

Global Energy Storage

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America

- [Cypress Creek Secures \\$3.5 Billion Financing for Major U.S. Solar + Storage Project.- BNEF.com](#) Cypress Creek Energy has secured \$3.5 billion in financing for the first phases of the Steel River Energy Center in Arkansas, one of the largest renewable energy projects in the U.S. The project will combine 1.63 GW of solar power with 1.9 GWh of battery storage, with electricity to be supplied to a large technology company amid rising AI and data center power demand. The deal highlights continued strong investor support for solar and battery storage infrastructure despite shifting U.S. clean energy policies.
- [GM Pivots to Energy Storage on AI Demand, Following Ford's Lead.- BNEF.com](#) General Motors (GM) is expanding into the stationary energy storage market through partnerships with Peak Energy and Redwood Materials, targeting rising electricity demand from AI data centers and grid infrastructure. GM plans to develop sodium-ion batteries for grid storage, citing advantages such as lower cost, improved safety, and abundant raw materials compared to lithium-ion batteries. The company is also advancing vehicle-to-grid (V2G) capabilities that allow EVs to supply power back to the grid, following a broader industry shift where automakers increasingly leverage EV battery expertise for the rapidly growing energy storage sector.
- [GM and Redwood expand partnership with second-life battery storage project.- electrive.com](#) General Motors and Redwood Materials are expanding their battery partnership with a second-life energy storage project in Michigan, using around 100 retired GM EV battery packs to provide 1.5 MW / 7.2 MWh of stationary storage at a GM manufacturing plant. The system is expected to lower electricity costs and improve grid resilience, while demonstrating how used EV batteries can be repurposed before final recycling. The project strengthens GM and Redwood's collaboration across the full battery lifecycle, including recycling, second-life deployment, and material recovery for future batteries.
- [POSCO Holdings to Demonstrate Direct Lithium Extraction in US.- thelec.net](#) POSCO Holdings has partnered with Australia's Anson Resources to build a direct lithium extraction (DLE) demonstration plant in Utah, U.S., marking the first such project by a Korean company in the country. Scheduled to begin operation in 2027, the project aims to validate DLE technology using real lithium brine by 2028 and lay the groundwork for commercialization. Compared with traditional evaporation methods, DLE offers higher lithium recovery rates and faster production, supporting POSCO's strategy to strengthen its position in the global lithium supply chain and North American battery materials market.

Asia

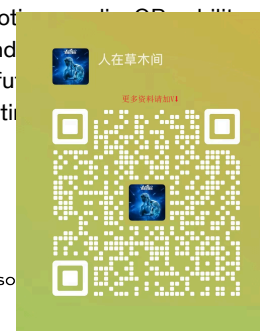
- [China's Lopal Plans USD160 Million Indonesia Expansion to Add 120,000 Tons of LFP Capacity.- yicaiglobal](#) Lopal Tech plans to invest USD 160 million to expand its Indonesia LFP cathode materials plant, adding 120,000 tons of annual capacity for EV and energy storage batteries. The expansion supports rising overseas demand and long-term supply agreements with major customers including LG Energy Solution and CATL. Located in Central Java, the project strengthens Lopal's international manufacturing footprint and highlights Indonesia's growing role in the global battery materials supply chain.
- [CATL Places Big Order for Lithium Battery Electrolyte With China's Capchem.- yicaiglobal](#) CATL has signed a major multi-year agreement with Chinese electrolyte supplier Capchem, covering purchases of 50,000 tons in 2026, 100,000 tons in 2027, and 150,000 tons in 2028. Based on current market prices, the deal could be worth around CNY 8.1 billion (USD 1.2 billion). The agreement strengthens long-term

supply chain cooperation between the two companies and reflects growing demand for battery electrolytes driven by rapid expansion in EV and energy storage markets.

