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Global Energy Storage

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Battery Weekly 19 April

America

- Rivian Deploys Second-Life EV Batteries for On-Site Energy Storage at Illinois Plant- electrive.com. Rivian, in partnership with Redwood Materials, is installing a 10 MWh stationary energy storage system at its manufacturing plant in Normal, Illinois using over 100 repurposed electric vehicle battery packs from its own vehicles. The system will support peak shaving by reducing reliance on grid power during high-demand periods, lowering energy costs and improving grid stability. By giving used EV batteries a second life, the project offers a scalable and lower-cost alternative to new storage systems while enabling faster deployment of energy capacity at energy-intensive facilities like manufacturing plants.

- US battery recycler Ascend Elements files for insolvency- electrive.com. U.S. battery recycler Ascend Elements has filed for Chapter 11 bankruptcy following the withdrawal of $316 million in federal funding for its planned battery recycling facility in Hopkinsville, Kentucky. The restructuring process will allow the company to continue operations while addressing financial challenges stemming from policy changes that impacted energy project funding. Despite the setback, Ascend is advancing construction of the Kentucky plant with partner SK, applying experience from its Georgia facility, and continuing development of a subsidized cathode material recycling plant in Poland using its Hydro-to-Cathode technology.

- EcoPro secures $4.3 mn Canadian R&D grant for lithium metal anodes - pulse.mk.co.kr. EcoPro Lithium, a subsidiary of South Korea's EcoPro, has secured CAD 6 million (USD 4.3 million) in funding from Natural Resources Canada to support the development of lithium metal anode production for next-generation solid-state batteries. Under Canada's Energy Innovation Program, the project aims to establish a local production chain—from lithium metal refining to ultrathin foil manufacturing—by March 2027, strengthening domestic battery supply chains and advancing high-energy-density battery technologies.

Asia

- China's Ronbay Gains on USD590 Million Investment in LFP Cathode Output Expansion - yicaiglobal.com. Chinese battery materials manufacturer Ronbay New Energy Technology plans to invest CNY 4.3 billion (USD 590 million) to expand its lithium iron phosphate (LFP) cathode material production capacity amid rising demand from electric vehicle and energy storage markets. The investment will fund new precursor and cathode production facilities in Guizhou province, with construction set to begin this month. The move aims to address supply shortages of high-end LFP materials and support future contract commitments, following regulatory penalties earlier this year related to disclosures about a supply agreement with battery giant CATL.

- China's CATL, Do-Fluoride Post Strong First-Quarter Results Amid Surge in Lithium Battery Demand - yicaiglobal.com. China's CATL and battery materials supplier Do-Fluoride posted strong first-quarter earnings driven by rising demand for lithium batteries in electric vehicle and energy storage markets. CATL reported a 49% year-on-year increase in net profit and a 52% jump in revenue, while Do-Fluoride returned to profitability as lithium battery material prices rebounded. Both companies benefited from rapid growth in power and energy storage battery sales, which continued to expand significantly in early 2026.

- Enchem to Cut Workforce by About Half Amid Mounting Cash Strain - thelec.net. South Korean battery electrolyte manufacturer Enchem is undertaking a major restructuring that includes reducing its workforce by around 50% in response to mounting financial strain following rapid global capacity expansion. Despite significant investments in new production facilities across Asia, Europe, and North America, low utilization rates and weakening cash flows have pressured profitability and liquidity. The cost-cutting move aims to lower fixed expenses as falling revenues, rising debt obligations, and underused production capacity challenge the company's ability to sustain operations.

- Jeil M&S Begins Sale Process With Stalking-Horse Bidder Selected - thelec.net. Battery mixing equipment manufacturer Jeil M&S has begun a court-supervised sale and restructuring process after selecting a stalking-horse bidder as part of its rehabilitation proceedings. The company is seeking new ownership through a pre-approved M&A process involving external capital raising, while ongoing payment disputes with key customer LG Energy Solution remain unresolved. The outcome of both the bidding process and legal proceedings will be critical to Jeil M&S's turnaround and future position within the battery manufacturing supply chain.

