

Global Energy Storage

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America

- [LG Energy Solution Files Patent Lawsuit Against EVE Energy in U.S.- thelec.net](#) LG Energy Solution (LGES) has filed patent infringement lawsuits against Chinese battery maker EVE Energy with the U.S. International Trade Commission (ITC) and a U.S. federal court. The case involves five battery patents, including technologies related to cylindrical batteries and tabless battery designs. LGES is seeking to block the import and sale of products using the allegedly infringing batteries in the United States, highlighting growing competition over advanced battery technologies in the North American market.
- [Samsung-Backed Pino Seeks Capital Raise as It Prepares for US Battery Rules.- thelec.net](#) South Korean battery materials company Pino is preparing a major capital raise to support expansion of its lithium iron phosphate (LFP) cathode business and reduce its exposure to Chinese ownership. The company may increase its fundraising capacity to as much as KRW 1.6 trillion, with proceeds expected to support a new 50,000-tonne-per-year LFP cathode plant being developed by subsidiary C&P New Material Technology. Pino is also working to lower ownership stakes held by China's CNGR Advanced Material and affiliated entities to improve compliance with potential U.S. battery sourcing and Prohibited Foreign Entity (PFE) requirements. The move reflects growing efforts by battery supply-chain companies to position themselves for North American EV and energy storage markets.
- [Sila raises \\$300 million to expand US silicon anode production.- electrive.com](#) U.S. battery materials company Sila Nanotechnologies has raised USD 300 million in new funding to expand production of its Titan Silicon anode material and accelerate the next phase of its Moses Lake, Washington manufacturing facility. The company aims to scale the plant's capacity from an initial 2 GWh to as much as 250 GWh over the next five years, supporting demand from EV and battery manufacturers including Mercedes-Benz and Panasonic. Sila's silicon-carbon anode technology is designed to deliver up to 20% higher energy density and faster charging than conventional graphite-based batteries, while strengthening domestic U.S. battery supply chains.
- [Brookfield to Buy Blackstone Battery Company for \\$7 Billion.-BNEF](#) Brookfield Asset Management has agreed to acquire U.S. energy storage developer Aypa Power from Blackstone Energy Transition Partners in a deal valued at USD 7 billion, including debt. Aypa operates and develops battery energy storage and hybrid renewable energy projects across North America, with 6.5 GW of operating and contracted battery capacity and more than 20 GW under development. The acquisition reflects growing investor interest in energy storage infrastructure driven by rising electricity demand from AI data centers, grid modernization, and renewable energy integration. The transaction gives Aypa an equity valuation of approximately USD 3 billion and includes the company's project portfolio, development pipeline, and workforce.

Asia

- [China Aims to Boost Renewable Energy Consumption 53% by 2030.- BNEF](#) China has unveiled a new renewable energy development plan that aims to increase renewable energy consumption by 53%, from 1.18 billion tonnes of coal equivalent in 2025 to 1.8 billion tonnes by 2030. The plan targets 6 trillion kWh of renewable electricity generation, including 4 trillion kWh from wind and solar, and seeks to improve grid reliability through greater deployment of energy storage systems. By 2030, renewables supported by storage are expected to provide 20% of peak electricity demand, double the current level. The strategy also includes expanding emerging technologies such as solar thermal power and marine energy, reinforcing China's long-term transition toward a more flexible and low-carbon energy system.

