

Zacks Small-Cap Research

Sponsored – Impartial - Comprehensive

Brian Lantier
312-265-9153
blantier@zacks.com

scr.zacks.com

10 S. Riverside Plaza, Chicago, IL 60606

CBAK Energy Technology (CBAT-NASDAQ)

CBAT: Reasons for optimism are on the horizon as the company discusses new expansion plans.

CBAK's battery business has a bright outlook given the strong demand for cylindrical cells which is driving expansion plans. Near-term margin pressures and tariff concerns could weigh on the stock. The shares continue to represent a good value trading at just 4.5 times our 2026 estimate.

Current Price (03/14/25) **\$0.85**
Valuation **\$2.00**

OUTLOOK

CBAK Energy Technology's core battery business has performed well during the prolonged industry downturn still generating over \$20 million in operating income in 2024.

Capacity expansions disclosures were increased on the company's conference call as the company now anticipates growing from 2.3 GWh of capacity to 7.6 GWh in 2026.

Tariff concerns continue to weigh on the shares and the company's raw material business remains very weak but for investors seeking exposure to the cylindrical cell market CBAK's shares could represent a good value if expansion plans are successfully implemented.

SUMMARY DATA

52-Week High **\$2.08**
52-Week Low **\$0.77**
One-Year Return (%) **-20%**
Beta **1.59**
Average Daily Volume (sh) **298,592**

Shares Outstanding (mil) **90**
Market Capitalization (\$mil) **\$77**
Short Interest Ratio (days) **N/A**
Institutional Ownership (%) **2**
Insider Ownership (%) **13**

Annual Cash Dividend **\$0.00**
Dividend Yield (%) **0.00**

5-Yr. Historical Growth Rates
Sales (%) **81.5**
Earnings Per Share (%) **N/A**
Dividend (%) **N/A**

P/E using TTM EPS **6.5x**
P/E using 2025 Estimate **21.4x**
P/E using 2025 Estimate **4.5x**

Zacks Rank **N/A**

Risk Level **Above Average**
Type of Stock **Speculative**
Industry **Energy Storage**

ZACKS ESTIMATES

Revenue
(in millions of \$)

	Q1 (Mar)	Q2 (Jun)	Q3 (Sep)	Q4 (Dec)	Year (Dec)
2023	42 A	42 A	63 A	56 A	204 A
2023	59 A	48 A	45 A	28 A	177 A
2025	52 E	49 E	56 E	66 E	223 E
2026	76 E	71 E	77 E	81 E	305 E

	Q1 (Mar)	Q2 (Jun)	Q3 (Sep)	Q4 (Dec)	Year (Dec)
2023	-\$0.02 A	-\$0.03 A	\$0.07 A	-\$0.04 A	-\$0.03 A
2024	\$0.11 A	\$0.07 A	\$0.00 A	-\$0.05 A	\$0.13 A
2025	\$0.00 E	\$0.00 E	\$0.01 E	\$0.03 E	\$0.04 E
2026	\$0.05 E	\$0.04 E	\$0.05 E	\$0.05 E	\$0.19 E

Zacks Projected EPS Growth Rate - Next 5 Years % **N/A**

*Quarterly EPS may not add up to annual EPS due to rounding

WHAT'S NEW

CBAK Energy Reports Full Year 2024 Results

On Monday, March 17th, CBAK Energy Technology released its full-year results which saw many of the trends of 2024 continue into the fourth quarter including profound weakness in the raw material business. While we will have to wait for the full 10-K to be filed for a full review of the business we can discuss some 2024 highlights:

- We estimate that battery revenues in Q4 were roughly \$34.1 million which appears to be about 12% below our estimate of \$38.9 million. However, we would note that the company's largest product line – uninterruptable supplies – likely generated the substantial majority of these revenues and were roughly in line with forecasts. Uninterruptable supplies accounted for \$124 million of total revenue in 2024 (flat versus 2023) despite industry-wide weakness which speaks to the strong demand for the company's cylindrical cells and the strength of the company's customer relationships. It does appear as though Light Electric Vehicle sales (mostly to two-wheeled scooter manufacturers) while nearly doubling to \$10.3 million in 2024 underperformed our forecast in Q4 significantly. Since we are currently projecting robust growth in this business line by 2026 it will be important to monitor this business throughout 2025.
- While the company's full-year battery gross margin remained an impressive 31.5% we believe margins dipped meaningfully in the fourth quarter perhaps slipping below 20%. This appears to be in line with our expectation that gross margins would eventually decline toward industry norms and we are forecasting battery gross margins in the high teens in 2026.
- The company's raw material business remains a significant drag on the overall performance of CBAK and we estimate that the raw material business had a gross loss for all of 2024 while sales in this division tumbled sharply to just over \$40 million in 2024. Most industry forecasts indicate that the excess capacity in the battery raw material market is likely to continue through 2027 or 2028 and we anticipate very weak pricing and margins will continue to plague this market. Management indicated that given the weak pricing in the market, strategic alternatives are limited at this time and thus, consolidated results for CBAK will likely continue to be impacted by the weak performance of the raw material business.
- The balance of the company's expenses were roughly in line with our model but as a result of the decline in battery gross margins and weak raw material business, we believe that the company reported a loss of (\$0.05)/share for the fourth quarter versus our estimate of \$0.01/share of income.
- The company has made significant strides in establishing its battery cell business as revenue exceeded \$136 million in 2024 and the company reported \$19.4 million in revenue for this business line. However, the continued weakness in the raw materials business and the inability to dispose of the business will likely remain a concern for investors given the outlook for raw materials for the next three years.
- We believe 2025 will be the "make or break" year for CBAK as the company ramps up efforts to expand its battery cell capacity at its Nanjing and Dalian facilities. CBAK's management indicated again that it intends to add 3GWh of capacity at the Nanjing facility and highlighted a new plan to add 2.3 GWh of capacity at the Dalian facility which should enter production in 2026. Given the company currently operates 2.3 GWh combined at both facilities the prospect of adding 5.3 GWh or

7.6 GWh total capacity in 2026 is significant. The prospect of increasing the company's capacity by more than 200% even as margins compress should be enticing to long-term, value investors but if the company is unable to achieve these expansion targets the company may struggle to regain investor confidence.

- We are adjusting our forecasts to reflect slightly lower sales and continued weakness in the raw material business. If the company begins production sooner than our projection on the new Nanjing or Dalian lines that would positively impact our model. Our full-year EPS forecasts are now \$0.04/share in 2025 and \$0.19/share for 2026.

Balance Sheet: The company's current liabilities remain elevated and driven by a jump in accrued liabilities and payables, increased and grew further to \$171.7 million as of 12/31/24 (up 11% since the end of the third quarter). It is encouraging to see the company's construction in progress is increasing as investments are made and other prepayments growth seems to match its expansion plans.

Market share report

In February the company noted a research report from Start Point Institute of Research that indicated in 2024, the global shipments of 32140 cylindrical battery cells increased by 14% to more than 102 million units. CBAK's management team disclosed that the company shipped 19.4 million 32140 cells in 2024 and thus, they appear to have had a 19% market share of this growing form factor. Cylindrical cells are ideally suited for light electric vehicle use and portable energy storage and the 32140 format has been increasing in popularity recently. This proprietary report was not released to the general public, so we've been unable to independently verify the data but it does seem to confirm that CBAK is a major player in the large cylindrical cell market. As the company introduces more cell formats (40-series) we think that its position as an industry leader will enable it to maintain or grow its market share.

Expansion of Production Lines

The company further discussed its planned capacity expansion at the Dalian and Nanjing facilities on the year-end conference call which is being driven by strong demand from its customers for cylindrical cells.

Nanjing – The company has already announced an accelerated expansion of the Nanjing facility focused on production of the 32140 which should enter full production by the end of 2025 and add up to 3.0 GWh of capacity at this facility. As a reminder, the company currently has 1.3 GWh of capacity at Nanjing so this expansion will take the company's capacity to 4.3 GWh at Nanjing.

Dalian – The company announced a new expansion at the Dalian facility which currently operates 1.0 GWh of capacity focused on the production of 26650 and 26700 cells. The new expansion – expected to be 2.3 GWh focused on the production of 40135 cells – is roughly equivalent to the company's total current capacity and is a significant expansion of the Dalian facility.

This expansion could also be completed in 2025 to enter production in 2026 and in total this expansion represents a meaningful increase in the total capacity that CBAK could offer to customers in 2026. Management also noted that in light of the very fluid trade regulations, it was exploring the idea of relocating some production outside of China and they have been reviewing potential sites though this sounds like it is in the very earliest stages of discussion.

We are not going to assume that both of these expansions are operational for all of 2026 at this point, but if the company does complete these expansions, it offers significant upside to our revenue and earnings estimates in 2026.