- LG Energy Solution Targets 50% Productivity Gain by 2028 Through AI Transformation - thelec.net. LG Energy Solution plans to increase productivity by 50% by 2028 as it accelerates a company-wide artificial intelligence (AI) transformation to remain competitive in the global battery market. The initiative includes the rollout of an enterprise AI platform, expanded workforce training, and the establishment of a CEO-led governance committee to oversee AI adoption and operational changes. The strategy aims to shift the company away from traditional volume-driven competition toward efficiency-focused manufacturing and smarter operations.

- Geely recalls 1,473 Polestar 4 EVs in China over battery thermal runaway risk - cnevpost.com. Geely Auto is recalling 1,473 Polestar 4 electric vehicles equipped with 86 kWh battery packs due to potential thermal runaway risks caused by inconsistencies in high-voltage battery component manufacturing. The issue may lead to increased internal resistance and battery performance degradation over time, posing a safety hazard in extreme cases. Affected battery modules will be replaced free of charge, and customers are advised to limit charging to 70% until repairs are completed. The recall follows a similar action earlier this year by Geely's Zeekr brand over related battery safety concerns.

- Svolt begins mass production of 80-kWh high-capacity PHEV battery - cnevpost.com. Svolt Energy has started mass production of its new 80 kWh Fortress 2.0 battery for plug-in hybrid electric vehicles, currently the largest-capacity PHEV battery available in China. Designed for large passenger vehicles and off-road use, the battery supports 6C fast charging and enables over 400 km of all-electric driving range. Featuring improved energy density and advanced thermal insulation materials, the new system aims to reduce charging frequency while enhancing safety and performance for next-generation hybrid models.

- Volvo's Flagship EV Truck Now Has Over 400 Miles Of Range - insideevs.com. Volvo Trucks has introduced an extended-range version of its FH Aero Electric heavy-duty truck, capable of driving up to 435 miles (700 km) on a full charge. The increased range is enabled by a newly designed rear electric axle that integrates dual motors and frees up space for a larger battery pack with up to 725 kWh capacity. Equipped with megawatt-class fast charging support, the truck can recharge from 20% to 80% in around 50 minutes, enhancing its suitability for long-haul electric transport operations.

- $15B Solid-State Battery Plant in Jiangsu Targets June Mass Production. Jusheng Energy is preparing to begin mass production of all-solid-state lithium batteries at its manufacturing base in Yancheng, Jiangsu, by the end of June 2026. The facility, completed in December 2025 with a total investment of CNY 11 billion (USD ~1.5 billion), is designed to produce 10Ah, 20Ah, and 30Ah solid-state cells. Once fully developed across three phases, the project is expected to achieve an annual production capacity of 20 GWh and become the world's largest single-site solid-state battery manufacturing base, supporting advancements in next-generation energy storage technologies.

Europe

- IBU-tec reports progress on plant construction for LFP battery material in Germany- electrive.com. IBU-tec has marked construction progress of its large-scale LFP battery material plant in Bitterfeld-Wolfen, Germany, with the completion of a key spray tower. The new facility, set to begin operations in 2028 with a capacity of 15,000 tonnes, will supply Volkswagen's battery subsidiary PowerCo under a 10-year agreement. Designed using proprietary, China-independent technology, the plant aims to produce LFP cathode materials with a significantly lower CO_2 footprint by consuming roughly half the energy of conventional production processes.

- Partial permit for Heide plant as Lyten/Northvolt repays millions - electrive.com. Northvolt Drei has received a key partial construction permit for its planned battery cell factory in Heide, Germany, as U.S. battery firm Lyten moves forward with plans to acquire the project following Northvolt's insolvency. The approval enables progress on the facility, which may now proceed at a reduced scale, targeting around 1,000 jobs instead of the originally planned 3,000. As part of the restructuring process, Northvolt Drei has also repaid €153 million in unused public funding from a €600 million convertible bond to German federal and state authorities, with a further repayment expected later this year.