- [China's Innolight Seeks USD8 Billion in Hong Kong's Largest Listing in Seven Years.- yicaiglobal.com](#) Zhongji Innolight (Innolight), the world's leading supplier of optical interconnect solutions for AI data centers and cloud computing networks, plans to raise up to HKD 62.4 billion (USD 8 billion) through a secondary listing in Hong Kong, which would be the city's largest IPO since 2019. The company intends to use the proceeds to expand high-speed optical transceiver production, strengthen its supply chain, and accelerate R&D. Innolight holds a 21% global market share in optical interconnect solutions and a 28% share of the high-speed data communications optical transceiver market. The offering has attracted major cornerstone investors including Temasek, ADIA, CPP Investments, BlackRock, Alibaba, and Tencent, highlighting strong investor confidence in the AI infrastructure supply chain.
- [China Sets Aside USD3.3 Billion of Gov't Bond Proceeds for New Energy Heavy-Duty Truck Industry.- yicaiglobal.com](#) China has allocated CNY 22 billion (USD 3.3 billion) from its ultra-long-term special government bond program to support the replacement of conventional trucks with new energy heavy-duty trucks (NEHDTs) in 2026. The funding is part of a broader effort to decarbonize the transportation sector and accelerate adoption of electric and other new energy commercial vehicles. Chinese NEHDT sales have surged over the past two years, rising 182% in 2025 and nearly 80% in the first half of 2026. The government aims for new energy models to account for 40% of new heavy-duty truck sales by 2030, supported by plans to build more than 3,000 charging and battery-swapping stations and 30,000 km of zero-carbon freight corridors nationwide.
- [China's SDIC Power Allies With CATL to Build Big Hydropower Station for USD4.9 Billion.- yicaiglobal.com](#) CATL and Chinese state-owned utility SDIC Power have partnered to invest CNY 33.4 billion (USD 4.9 billion) in the development of the 2.4 GW Yagen II Hydropower Station in Sichuan Province. Under the agreement, CATL will hold a 10% stake in the project company, while SDIC Power's subsidiary Yalong River Hydropower Development will own the remaining 90%. Expected to generate 8.6 TWh of electricity annually, the project is scheduled to begin operations in 2035 and could reduce carbon emissions by approximately 4.5 million tonnes per year. The investment reflects CATL's broader strategy to expand beyond batteries and energy storage into upstream renewable power generation, strengthening its position as a comprehensive clean energy solutions provider.
- [Yujin Technology Selected for Government AI Manufacturing Platform Project.- thelec.net](#) South Korean battery equipment manufacturer Yujin Technology has been selected for the government's 2026 AI Transformation (AX) One-Stop Voucher Program. Working with Plan I and Gabia, the consortium will develop a generative AI-based manufacturing platform for battery equipment production, supported by approximately KRW 1.1 billion in first-year government funding. The platform will initially focus on improving productivity and quality in battery equipment manufacturing before expanding to other industries, including semiconductors and precision machining.
- [EcoPro BM Targets 2027 Mass Production of Solid-State Electrolyte.- thelec.net](#) EcoPro BM announced progress in its all-solid-state battery materials roadmap, highlighting that its proprietary sulfide-based solid electrolyte technology has successfully passed qualification tests with major battery manufacturers. The company is currently reviewing pilot-scale production with customers and expects the earliest commercial mass production to begin in 2027. In addition, EcoPro BM is developing high-nickel and lithium manganese-rich (LMR) cathode materials for solid-state batteries, as well as sodium-ion battery cathodes and silicon anode materials, strengthening its position in next-generation battery technologies.
- [LG Energy Solution to Build Sodium-Ion Battery Mother Line at Ochang Plant.- thelec.net](#) LG Energy Solution (LGES) will establish a sodium-ion battery mother line at its Ochang Energy Plant by the end of 2026, accelerating commercialization of next-generation batteries for energy storage systems (ESS). The company plans to begin customer proof-of-concept (PoC) projects in 2027, targeting long-duration ESS applications. By leveraging its proprietary Advanced Z-Stacking (AZS) manufacturing process, LGES aims to achieve higher energy density and longer cycle life than competing sodium-ion technologies. The move positions LGES to compete with CATL in the emerging sodium-ion battery market while supporting efforts to diversify battery supply chains beyond lithium-based technologies.
- [Aulton revives Hong Kong IPO bid, seeking to become first listed battery swap specialist.- cnevpost.com](#) Chinese battery-swapping company Aulton New Energy has resubmitted its application for a Hong Kong IPO, aiming to become the world's first publicly listed company focused on battery-swapping services. Aulton operates an open battery-swapping ecosystem, partnering with more than 16 automakers and connecting 531 battery-swapping stations across China. While revenue has declined due to weaker equipment sales, the company has narrowed losses and recently achieved its first positive gross profit period. Aulton is increasingly focusing on higher-margin operational services and future technologies such as Vehicle-to-Station-to-Grid (V2S2G) energy management, as it seeks to compete with battery-swapping networks led by Nio and CATL.
- [CALB under pressure over GAC Aion S battery issues.- electrive.com](#) Chinese battery maker CALB is facing increased attention after reports of battery-related issues in GAC Aion's Aion S electric sedan, particularly in vehicles with 150,000–300,000 km of mileage. Reported problems include battery swelling, leakage, insulation faults, range degradation, and, in some cases, power loss while driving. While no official recall has been issued, GAC Aion and CALB have responded by extending battery warranty coverage from 150,000 km to 300,000 km and offering free inspections, repairs, and battery replacements where necessary. The development comes as CALB continues its