- [Toptec Wins First Direct Supply Deal With Indian Automaker Group.- thelec.net](#) South Korea's Toptec has secured its first direct overseas battery equipment contract with a major Indian automaker group, supplying pouch-type battery module and pack assembly equipment for a new production line in Pune, India. The deal, worth about KRW 13 billion, marks Toptec's expansion into India's rapidly growing EV and ESS market and strengthens its position as a global battery manufacturing equipment supplier. The company continues diversifying beyond display equipment into battery production technologies, including advanced inspection and assembly systems..
- [CK Solution Develops Dehumidifier for Solid-State Battery Production.- thelec.net](#) South Korea's CK Solution has developed a new industrial dehumidifier system, "Dry Monster (CDHL-4500)," designed for solid-state battery manufacturing, where ultra-low humidity conditions are critical. The system delivers up to 115,000 m³/h airflow, about 2.4x larger than existing models, enabling battery makers to reduce equipment installations and lower facility space requirements by up to 30%. The technology supports the growing shift toward sulfide-based solid-state batteries, which require much stricter moisture control than conventional lithium-ion battery production.
- [Korea accelerates battery recycling efforts amid rising critical mineral prices.- pulse.mk](#) South Korea is accelerating efforts to strengthen its battery recycling industry as prices for critical minerals such as lithium, nickel, cobalt, and manganese continue to rise. State-run agency KOMIR has launched a new initiative to build a comprehensive recycling supply-chain database and develop strategies for recovering battery materials from used batteries, manufacturing scrap, and mining byproducts. The project aims to improve domestic supply security for key battery materials used by companies such as LG Energy Solution, Samsung SDI, and SK On, while supporting the growth of a circular battery economy.
- [LG Energy Solution settles patent dispute with Sunwoda.- pulse.mk](#) LG Energy Solution and Chinese battery maker Sunwoda have reached a patent licensing agreement, ending a battery technology dispute that lasted nearly two years. Under the deal, both parties will withdraw ongoing legal actions, while LGES emphasized the importance of fair compensation for intellectual property and technology innovation. The settlement highlights the growing importance of patent protection and licensing in the increasingly competitive global battery industry and may encourage similar agreements across the sector.
- [SPIC's 60MW/163MWh Clements Gap Battery Storage Project Enters Full Commercial Operation in Australia.-solarbe.com](#) State Power Investment Corporation (SPIC) has officially commenced full commercial operation of its 60MW/163MWh Clements Gap Battery Energy Storage System (BESS) in South Australia, after receiving approval from AEMO and grid operator ElectraNet. Located near the existing Clements Gap Wind Farm, the project is one of the first battery projects awarded under Australia's Capacity Investment Scheme (CIS) and the first CIS storage project to enter operation. The system will participate in Australia's electricity and ancillary services markets, helping improve grid flexibility, renewable energy integration, and regional energy transition efforts.
- [EVE Energy Secures Over 67 GWh Orders at SNEC 2026 With 6.9+ MWh ESS System.-solarbe.com](#) At SNEC 2026 in Shanghai, EVE Energy showcased its 6.9+ MWh containerized energy storage system and secured more than 67 GWh of strategic orders through partnerships with multiple industry players. The system features high energy density, long cycle life (10,000 cycles), advanced thermal management, and AI-based fire protection, targeting large-scale utility storage applications. EVE also highlighted its growing manufacturing scale, with over 3.7 million large ESS cells delivered, an operational 60 GWh mega factory, and plans for an additional 230 GWh of capacity expansion, reinforcing its leadership in the global energy storage market.
- [Ningxia Zhiyao Signs 2 GWh Sodium-Ion Battery Project in China.-solarbe.com](#) Ningxia Zhiyao New Energy Technology has signed an agreement to build a 2 GWh sodium-ion battery manufacturing project in Lingwu, Ningxia, with total investment of CNY 1.06 billion (~USD 147 million). The project will include production, R&D, storage, and supporting facilities, aiming to strengthen the regional energy storage battery supply chain and support growth in upstream materials and downstream logistics services. The investment reflects accelerating momentum in sodium-ion battery development as China expands alternative battery technologies for large-scale energy storage applications.

Europe

- [ProLogium and OPmobility to integrate solid-state cells into modules.- electrive.com](#) ProLogium and French automot have signed a cooperation agreement to explore integrating solid-state battery cells into EV battery modules and supply its lithium-ceramic solid-state cells for testing, while OPmobility will develop module designs aimed at fu partnership focuses on accelerating system-level validation and commercialization of solid-state batteries, supporting next-generation EV technologies with higher energy density, faster charging, and improved safety.