With \$136.6 million in battery sales in 2024 derived from 2.3 GWh of capacity, if the company reaches 7.6 GWh of capacity in 2026 our revenue estimate of \$258 million from battery sales is likely to be revised significantly higher. We would caution that CBAK's expansion plans have been slow to evolve in the past but there appears to be a new urgency that should be encouraging to investors.

OVERVIEW

- CBAK Energy Technology (NASDAQ: CBAT) is an integrated lithium-ion battery cell company with manufacturing and raw materials divisions in China. The company operates manufacturing facilities in Dalian (a port city in Liaoning Province) and Nanjing (the capital of Jiangsu Province) with ambitious plans to expand production potentially reaching 7.6 GWh of capacity in 2026.
- Demand for energy storage has ramped significantly in recent years and as industrial and grid storage needs emerge demand should accelerate further. The company appears to be establishing itself as a strong player in the market for large cylindrical cells with a recent industry report indicating that they had a 19% market share of global shipments of 32140 cells.
- The lithium-ion battery market is almost entirely dominated by large Asian (principally Chinese) manufacturers today. Most of these companies are focused on providing battery packs to the EV market which creates an opportunity for cylindrical cells in the energy storage market where CBAK is focusing its efforts.
- We are maintaining our twelve-month valuation target at \$2.00/share based on our current estimates for earnings in 2026 however, we think this valuation target could be revised upward if the Nanjing expansion happens sooner than anticipated. There remains significant headline risk associated with any news on tariffs from the US. If the company's expansion plans are delayed or deferred, we will have to revisit our target valuation.

RISKS

- The PRC government exerts substantial influence over a wide variety of issues related to the company's business. Since the company is based in the US with China-based operating subsidiaries, there are several issues related to the government's oversight that could result in a material adverse change in the company's operations and subsequently, the value of CBAK's common stock. In addition, it should be noted that rules and regulations in China can change quickly with little advance notice.
- The company's independent auditors have expressed substantial doubt about its ability to continue as a going concern. The company is working with its banks and lenders to ensure that they will have access to credit but improving the company's profitability will be an important step toward resolving this issue.
- The competitive landscape for lithium batteries is intense and many of the company's competitors are in much stronger financial positions. In the long run, the company will also face increased competition from new facilities that are expected to be built in North America and the EU.
- The company's customer concentration remains very high and the loss of any significant customer could impact the company's financial stability. In 2022, roughly 70% of revenues were

derived from the company's five largest customers. In the battery business, customer concentration could be even higher. The acquisition of Viessmann by Carrier presents an opportunity and a risk given the proportion of battery sales Viessmann represents.

- The company indicated that it identified a material weakness in its internal control over financial reporting. Management believes that the company did not have appropriate policies and procedures in place to evaluate proper accounting and disclosures of key documents and agreements, and there was insufficient accounting personnel with an appropriate level of technical accounting knowledge. The company has implemented additional training to address this issue but it remains a risk. As noted in recent news, the company elected to change its auditor in July 2023 and we will see if this leads to improved internal financial controls.
- The company's shares have been trading below NASDAQ's minimum \$1 bid price for most of 2025. If the stock price cannot regain a level above the \$1 minimum bid, the company is at risk of delisting or other options like a reverse stock split may have to be considered.