international expansion, including construction of its first European battery factory in Portugal.

- [Sumitomo Chemical aims to make solid-state batteries more affordable.- electrive.com](#) Sumitomo Chemical is preparing to commercialize a new halide-based solid electrolyte for all-solid-state batteries, aiming to reduce manufacturing costs and accelerate adoption in electric vehicles. Developed with Kyoto University and Tottori University, the material is designed to offer performance comparable to leading sulfide-based electrolytes while being easier to manufacture and compatible with parts of existing lithium-ion battery production infrastructure. The company is currently evaluating the technology with potential customers and sees it as a promising pathway to make solid-state batteries more affordable and scalable for future EV applications.
- [Anupam Rasayan and Basquevolt Sign Potential USD 300 Million Solid-State Battery Materials Partnership.- solare.com](#) Indian specialty chemicals manufacturer Anupam Rasayan India Ltd. and Spanish solid-state battery developer Basquevolt S.A. have signed a non-binding Letter of Intent (LOI) to collaborate on specialty materials for next-generation lithium-metal solid-state batteries. The partnership could span up to 10 years and has a potential value of approximately USD 300 million (CNY 2.0 billion). Under the agreement, Anupam Rasayan will support the development, custom synthesis, and future supply of high-performance chemical materials for Basquevolt's solid-state battery technology, which targets applications in electric vehicles, heavy transport, stationary energy storage, and aviation. The deal highlights growing momentum in the global solid-state battery supply chain and Anupam Rasayan's expansion into advanced energy materials.
- [India Launches 10 GWh Advanced Battery Manufacturing Tender for Grid Energy Storage.- solare.com](#) India's Ministry of Heavy Industries (MHI) has launched a global tender for 10 GWh of Advanced Chemistry Cell (ACC) manufacturing capacity dedicated to grid-scale energy storage applications. The tender is part of India's Production Linked Incentive (PLI) program and represents the final allocation under the country's 50 GWh ACC manufacturing initiative. Bidders must commit to achieving at least 25% local value addition within two years and 40% within five years, while building 1-4 GWh of battery production capacity within five years. Successful bidders will be eligible for PLI incentives, supporting India's efforts to expand domestic battery manufacturing and meet growing energy storage demand driven by rapid renewable energy deployment.