- [EcoPro BM Begins Mass Production of High-Nickel Cathodes in Hungary.- thelec.net](#) EcoPro BM has begun mass production of high-nickel NCA cathode materials at its Debrecen, Hungary plant, marking its first shipments to a European automotive OEM. The facility has annual capacity of 54,000 tons, enough to support around 600,000 EVs, and forms part of EcoPro's broader European battery materials hub. The company plans to expand production, add NCM cathode lines, and deepen partnerships with major European automakers as demand for localized battery supply chains grows.
- [Philenergy Wins UK Battery Project.- thelec.net](#) Philenergy has secured battery manufacturing equipment orders for Agratas' gigafactories in India and the UK, including a UK contract worth KRW 14.8 billion. The company will supply its proprietary integrated slitting-notching equipment, which combines multiple electrode processing steps into a single platform to improve efficiency, reduce material loss, and increase processing speed. The deal strengthens Philenergy's position in the global battery equipment market as it expands beyond Samsung SDI and targets next-generation battery manufacturing technologies.
- [Nissan collaborates with partners on sulphur-based solid-state battery research.- electrive.com](#) Nissan, the University of Oxford, and UK battery materials company Gelion have launched the CoRe-SoLiS research project to develop solid-state lithium-sulfur batteries with higher energy density, faster charging, and longer lifespan. The project will integrate Gelion's nano-encapsulated sulfur (NES) cathode technology into Nissan's future solid-state battery platforms, aiming to reduce battery cost while improving durability. Backed by UK government funding, the initiative targets next-generation EV batteries and seeks to overcome key commercialization challenges of lithium-sulfur technology.

EXHIBIT 1: **Key commodities price performance**

	Price 12-Jun	Ccy	Mkt cap \$bn	P/E 26E	EV /EBITDA 26E	%1D	%1W	%1M	%1Y	1Y px chart
Metal prices (US\$/tonne)										
LiCO (spot)	23,687					0.0%	-3%	-19%	179%	
LiOH (spot)	22,949					-2.2%	-4%	-18%	170%	
LiCO (contract)	20,000					0.0%	-1%	7%	104%	
LiOH (contract)	20,250					0.0%	1%	9%	128%	
Cobalt (spot)	55,857					0.0%	0%	0%	70%	
Nickel (spot)	17,693					0.1%	-5%	-7%	17%	
Component prices										
Cathode NMC811						0.0%	0%	-2%	53%	
Cathode LFP						0.0%	2%	-11%	84%	
Precursor NMC811						0.0%	0%	-1%	37%	
Precursor LFP						0.0%	5%	10%	40%	
Artificial Graphite						0.0%	0%	2%	6%	
Natural Graphite						0.0%	0%	0%	0%	
Electrolyte NMC						0.0%	0%	0%	23%	
Electrolyte LFP						0.0%	0%	0%	43%	
Separator						0.0%	0%	5%	17%	
Spot battery cell cost (US\$/kWh)										
LFP	61					0.0%	0%	-3%	18%	
NMC532	90					0.0%	0%	-1%	31%	
NMC622	89					0.0%	0%	-1%	28%	
NMC811	88					0.0%	0%	-1%	26%	
Spot battery pack cost (US\$/kWh)										
LFP	76					0.0%	0%	-4%	2%	
NMC532	121					0.0%	0%	-1%	21%	
NMC622	121					0.0%	0%	-1%	19%	
NMC811	121					0.0%	0%	-1%	18%	

Source: Bloomberg, Baiinfo, Bernstein analysis and estimates (cell and pack cost)