- JR Energy Solution Partners with LionVolt to Expand Battery Production in Europe - thelec.net. JR Energy Solution has signed a manufacturing agreement with Dutch battery developer LionVolt to produce its high-energy lithium battery cells and support the development of a dedicated production facility in Europe. The partnership will begin with cell manufacturing at JR's Korean facilities before transitioning to European production. As demand grows for contract battery manufacturing services, the collaboration aims to help LionVolt scale production while strengthening JR Energy Solution's global footprint and foundry capabilities ahead of its planned IPO.

- Hithium Signs €400M Battery Storage Manufacturing Deal in Spain - cn.solarbe.com. Chinese energy storage company Hithium has signed a strategic investment memorandum with the Government of Navarre to establish a joint venture for a large-scale battery energy storage and system manufacturing plant in Spain, with an initial planned investment of approximately €400 million. The agreement, witnessed by Spanish Prime Minister Pedro Sánchez during his visit to China, marks a significant step in China–Spain green energy collaboration. The project will strengthen Hithium's European localization strategy, enhance its supply chain and delivery capabilities in the region, and support renewable energy development in Spain and across Europe through local production.

EXHIBIT 1: **Key commodities price performance**

	Price 17-Apr	Ccy	Mkt cap $bn	P/E 26E	EV /EBITDA 26E	%1D	%1W	%1M	%1Y	1Y px chart
Metal prices (US$/tonne)										
LiCO (spot)	24,535					1.7%	9%	10%	151%	
LiOH (spot)	24,535					1.7%	9%	10%	165%	
LiCO (contract)	17,250					0.0%	0%	27%	73%	
LiOH (contract)	18,250					0.0%	0%	3%	98%	
Cobalt (spot)	55,858					0.0%	0%	0%	68%	
Nickel (spot)	18,239					0.6%	6%	6%	17%	
Component prices										
Cathode NMC811						0.2%	1%	1%	44%	
Cathode LFP						0.9%	8%	14%	68%	
Precursor NMC811						0.5%	0%	0%	34%	
Precursor LFP						0.0%	5%	7%	21%	
Artificial Graphite						0.0%	0%	0%	2%	
Natural Graphite						0.0%	0%	0%	-6%	
Electrolyte NMC						0.0%	-3%	-3%	20%	
Electrolyte LFP						0.0%	-3%	-6%	41%	
Separator						0.0%	0%	0%	5%	
Spot battery cell cost (US$/kWh)										
LFP	61					0.2%	2%	3%	15%	
NMC532	88					0.1%	0%	0%	24%	
NMC622	86					0.1%	0%	0%	22%	
NMC811	86					0.1%	0%	0%	21%	
Spot battery pack cost (US$/kWh)										
LFP	77					0.2%	1%	4%	2%	
NMC532	119					0.1%	0%	0%	17%	
NMC622	119					0.1%	0%	0%	15%	
NMC811	119					0.1%	0%	0%	14%	