PROJECTED INCOME STATEMENT

CBAK Energy Technology

3/17/25

					Mar	June	Sept	Dec		Mar	June	Sept	Dec	
	2022A	2023A	2024A		1Q25E	2Q25E	3Q25E	4Q25E	2025E	1Q26E	2Q26E	3Q26E	4Q26E	2026E
(USD in 000's; December Year-End)														
Battery Revenues														
Uninterruptible supplies	83,604.0	74,978.0	124,588.0		35,550.8	31,995.7	38,394.8	47,993.5	153,934.9	57,592.3	51,833.0	57,016.3	59,867.1	226,308.8
Light Electric Vehicles	6,413.8	8,029.6	10,319.2		4,901.3	5,146.4	5,403.7	6,214.3	21,665.7	6,525.0	7,177.5	7,536.3	7,913.2	29,151.9
Electric Vehicles	4,695.3	2,289.1	1,681.7		377.8	396.7	424.5	454.2	1,653.3	476.9	500.8	535.8	573.4	2,086.9
Total Battery Revenues	94,713.1	85,296.7	136,588.8		40,829.9	37,538.8	44,223.0	54,662.0	177,253.8	64,594.2	59,511.3	65,088.5	68,353.7	257,547.6
Battery Revenues % change (yoy)		-9.9%												
Raw Material Revenues														
Precursor	78,680.0		-		-	-	-	-	-	-	-	-	-	-
Cathode	75,331.0		-		-	-	-	-	-	-	-	-	-	-
Total Raw Material Revenues	154,011.0	119,141.7	40,025.8		11,334.6	11,447.9	11,562.4	11,678.0	46,022.8	11,794.8	11,912.7	12,031.9	12,152.2	47,891.6
Sales	248,725.8	204,438.4	176,614.6		52,164.5	48,986.7	55,785.4	66,340.0	223,276.7	76,388.9	71,424.0	77,120.4	80,505.8	305,439.2
% change (yoy)	372%	-18%	-14%		-11%	2%	25%	161%	26%	46%	46%	38%	21%	37%
Cost of Revenues	230,630	172,714	134,839		43,944	41,508	46,437	54,868	186,757	62,942	59,165	63,832	66,683	252,623
Gross Profit	18,096	31,724	41,775		8,221	7,479	9,348	11,472	36,519	13,447	12,259	13,288	13,823	52,817
% change (yoy)			0						-13%					45%
Gross Profit Margin	7.3%	15.5%	23.7%		15.8%	15.3%	16.8%	17.3%	16.4%	17.6%	17.2%	17.2%	17.2%	17.3%
Operating Expenses:														
Research and Development	10,635	11,928	13,010		3,729	3,542	3,719	3,794	14,783	3,718	3,532	3,708	3,783	14,740
Sales and marketing	2,008	4,904	5,198		1,127	1,183	1,242	1,304	4,856	1,357	1,424	1,496	1,570	5,847
General and Administrative	9,738	13,789	13,948		3,985	4,025	4,146	4,249	16,405	4,292	4,335	4,465	4,576	17,668
	22,381	30,621	32,156		8,840	8,750	9,107	9,347	36,045	9,366	9,291	9,669	9,929	38,255
% of Sales	9.0%	15.0%	18.2%		16.9%	17.9%	16.3%	14.1%	16.1%	12.3%	13.0%	12.5%	12.3%	12.5%
Operating Income (Loss)	(4,285)	1,103	9,620		(620)	(1,271)	241	2,124	474	4,081	2,968	3,619	3,893	14,561
Impairment Charge on PPE & goodwill	6,388	(7,070)	(475)						-					-
(Provision for) recovery of doubtful accounts	(831)	(1,285)	(356)						-					-
Other Income, net	(7,252)	(3,023)	1,046		0	0	0	0	-	0	0	0	0	-
Finance Expenses/(Income)	(491)	(433)	(1,283)		0	0	0	0	0	0	0	0	0	0
Changes in equity investee			27											
Changes in fair value of warrants liability	5,710	136	0		0	0	0	0	0	0	0	0	0	0
Impairment of non-marketable equity securities	0	(2,393)	0		0	0	0	0	0	0	0	0	0	0
Income before Taxes	(12,556)	(6,053)	11,144		(620)	(1,271)	241	2,124	474	4,081	2,968	3,619	3,893	14,561
Loss (income) attributable to non-controlling interests	1,879	6,090	2,205		840	882	909	936	3,567	964	1,012	1,043	1,074	4,093
Income tax (expense)/credit	1,228	(2,486)	(1,559)		50	102	(19)	(170)	(38)	(326)	(237)	(290)	(311)	(1,165)
Net Income (Loss) attributable to CBAK	(9,448)	(2,449)	11,790		270	(287)	1,130	2,890	4,003	4,718	3,743	4,372	4,656	17,489
EPS reported	(0.11)	(0.03)	0.13		0.00	(0.00)	0.01	0.03	0.04	0.05	0.04	0.05	0.05	0.19
% change (yoy)	N/A	N/A	N/A		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Diluted Shares (weighted average)	88927.0	89252.0	90158.0		90372.3	90553.1	90734.2	90915.7	90643.8	91097.5	91279.7	91462.3	91645.2	91371.2
Margins:														
Gross Margin	7.3%	15.5%	23.7%		15.8%	15.3%	16.8%	17.3%	16.4%	17.6%	17.2%	17.2%	17.2%	17.3%
Research and Development as a % of Sales	4.3%	5.8%	7.4%		7.1%	7.2%	6.7%	5.7%	6.6%	4.9%	4.9%	4.8%	4.7%	4.8%
General & Administrative as a % of Sales	3.9%	6.7%	7.9%		7.6%	8.2%	7.4%	6.4%	7.3%	5.6%	6.1%	5.8%	5.7%	5.8%