EXHIBIT 2: Key companies price performance and valuation

	Price 12-Jun	Ccy	Mkt cap \$bn	P/E 26E	EV /EBITDA 26E	%1D	%1W	%1M	%1Y	1Y px chart
Cell makers										
LGES	402,500	KRW	61.9	624.8x	16.7x	4.0%	-2%	-9%	32%	
Samsung SDI	562,000	KRW	29.8	132.7x	19.5x	10.8%	-1%	-10%	222%	
CATL	390.6	CNY	273.2	18.7x	13.3x	2.2%	-3%	-9%	56%	
CALB	25.6	HKD	6.3	15.0x	4.1x	2.8%	-6%	-20%	55%	
EVE Energy	56.8	CNY	18.2	16.7x	10.7x	3.0%	-3%	-17%	31%	
Gotion	28.9	CNY	7.7	24.2x	7.0x	1.9%	-4%	-21%	15%	
Sunwoda	19.7	CNY	5.4	14.1x	5.4x	3.1%	-5%	-25%	7%	
Farasis	11.1	CNY	2.0	n.a.	n.a.	2.9%	-8%	-19%	-18%	
Lithium Miners/Refiners										
Albemarle	159.1	USD	18.8	12.8x	6.6x	8.0%	2%	-23%	155%	
SQM	80.4	USD	21.6	11.6x	5.9x	8.4%	7%	-15%	141%	
Pilbara Minerals	6.3	AUD	14.3	36.7x	18.6x	6.3%	7%	-3%	371%	
Ganfeng Lithium	60.9	HKD	20.6	14.7x	12.8x	4.5%	9%	-27%	183%	
Tianqi Lithium	61.6	CNY	14.8	16.7x	5.6x	0.9%	4%	-18%	101%	
Cathode										
LG Chem	344,000	KRW	16.0	151.3x	3.3x	7.5%	-1%	-11%	63%	
EcoPro BM	174,000	KRW	11.2	402.6x	67.6x	3.7%	-4%	-15%	78%	
L&F	137,700	KRW	3.7	638.9x	20.7x	7.0%	-1%	-20%	161%	
Umicore	21.8	EUR	6.2	13.2x	5.6x	-0.6%	-7%	-3%	85%	
Ningbo Ronbay	31.4	CNY	3.3	51.0x	14.5x	0.3%	-3%	-16%	50%	
Beijing Easpring	49.1	CNY	4.0	24.8x	16.0x	2.0%	-4%	-20%	20%	
GEM	7.3	CNY	5.5	17.4x	5.6x	2.8%	2%	-16%	18%	
Huayou Cobalt	49.3	CNY	13.8	10.5x	5.0x	3.8%	-1%	-22%	39%	
Dynanonic	63.0	CNY	2.6	28.5x	10.0x	3.2%	0%	-18%	113%	
Anode										
Posco	200,000	KRW	11.7	315.2x	50.1x	5.9%	-4%	-23%	56%	
Putailai	28.0	CNY	8.9	18.1x	11.4x	2.9%	2%	-16%	69%	
Shanshan	13.6	CNY	4.5	n.a.	n.a.	3.9%	-1%	-16%	58%	
Separator										
Asahi Kasei	1,784	JPY	15.2	16.6x	6.0x	1.3%	0%	8%	83%	
SK IE	19,500	KRW	1.0	n.a.	-44.1x	-2.1%	9%	-15%	-17%	
Toray Industries	1,145	JPY	10.7	21.3x	6.5x	2.4%	2%	0%	17%	
W-Scope	210	JPY	0.1	n.a.	n.a.	-9.5%	-31%	-17%	-30%	
Yunnan Energy	63.6	CNY	9.2	36.0x	13.0x	3.6%	0%	-24%	128%	
Shenzhen Senior	18.0	CNY	4.0	39.8x	13.6x	3.4%	16%	-2%	74%	
Sinoma Science	64.7	CNY	16.0	37.8x	16.2x	1.2%	3%	-2%	297%	
Electrolyte										
Enchem	33,950	KRW	0.5	n.a.	n.a.	-1.2%	2%	-14%	-46%	
Tinci Minerals	48.5	CNY	14.6	14.7x	10.6x	0.2%	0%	-17%	177%	
Capchem	74.8	CNY	8.3	27.6x	17.4x	-1.1%	-2%	16%	115%	
Jiangsu Guotai	7.6	CNY	1.8	9.8x	n.a.	1.6%	-8%	-18%	0%	
Shanshan	13.6	CNY	4.5	n.a.	n.a.	3.9%	-1%	-16%	58%	
Equipment Maker										
Hirano	1,777	JPY	0.2	16.8x	n.a.	0.1%	-18%	-10%	21%	
CKD	6,870	JPY	2.9	36.9x	18.9x	11.7%	10%	1%	188%	
Wuxi Lead	42.9	CNY	10.5	28.7x	23.1x	2.7%	-9%	-21%	100%	
Shenzhen Yinghe	23.3	CNY	2.2	24.8x	12.0x	2.1%	-6%	-20%	34%	
Zhejiang HangKe	34.1	CNY	3.0	35.9x	33.8x	4.6%	8%	1%	87%	
Guangdong Lyric	41.8	CNY	1.0	46.0x	16.9x	0.5%	-18%	-23%	33%	
Shenzhen United	26.2	CNY	1.3	23.5x	16.0x	1.4%	-2%	-11%	45%	

Source: Bloomberg (all estimates), Bernstein analysis
GLOBAL ENERGY STORAGE

Company Models

[CATL](#) | [LG Energy Solution](#) | [Samsung SDI](#)