Europe

- [Hungary Crackdown on \\$20 Billion EV Sector Puts China on Notice.- BNEF](#) Hungary's new government plans to introduce stricter environmental regulations and reduce subsidies for multinational companies, increasing scrutiny of major Chinese EV and battery investments. Companies including CATL, BYD, and Semcorp are facing environmental investigations or compliance reviews, signaling a tougher regulatory environment for the country's USD 20 billion EV and battery sector while maintaining support for industrial investment.
- [Cylib acquires Bavarian EV battery recycling facility.- electrive.com](#) German battery recycling company Cylib has acquired a battery processing facility in Bavaria, Germany, with the capacity to recycle up to 10,000 tonnes of end-of-life EV batteries per year. The plant will produce black mass, which will be supplied to Cylib's hydrometallurgical recycling facility under construction in Dormagen, where valuable materials including lithium, nickel, cobalt, manganese, and graphite will be recovered. The acquisition strengthens Cylib's end-to-end battery recycling capabilities and supports the expansion of Europe's domestic battery materials supply chain.
- [CATL signs 2 GWh sodium battery storage deal with Europe's Solarpro.- cnevpost.com](#) CATL has signed a 2 GWh sodium-ion energy storage agreement with Eastern European renewable energy developer Solarpro, marking its second major sodium-ion battery storage deal in Europe this month. The partnership will deploy Central and Eastern Europe's first large-scale sodium-ion energy storage project and accelerate adoption of CATL's new Tener Sodium battery system. Designed for long-duration storage, the system offers up to 15,000 cycles, a 25–30 year lifespan, and strong low-temperature performance, making it well-suited for European grid applications. The agreement further strengthens CATL's push to commercialize sodium-ion technology globally and expand its presence in the European energy storage market.
- [Tianneng International and ELQ Energy to Build 5 GWh Energy Storage Assembly Base in Poland.- solare.com](#) Chinese battery manufacturer Tianneng International has signed an agreement with Polish energy company ELQ Energy to establish a 5 GWh energy storage system (ESS) assembly facility in Częstochowa, Poland. The joint venture will combine Tianneng's battery and ESS technology with ELQ Energy's local market expertise and project development capabilities. The project will be developed in phases, starting with 100 MWh of annual assembly capacity before expanding to 1 GWh in the first year and reaching 5 GWh within three years. The investment reflects the growing trend of Chinese energy storage companies localizing production in Europe to meet increasing ESS demand, comply with EU regulations, and strengthen their position in the rapidly expanding Central and Eastern European energy storage market.

Others

- [Zimbabwe Rejects Lithium Miners' Request to Delay Export Ban.- BNEF](#) Zimbabwe has confirmed that its ban on lithium concentrate exports will take effect on January 1, 2027, rejecting industry requests for a delay. The government said the policy is intended to

encourage domestic lithium processing and increase the value captured from the country's mineral resources. As one of the world's fastest-growing lithium suppliers, accounting for roughly 10% of global mined lithium production, Zimbabwe plays a key role in the EV battery supply chain. Several Chinese companies, including Huayou Cobalt, Sinomine Resource Group, and Chengxin Lithium, have invested in local processing facilities to comply with the shift toward higher-value lithium products.

- [Octopus-Backed MOPO Partners Nigeria in \\$75 Million Battery Plan.- BNEF](#) MOPO, an Africa-focused battery rental company backed by Octopus Energy, has signed an agreement with Nigeria's Rural Electrification Agency to support a USD 75 million expansion of its battery services by 2030. MOPO provides batteries charged at its own solar-powered stations, allowing households and businesses to access electricity without purchasing solar systems or mini-grids. The company currently rents out 1.6 million batteries per month across several African countries and sees the expansion as part of broader efforts to improve electricity access in regions where grid power remains limited.
- [EVE Energy and Akaysha Energy Partner on 4 GWh Energy Storage Projects in Australia.- solare.com](#) Chinese battery manufacturer EVE Energy has signed a Preferred Supplier Agreement (PSPD) with leading Australian energy storage developer Akaysha Energy to support the deployment of up to 4 GWh of battery energy storage projects in Australia. Under the agreement, EVE Energy will supply large-format battery storage solutions for Akaysha's expanding project portfolio. The partnership highlights EVE Energy's growing presence in overseas energy storage markets and underscores increasing demand for grid-scale battery systems in Australia, one of the world's most active energy storage markets. The deal also follows EVE Energy's recent success in securing more than 13.5 GWh of strategic energy storage orders in Europe, further strengthening its global ESS footprint.