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

EXHIBIT 2: **Key companies price performance and valuation**

	Price 17-Apr	Ccy	Mkt cap $bn	P/E 26E	EV /EBITDA 26E	%1D	%1W	%1M	%1Y	1Y px chart
Cell makers										
LGES	417,500	KRW	65.9	296.4x	16.5x	0.8%	1%	10%	22%	
Samsung SDI	512,000	KRW	27.8	522.6x	19.6x	7.1%	6%	30%	183%	
CATL	444.2	CNY	300.6	21.9x	15.2x	-2.2%	7%	10%	97%	
CALB	37.1	HKD	9.1	22.8x	6.7x	-1.9%	0%	35%	140%	
EVE Energy	69.9	CNY	21.5	19.9x	12.5x	-1.6%	1%	2%	76%	
Gotion	40.2	CNY	10.7	32.9x	10.9x	1.1%	4%	7%	99%	
Sunwoda	29.4	CNY	8.0	18.4x	7.8x	0.2%	3%	11%	64%	
Farasis	13.9	CNY	2.5	n.a.	n.a.	3.2%	3%	0%	13%	
Lithium Miners/Refiners										
Albemarle	215.6	USD	25.4	26.2x	11.3x	16.3%	24%	30%	308%	
SQM	95.3	USD	25.1	16.9x	7.9x	8.8%	16%	24%	173%	
Pilbara Minerals	6.0	AUD	13.9	39.2x	19.6x	5.8%	13%	29%	322%	
Ganfeng Lithium	81.7	HKD	24.9	27.5x	18.2x	-2.9%	3%	32%	346%	
Tianqi Lithium	66.7	CNY	16.1	24.9x	7.2x	2.0%	12%	28%	143%	
Cathode										
LG Chem	358,500	KRW	17.1	######	3.2x	0.8%	1%	16%	62%	
EcoPro BM	208,000	KRW	13.7	645.4x	79.0x	1.2%	2%	8%	113%	
L&F	185,300	KRW	5.0	323.8x	35.5x	9.3%	-2%	69%	205%	
Umicore	17.4	EUR	5.1	12.1x	4.8x	-0.2%	-1%	3%	126%	
Ningbo Ronbay	33.0	CNY	3.4	50.4x	15.2x	5.8%	8%	7%	63%	
Beijing Easpring	57.8	CNY	4.6	30.4x	19.6x	1.7%	1%	7%	56%	
GEM	8.5	CNY	6.3	20.6x	6.8x	2.2%	5%	2%	42%	
Huayou Cobalt	66.2	CNY	18.4	14.7x	6.9x	0.5%	8%	7%	114%	
Dynanonic	47.9	CNY	2.0	92.8x	11.7x	0.0%	7%	7%	75%	
Anode										
Posco	234,500	KRW	14.1	447.2x	55.1x	4.5%	8%	21%	93%	
Putailai	35.9	CNY	11.2	23.8x	14.8x	0.2%	7%	17%	107%	
Shanshan	14.7	CNY	4.8	n.a.	n.a.	-0.3%	-1%	6%	134%	
Separator										
Asahi Kasei	1,602	JPY	13.7	14.9x	5.5x	-0.6%	-2%	0%	67%	
SK IE	24,250	KRW	1.3	n.a.	282.4x	2.5%	5%	10%	10%	
Toray Industries	1,157	JPY	10.9	21.4x	6.5x	-1.3%	-2%	5%	27%	
W-Scope	223	JPY	0.1	n.a.	n.a.	-2.6%	-6%	13%	5%	
Yunnan Energy	71.7	CNY	10.3	47.7x	16.2x	0.4%	7%	4%	150%	
Shenzhen Senior	15.7	CNY	3.1	33.1x	10.5x	-0.8%	0%	6%	71%	
Sinoma Science	49.3	CNY	12.1	30.8x	12.3x	0.9%	8%	16%	270%	
Electrolyte										
Enchem	42,100	KRW	0.6	n.a.	n.a.	-3.2%	13%	-26%	-49%	
Tinci Minerals	48.8	CNY	14.6	17.2x	11.0x	-0.8%	4%	7%	193%	
Capchem	62.8	CNY	6.9	24.2x	14.8x	-1.2%	-2%	9%	111%	
Jiangsu Guotai	9.4	CNY	2.2	11.3x	n.a.	-0.5%	1%	1%	37%	
Shanshan	14.7	CNY	4.8	n.a.	n.a.	-0.3%	-1%	6%	134%	
Equipment Maker										
Hirano	1,816	JPY	0.2	17.2x	n.a.	0.6%	2%	3%	20%	
CKD	5,540	JPY	2.4	29.8x	15.4x	-3.8%	-1%	25%	187%	
Wuxi Lead	56.0	CNY	13.6	37.4x	29.7x	4.4%	7%	12%	190%	
Shenzhen Yinghe	28.8	CNY	2.7	26.3x	14.8x	2.7%	3%	17%	70%	
Zhejiang HangKe	31.9	CNY	2.8	30.2x	29.1x	5.1%	10%	18%	91%	
Guangdong Lyric	53.9	CNY	1.3	58.3x	20.6x	5.4%	8%	-1%	133%	
Shenzhen United	28.6	CNY	1.4	24.1x	16.1x	6.7%	11%	16%	88%	

Source: Bloomberg (all estimates), Bernstein analysis

Company Models

CATL | LG Energy Solution | Samsung SDI

LG Chem | EcoPro BM | Posco Future M

Tianqi Lithium

Sungrow

Industry Models

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

Quick Take: CATL 1Q26 - Stronger for longer

CATL: 1Q26 Earnings Preview. Raising estimates on strong volume growth

EV TRACKER - 2025: Solid year of 20% growth, but expectations are for slower 2026

CATL: A winner in the age of energy disruption

Future of Tech: Can China achieve AI supremacy?