Source: Zacks SCR, Brian Lantier, Company Filings

BALANCE SHEET

CBAK Energy Technology, Inc.
Balance Sheet in US Dollars
12/31/24

(US Dollars USD in 000s)

Assets

Current Assets

Cash and Cash Equivalents	6,724
Pledged Deposits	54,062
Term Deposits	4,237
Trade and bills receivable, net	32,939
Inventories	22,851
Prepayment & other receivables	20,005
Receivables from a former subsidiary, net	12
Income Tax recoverable	566
Total current assets	141,397

Property, plant & tquipment (net)	85,487
Construction in progress	42,527
Long-term investments, net	2,247
Prepaid land use rights	11,076
Intangible Assets (net)	383
Deposit paid for acquisition - long-term investment	15,864
Operating lease right-of-use assets, net	3,238
Deferred tax assets, net	

Total Assets **302,218**

Liabilities

Current Liabilities

Trade and bills payable	84,724
Short-term bank borrowings	26,087
Other short-term loans	336
Accrued expenses and other payables	58,286
Payables to a former subsidiary, net	420
Deferred government grants, current	556
Product warranty provisions	23
Income Tax Payable	0
Operating lease liability, current	1,268
Finance lease liability, current	0
Total current liabilities	171,701

Deferred government grants, non-current	7,580
Product warranty provisions	421
Operating lease liability, non-current	2,449
Accrued expenses & other payables, non-current	0

Total Liabilities **182,151**

Shareholder's Equity

Common stock	90
Donated shares	14,102
Additional Paid-in Capital	247,843
Statutory reserves	1,231
Accumulated Deficit	(122,606)
Accumulated Other Comprehensive Loss	(14,919)

Shareholder's Equity **125,740**

Less: Treasury Shares (4,067)

Total shareholders' equity **121,674**

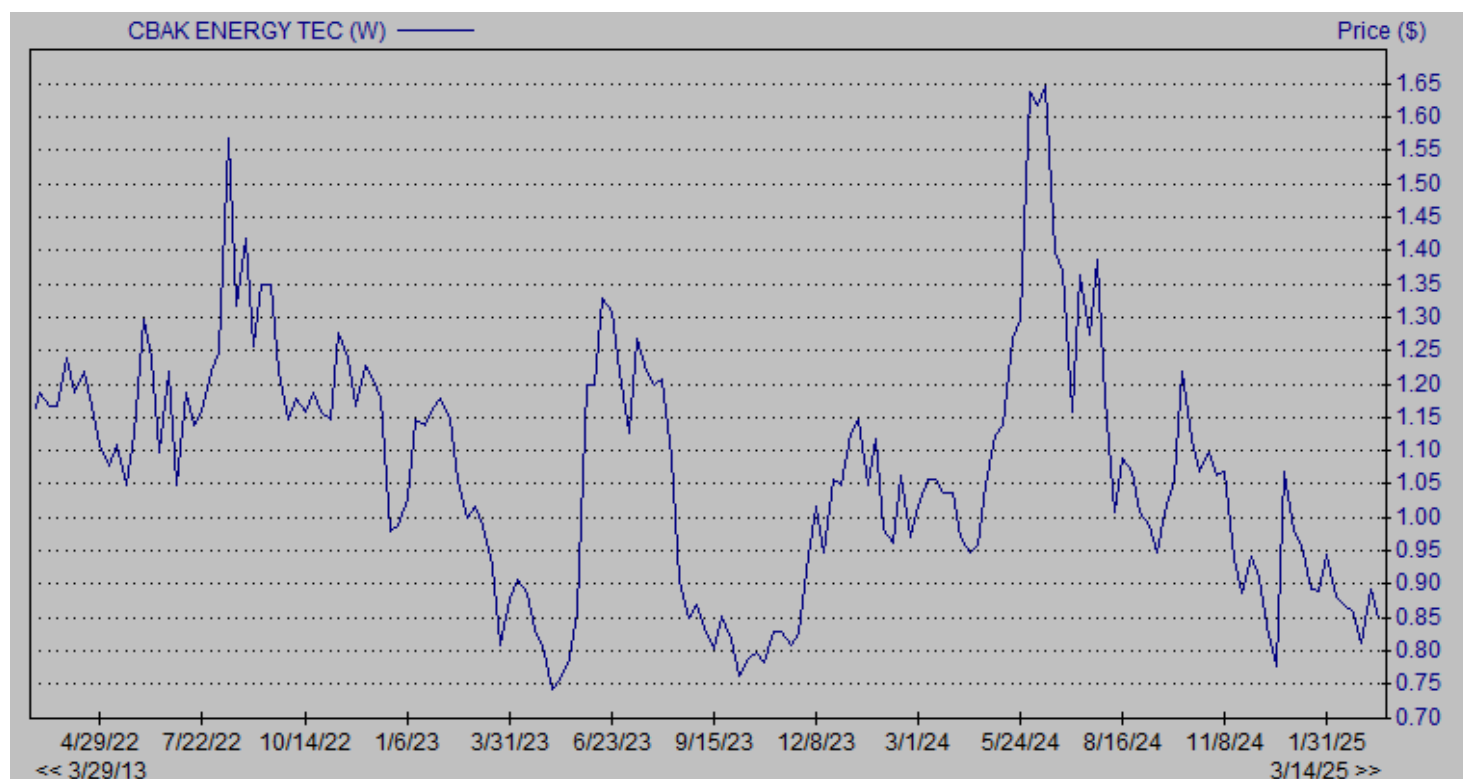
Non-controlling interests (1,606)