EXHIBIT 1: Key commodities price performance

	Price 24-Jul	Ccy	Mkt cap \$bn	P/E 26E	EV /EBITDA 26E	%1D	%1W	%1M	%1Y	1Y px chart
Metal prices (US\$/tonne)										
LiCO (spot)	20,879					-0.1%	-4%	-11%	107%	
LiOH (spot)	19,256					-0.1%	-4%	-15%	120%	
LiCO (contract)	19,925					0.0%	0%	0%	119%	
LiOH (contract)	19,550					0.0%	-2%	-3%	131%	
Cobalt (spot)	55,879					0.0%	0%	0%	70%	
Nickel (spot)	17,233					0.0%	2%	0%	11%	
Component prices										
Cathode NMC811						0.0%	-1%	-6%	41%	
Cathode LFP						0.0%	-3%	-4%	56%	
Precursor NMC811						0.0%	-1%	-4%	27%	
Precursor LFP						0.0%	0%	3%	45%	
Artificial Graphite						0.0%	0%	0%	6%	
Natural Graphite						0.0%	0%	0%	0%	
Electrolyte NMC						0.0%	0%	3%	30%	
Electrolyte LFP						0.0%	0%	-2%	46%	
Separator						0.0%	0%	0%	28%	
Spot battery cell cost (US\$/kWh)										
LFP	60					0.0%	-1%	-1%	14%	
NMC532	86					0.0%	-1%	-3%	25%	
NMC622	82					0.0%	-1%	-6%	19%	
NMC811	84					0.0%	-1%	-3%	21%	
Spot battery pack cost (US\$/kWh)										
LFP	76					0.0%	-1%	1%	1%	
NMC532	118					0.0%	-1%	-2%	17%	
NMC622	115					0.0%	-1%	-4%	13%	
NMC811	117					0.0%	0%	-2%	14%	

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

EXHIBIT 2: Key companies price performance and valuation

	Price		Mkt cap	P/E	EV						
	24-Jul	Ccy	\$bn	26E	/EBITDA	%1D	%1W	%1M	%1Y	1Y px	
					26E					chart	
Cell makers											
LGES	334,500	KRW	53.4	n.a.	14.0x	-2.8%	1%	-7%	-9%		
Samsung SDI	448,000	KRW	24.6	102.0x	15.4x	-3.1%	4%	-3%	135%		
CATL	386.0	CNY	268.6	18.5x	13.1x	3.7%	7%	-2%	35%		
CALB	17.8	HKD	4.0	10.6x	2.7x	5.2%	-6%	-29%	-19%		
EVE Energy	55.3	CNY	17.7	16.8x	10.6x	4.4%	7%	-18%	16%		
Gotion	28.3	CNY	7.6	27.2x	6.8x	1.0%	5%	-4%	-7%		
Sunwoda	17.4	CNY	4.7	13.5x	4.9x	2.5%	5%	-14%	-20%		
Farasis	9.5	CNY	1.7	n.a.	n.a.	2.8%	7%	-12%	-44%		
Lithium Miners/Refiners											
Albemarle	116.9	USD	13.8	9.2x	4.6x	-0.5%	-3%	-22%	39%		
SQM	69.3	USD	18.6	9.8x	4.8x	0.2%	-1%	-9%	67%		
Pilbara Minerals	4.1	AUD	9.2	23.5x	11.8x	-3.3%	-6%	-25%	116%		
Ganfeng Lithium	40.5	HKD	14.7	9.5x	7.9x	9.9%	7%	-26%	31%		
Tianqi Lithium	46.4	CNY	11.1	10.7x	4.0x	5.6%	-1%	-24%	15%		
Cathode											
LG Chem	264,000	KRW	12.7	129.4x	2.4x	-2.2%	2%	-9%	-13%		
EcoPro BM	111,500	KRW	7.4	252.4x	46.5x	-4.9%	0%	-23%	0%		
L&F	84,300	KRW	2.3	#N/A	N/A	11.1x	-5.1%	-8%	-22%	25%	
Umicore	19.6	EUR	5.5	11.4x	4.8x	-3.3%	1%	-13%	29%		
Ningbo Ronbay	27.0	CNY	2.9	49.7x	13.0x	2.9%	13%	-20%	15%		
Beijing Easpring	40.9	CNY	3.3	20.2x	12.9x	2.9%	7%	-20%	-7%		
GEM	6.7	CNY	5.0	17.1x	5.0x	3.7%	6%	-10%	-1%		
Huayou Cobalt	41.6	CNY	11.6	9.3x	4.3x	4.4%	12%	-19%	-5%		
Dynanonic	44.2	CNY	1.8	14.9x	5.9x	5.7%	2%	-40%	26%		
Anode											
Posco	144,500	KRW	8.8	353.5x	36.6x	-4.6%	-1%	-15%	-4%		
Putailai	24.1	CNY	7.6	15.7x	10.0x	6.0%	11%	-17%	29%		
Shanshan	12.8	CNY	4.2	n.a.	n.a.	1.8%	8%	-12%	23%		
Separator											
Asahi Kasei	1,847	JPY	15.4	17.2x	6.1x	-1.1%	1%	3%	76%		
SK IE	14,460	KRW	0.8	n.a.	-17.5x	-1.2%	2%	-12%	-50%		
Toray Industries	1,158	JPY	10.6	21.5x	6.5x	-1.8%	1%	1%	13%		
W-Scope	154	JPY	0.1	n.a.	n.a.	-2.5%	-3%	-13%	-37%		
Yunnan Energy	51.6	CNY	7.5	25.1x	9.5x	7.9%	3%	-25%	70%		
Shenzhen Senior	12.5	CNY	2.6	24.3x	9.3x	4.7%	-1%	-34%	3%		
Sinoma Science	50.1	CNY	12.4	27.5x	11.6x	0.0%	-10%	-35%	77%		
Electrolyte											
Enchem	18,950	KRW	0.3	n.a.	n.a.	-5.2%	-16%	-30%	-71%		
Tinci Minerals	37.4	CNY	11.3	11.4x	8.4x	6.2%	5%	-31%	88%		
Capchem	61.4	CNY	6.8	21.7x	14.7x	3.1%	2%	-30%	72%		
Jiangsu Guotai	7.6	CNY	1.8	9.6x	n.a.	1.2%	3%	1%	0%		
Shanshan	12.8	CNY	4.2	n.a.	n.a.	1.8%	8%	-12%	23%		
Equipment Maker											
Hirano	1,612	JPY	0.2	15.3x	n.a.	-2.3%	-1%	-16%	6%		
CKD	6,450	JPY	2.7	34.7x	17.4x	-4.0%	3%	-15%	135%		
Wuxi Lead	33.1	CNY	8.1	22.1x	17.7x	3.8%	7%	-25%	24%		
Shenzhen Yinghe	18.3	CNY	1.7	19.4x	9.4x	3.1%	3%	-17%	-14%		
Zhejiang HangKe	21.4	CNY	1.9	24.5x	21.0x	2.3%	3%	-44%	3%		
Guangdong Lyric	34.3	CNY	0.9	37.1x	15.0x	6.0%	3%	-26%	-35%		
Shenzhen United	18.0	CNY	0.9	14.5x	14.1x	3.0%	-2%	-37%	-21%		