Global Energy Storage: Key battery trends from 3000 electric vehicles

The Long View: Batteries to only get better

Global Energy Storage: Are rising metal prices a risk to battery maker margins?

Global Energy Storage: Inside the gigafactory arms race

Tianqi Lithium: 1Q26 Best Idea - Energy storage powers lithium upside. Outperform

Global Energy Storage: China sodium-ion battery cost breakthrough

Global Energy Storage: 2026 Outlook. Power storage set to continue to drive the battery rally

Global Energy Storage: 2026 Lithium Outlook. How high can prices go?

Global Energy Storage: ESS demand drives battery demand into overdrive

Global Energy Storage: Korean battery makers rally on US ESS demand. Is it justified?

Sungrow: A blue sky on ESS optimism - Upgrading to Outperform

Global Energy Storage: Should investors chase the rally in battery stocks?

Global Energy Storage: Why is ESS demand booming?

Global Energy Storage: Increasing CATL price target to CNY420 on blockbuster year for ESS

China EV & Battery Tour Takeaways, 2025 Edition: Steady Evolution

Global Energy Storage: Can US ESS demand offset EV weakness for Korean battery makers

Global Energy Storage: ESS battery demand surpasses electric vehicles

Global Energy Storage: Has a Deepseek moment arrived for solid state batteries?

Global Energy Storage: Downgrading Samsung SDI and LG Chem to Market-Perform as US EV adoption stalls

Global Energy Storage: How CATL won Europe's battery battle

Global Energy Storage: Has the price of lithium bottomed?

CATL: 2Q25 Earnings Preview. So far so good.

Global Energy Storage: Key takeaways from our battery value chain conference

Global Energy Storage: Is LMR the LFP killer?

Global Energy Storage: Valuation of energy storage companies

Electric Revolution: Divergence - Which battery makers have the best EV exposure?

CATL: HK IPO - key investor questions answered

Global Energy Storage: Battery takeaways from Shanghai Auto Show

Global Energy Storage: Impact of US tariffs on energy storage market

Global Energy Storage: A tale of two battery markets

Global Energy Storage: What are the world's lithium leaders saying about the future of lithium?

Global Energy Storage: Key takeaways from the Korea Interbattery Conference 2025

Future of Tech: Lift off for the low-altitude economy

Global Energy Storage: How big is the datacenter opportunity for batteries?

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

Global Energy Storage: Energy storage demand continues to surge on renewables and data centers

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

Global Energy Storage: Outlook 2025. New markets to drive battery growth

BERNSTEIN TICKER TABLE

			17 Apr 2026		TTM	Reported EPS				Reported P/E (x)		
			Closing	Price	Rel.							
Ticker	Rating	Cur	Price	Target	Perf.	Cur	2025A	2026E	2027E	2025A	2026E	2027E
300750.CH (CATL)	O	CNY	444.20	620.00	52.4%	CNY	16.14	21.56	26.02	27.5	20.6	17.1
3750.HK (CATL)	M	HKD	692.50	600.00	NA	CNY	16.14	21.56	26.02	37.4	28.0	23.2
051910.KS (LG Chem)	M	KRW	355,500	298,000	18.3%	KRW	(13,258.70)	2,042.47	31,118	(26.8)	174.1	11.4
373220.KS (LGES)	M	KRW	414,000	347,000	(22.2)%	KRW	(5,308.10)	1,811.04	9,452.97	(78.0)	228.6	43.8
006400.KS (SDI)	M	KRW	478,000	330,000	138.9%	KRW	(9,933.80)	543.59	16,737	(48.1)	879.3	28.6
003670.KS (Posco Future M)	U	KRW	224,500	190,000	48.0%	KRW	(2,740.96)	376.72	898.20	(81.9)	595.9	249.9
247540.KS (EcoPro BM)	U	KRW	205,500	106,000	69.7%	KRW	(991.00)	279.00	344.00	(207.4)	736.6	597.4
300274.CH (Sungrow)	O	RMB	132.75	260.00	93.9%	RMB	5.31	8.10	10.54	25.0	16.4	12.6
002466.CH (Tianqi Lithium)	O	CNY	66.65	73.00	98.6%	CNY	0.28	3.29	6.18	236.2	20.3	10.8
9696.HK (Tianqi Lithium)	O	HKD	58.45	61.00	131.6%	CNY	0.28	3.29	6.18	180.4	15.5	8.2
ASIAX			1,817.92									