Total equity **120,068**

Total Liabilities & Equity **302,219**

Source: Company Press Release

HISTORICAL STOCK PRICE



DISCLOSURES

The following disclosures relate to relationships between Zacks Small-Cap Research ("Zacks SCR"), a division of Zacks Investment Research ("ZIR"), and the issuers covered by the Zacks SCR Analysts in the Small-Cap Universe.

ANALYST DISCLOSURES

I, Brian Lantier, hereby certify that the view expressed in this research report accurately reflect my personal views about the subject securities and issuers. I also certify that no part of my compensation was, is, or will be, directly or indirectly, related to the recommendations or views expressed in this research report. I believe the information used for the creation of this report has been obtained from sources I considered to be reliable, but I can neither guarantee nor represent the completeness or accuracy of the information herewith. Such information and the opinions expressed are subject to change without notice.

INVESTMENT BANKING AND FEES FOR SERVICES

Zacks SCR does not provide investment banking services nor has it received compensation for investment banking services from the issuers of the securities covered in this report or article.

Zacks SCR has received compensation from the issuer directly, from an investment manager, or from an investor relations consulting firm engaged by the issuer for providing non-investment banking services to this issuer and expects to receive additional compensation for such non-investment banking services provided to this issuer. The non-investment banking services provided to the issuer includes the preparation of this report, investor relations services, investment software, financial database analysis, organization of non-deal road shows, and attendance fees for conferences sponsored or co-sponsored by Zacks SCR. The fees for these services vary on a per-client basis and are subject to the number and types of services contracted. Fees typically range between ten thousand and fifty thousand dollars per annum. Details of fees paid by this issuer are available upon request.

POLICY DISCLOSURES

This report provides an objective valuation of the issuer today and expected valuations of the issuer at various future dates based on applying standard investment valuation methodologies to the revenue and EPS forecasts made by the SCR Analyst of the issuer's business.

SCR Analysts are restricted from holding or trading securities in the issuers that they cover. ZIR and Zacks SCR do not make a market in any security followed by SCR nor do they act as dealers in these securities. Each Zacks SCR Analyst has full discretion over the valuation of the issuer included in this report based on his or her own due diligence. SCR Analysts are paid based on the number of companies they cover.

SCR Analyst compensation is not, was not, nor will be, directly or indirectly, related to the specific valuations or views expressed in any report or article.

ADDITIONAL INFORMATION

Additional information is available upon request. Zacks SCR reports and articles are based on data obtained from sources that it believes to be reliable, but are not guaranteed to be accurate nor do they purport to be complete. Because of individual financial or investment objectives and/or financial circumstances, this report or article should not be construed as advice designed to meet the particular investment needs of any investor. Investing involves risk. Any opinions expressed by Zacks SCR Analysts are subject to change without notice. Reports or articles or tweets are not to be construed as an offer or solicitation of an offer to buy or sell the securities herein mentioned.

CANADIAN COVERAGE

This research report is a product of Zacks SCR and prepared by a research analyst who is employed by or is a consultant to Zacks SCR. The research analyst preparing the research report is resident outside of Canada, and is not an associated person of any Canadian registered adviser and/or dealer. Therefore, the analyst is not subject to supervision by a Canadian registered adviser and/or dealer, and is not required to satisfy the regulatory licensing requirements of any Canadian provincial securities regulators, the Investment Industry Regulatory Organization of Canada and is not required to otherwise comply with Canadian rules or regulations.