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](#)

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BERNSTEIN TICKER TABLE

Ticker	Rating	Cur	23 Jul 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	385.99	800.00	9.6%	CNY	16.14	21.95	28.77	23.9	17.6	13.4
3750.HK (CATL)	O	HKD	626.50	770.00	20.3%	CNY	16.14	21.95	28.77	33.5	24.7	18.8
051910.KS (LG Chem)	M	KRW	270,000	312,000	(38.7)%	KRW (13,258.70)	2,693.22	28,743	(20.4)	100.3	9.4	
373220.KS (LGES)	M	KRW	344,000	351,000	(33.7)%	KRW (4,580.94)	(2,364.33)	10,225	(75.1)	(145.5)	33.6	
006400.KS (SDI)	M	KRW	462,500	520,000	115.9%	KRW (9,933.80)	1,751.66	18,577	(46.6)	264.0	24.9	
247540.KS (EcoPro BM)	U	KRW	117,200	140,000	(22.5)%	KRW	403.00	854.00	1,963.00	290.8	137.2	59.7
300274.CH (Sungrow)	O	RMB	117.79	185.00	27.0%	RMB	6.55	8.22	9.33	18.0	14.3	12.6
002466.CH (Tianqi Lithium)	O	CNY	46.38	80.00	(12.1)%	CNY	0.28	3.90	7.75	164.4	11.9	6.0
9696.HK (Tianqi Lithium)	O	HKD	34.42	65.00	(40.4)%	CNY	0.28	3.90	7.75	105.3	7.6	3.8
ASIA			1,880.30									

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

Source: Bloomberg, Bernstein estimates and analysis.

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