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

003670.KS, 247540.KS, 300274.CH base year is 2024;

Source: Bloomberg, Bernstein estimates and analysis.

I. REQUIRED DISCLOSURES

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RATINGS DEFINITIONS, BENCHMARKS AND DISTRIBUTION

EQUITY RATINGS DEFINITIONS

Bernstein brand

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The Bernstein brand has three categories of ratings:

- Outperform: Stock will outpace the market index by more than 15 pp
- Market-Perform: Stock will perform in line with the market index to within +/-15 pp
- Underperform: Stock will trail the performance of the market index by more than 15 pp

Coverage Suspended: Coverage of a company under the Bernstein research brand has been suspended. Ratings and price targets are suspended temporarily, are no longer current, and should therefore not be relied upon.

Not Rated: A rating assigned when the stock cannot be accurately valued, or the performance of the company accurately predicted, at the present time. The covering analyst may continue to publish research reports on the company to update investors on events and developments.

Not Covered (NC) denotes companies that are not under coverage.

Bernstein brand stock ratings are based on a 12-month time horizon.

Autonomous brand – common stocks

The Autonomous brand rates common stocks as indicated below. As our benchmarks we use the Bloomberg Europe 500 Banks And Financial Services Index (BEBANKS) and Bloomberg Europe Dev Mkt Financials Large and Mid Cap Price Ret Index EUR (EDMFI) index for developed European banks and Payments, the Bloomberg Europe 500 Insurance Index (BEINSUR) for European insurers, the S&P 500 and S&P Financials for US banks and Payments coverage, S5LIFE for US Insurance, the S&P Insurance Select Industry (SPSIINS) for US Non-Life Insurers coverage, and the Bloomberg Emerging Markets Financials Large, Mid and Small Cap Price Return Index (EMLSF) for emerging market banks and insurers and Payments. Ratings are stated relative to the sector (not the market).

The Autonomous brand has three categories of common stock ratings:

- Outperform (OP): Stock will outpace the relevant index by more than 10 pp

- Neutral (N): Stock will perform in line with the market index to within +/-10 pp

- Underperform (UP): Stock will trail the performance of the relevant index by more than 10 pp

Coverage Suspended: Coverage of a company under the Autonomous research brand has been suspended. Ratings and price targets are suspended temporarily, are no longer current, and should therefore not be relied upon.

Not Rated: A rating assigned when the stock cannot be accurately valued, or the performance of the company accurately predicted, at the present time. The covering analyst may continue to publish research reports on the company to update investors on events and developments.

Those denoted as ‘Feature’ (e.g., Feature Outperform FOP, Feature Under Outperform FUP) are our core ideas.

Not Covered (NC) denotes companies that are not under coverage.

Autonomous brand common stock ratings are based on a 12-month time horizon.

Autonomous brand – preferred stocks

The Autonomous brand has three categories of preferred stock ratings:

- Outperform (OP): The total return of the preferred instrument is expected to outperform preferred securities of other issuers operating in similar sectors or rating categories over the next six months.

- Neutral (N): The total return of the preferred instrument is expected to perform in line with preferred securities of other issuers operating in similar sectors or rating categories over the next six months.

- Underperform (UP): The total return of the preferred instrument is expected to underperform preferred securities of other issuers operating in similar sectors or rating categories over the next six months.

Autonomous preferred stock ratings are based on a 6-month time horizon.

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