[LG Chem](#) | [EcoPro BM](#) | [Posco Future M](#)

[Tianqi Lithium](#)

[Sungrow](#)

Industry Models

[Model: ESS tracker](#)

[Model: Monthly EV Tracker](#)

[Model: Battery Gigafactory Database](#)

[Industry model: Global EV TAM](#)

[Industry model: Global ESS TAM](#)

[Industry model: Battery TAM](#)

[Industry model: Battery supply and demand](#)

Blackbook

[Battery Utopia](#)

[Battery Tech Roadmap 2023: Faster, Higher, Stronger](#)

[Turn Up the Voltage... Investing Across the Battery Value Chain](#)

[Global Energy Storage: Resistance is Futile](#)

Initiation Report

[Global Energy Storage: Initiating Coverage. Lithium Positive \(Tianqi\) and Negative Cathodes \(EcoPro BM, Posco Future M\)](#)

[Sungrow: Solar Eclipse - Initiating at Market-Perform \(PT RMB65\)](#)

Recent Research

[Bernstein Energy: Raising battery demand estimates on ESS and CATL target price to HKD770](#)

[Global Energy Storage: Sodium-ion batteries to disrupt the LFP market](#)

[Global ESS TRACKER - June 2026: ESS momentum continues in China](#)

[EV TRACKER - April 2026: New markets lead recovery in global EV sales](#)

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[The Long View: Batteries to only get better](#)

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[Tianqi Lithium: 1Q26 Best Idea - Energy storage powers lithium upside. Outperform](#)

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[Sungrow: A blue sky on ESS optimism - Upgrading to Outperform](#)

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[Global Energy Storage: More downside risks ahead for Korean cathode makers](#)

[CATL: Does CATL deserve a premium or discount for HK IPO?](#)

[CATL: Initial perspectives on HK IPO Plans](#)

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[Global Energy Storage: Gigafactory expansion still strong but investment slowing](#)

[Global Energy Storage: Bigger and better batteries enables the rise of the 700km electric vehicle](#)

[Global Energy Storage: 2025 Lithium Outlook. Rising from rock bottom](#)

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BERNSTEIN TICKER TABLE

Ticker	Rating	Cur	11 Jun 2026		TTM Rel. Perf.	Reported EPS				Reported P/E (x)		
			Closing Price	Price Target		Cur	2025A	2026E	2027E	2025A	2026E	2027E
300750.CH (CATL)	O	CNY	382.20	800.00	13.8%	CNY	16.14	21.95	28.77	23.7	17.4	13.3
3750.HK (CATL)	M	HKD	662.00	770.00	75.1%	CNY	16.14	21.95	28.77	35.4	26.0	19.9
051910.KS (LG Chem)	M	KRW	320,000	298,000	11.2%	KRW (13,258.70)	2,042.47	31,118		(24.1)	156.7	10.3
373220.KS (LGES)	M	KRW	387,000	347,000	(13.5)%	KRW (5,308.10)	1,811.04	9,452.97		(72.9)	213.7	40.9
006400.KS (SDI)	M	KRW	507,000	520,000	149.2%	KRW (9,933.80)	2,099.51	18,376		(51.0)	241.5	27.6
003670.KS (Posco Future M)	U	KRW	188,800	190,000	6.3%	KRW (2,740.96)	376.72	898.20		(68.9)	501.2	210.2
247540.KS (EcoPro BM)	U	KRW	167,800	140,000	31.3%	KRW	403.00	854.00	1,963.00	416.4	196.5	85.5
300274.CH (Sungrow)	O	RMB	146.75	185.00	87.7%	RMB	6.55	8.22	9.33	22.4	17.8	15.7
002466.CH (Tianqi Lithium)	O	CNY	61.00	73.00	58.4%	CNY	0.28	3.29	6.18	216.2	18.6	9.9
9696.HK (Tianqi Lithium)	O	HKD	44.72	61.00	26.0%	CNY	0.28	3.29	6.18	136.8	11.7	6.2
ASIAx			1,966.72									

O - Outperform, M - Market-Perform, U - Underperform, NR - Not Rated, CS - Coverage Suspended

003670.KS base year is 2024;

Source: Bloomberg, Bernstein estimates and analysis.

DISCLOSURE APPENDIX

I. REQUIRED DISCLOSURES

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