

18 September 2023 Global Equity Research led by Dr. Thomas Kenny, Director of Equity Research and Charlie Yang, Senior Analyst, Mining and Commodities Hilda Gao, Research Analyst <u>information@cedrusinvestments.com</u>

Overweight

Price Target: AU\$3.81 / GBp196 PYX Resources: Raising Target Price; Continuously Improved HY'23 Financials with New Export License for TiO₂

Introduction

PYX Resources Limited ("PYX" or "Company"; NSX: PYX | LSE: PYX) is the world's third-largest publicly-listed zircon producer by zircon resources. It represents a leading and fast-growing emerging force in premium zircon production with enormous potential to grow output and enhance profitability. On 13 September 2023, PYX announced its audited financial results for the six months ended 30 June 2023 ("HY 2023").

This report provides highlights regarding PYX's HY 2023 financial results and some of its latest operational update together with our current assessment of the Company's valuation. Our analysis was made based on the operational milestones achieved by PYX and our view of the market conditions.

Some of the key achievements and milestones made are as follows:

- a) Delivered a sustainable growth in zircon production by 33% to 5.7kt¹ and zircon sales by 34% to 5.2kt both versus the same period in 2022. Continued to generate a positive underlying EBITDA of about US\$131k, a further 46% increase from HY 2022.
- b) Obtained an export license for titanium dioxide (TiO₂) products (rutile and ilmenite) from the Indonesian government, enabling PYX to add revenue streams and maximize the value of its deposits for the benefits of shareholders.



Share Price (as of 15 September 2023): AU\$0.51/GBp22.95 12- to 18-month Target Price: AU\$3.81/GBp196

Market Cap (as of 15 September 2023): AU\$232.1M/GBP104.4M Total Shares: 417.8 M Dividend and Yield: N/A

Recommendation Summary

- a) We continue our coverage of PYX and reiterate an Overweight rating, raising the 12- to 18-month price target from AU\$3.40 to AU\$3.81, representing an upside potential of about 647% over its closing price of AU\$0.51 as of 15 September 2023. Most of the increase in the AU\$ target price is driven by the weakening of AU\$ (currency of PYX's shares listed on the National Stock Exchange of Australia or NSX) against US\$ (currency used in PYX's financial statements);
- b) PYX is a globally leading premium zircon producer. Within its total resource base of 264 million tonnes of JORC-compliant mineral resources, there are a combined 10.5 million tonnes of contained zircon from its two assets. The Mandiri asset alone has 6 million tonnes of contained zircon, the largest discovery worldwide since 2012;
- c) The Company's mineral resources are not only abundant but also have one of the highest heavy mineral ("HM") assemblage values of US\$1,824 per tonne in the industry. Combining easy extraction and low processing cost with significant exploration potential, PYX enjoys tremendous benefits from its premier deposits. Consequently, in our view, PYX's shares should be traded at the very high end of the valuation range on a per tonne of HM resource basis among its peers at least in the short term;

¹ Kt means thousands of tonnes

- d) Importantly, we believe PYX is better positioned to capture further growth, gain continued investor support and ride favorable market momentum as a result of its competent management that has been delivering outstanding operational milestones and financial performance as well as meeting market and shareholder expectations; and
- e) **Outlook for the mineral sands industry in general and zircon in particular remains robust**. The positive prospects are based on long-term demand fueled by i) sustained global economic growth; 2) increasing urbanization from other developing countries especially those in Asia and Africa in addition to China and India; 3) innovative applications resulted from technological advancements; and 4) anticipated supply shortages. Strong demand for zircon is evident by the resilience of its prices during the turbulent times in the last 2-3 years. As a leader of zircon supply, PYX should be a prime beneficiary of the above-mentioned trends.
- f) For PYX specifically, securing an export license for rutile and ilmenite ores pertaining to the Mandiri asset along with the extension of an exploration and mining license for a maximum term of 10 years with respect to the Tisma asset. These new development should further diversify PYX revenue sources, add growth engines, and enrich the Company's margins as well as expanding its production capability, enhancing shareholder value eventually.

Note: Unless otherwise stated, the US\$:AU\$ exchange rate of 1.0:1.5 is used in all calculations.



Table of Contents

١.	CON	PANY'S ACHIEVEMENTS AND OPERATION UPDATES	4	
11.	FINA	NCIAL RESULTS FOR HY 2023 REMAIN ROBUST AND SUSTAINABLE	6	
III. VALUATION				
	3.1	Discounted Cash Flow ("DCF") Valuation	8	
	3.2	Comparable Company Analysts – EV/Resources	9	
	3.3	Valuation Results	9	
IV.	CON	CLUSION	11	
Impo	rtant	Disclosures	12	

CEDRUS INVESTMENTS 赛 德 思 投 资

I. COMPANY'S ACHIEVEMENTS AND OPERATION UPDATES

Sales of Rutile and Ilmenite By-Products

Indonesian authorities have permitted Indonesian mineral sands companies to export rutile and ilmenite ores to international markets, following a change to domestic law. In pursuance of recommendation by the Ministry of Energy and Mineral Resources, the Ministry of Trade of the Republic of Indonesia has revised the category to which titanium dioxide belongs, with rutile and ilmenite now being classified as Non-Metal Commodities, the same as zircon. With this law change, issued by the Ministry of Trade under regulation No. 13, ilmenite and rutile (with a minimum grade of $TiO_2 \ge 45\%$ for ilmenite and $TiO_2 \ge 90\%$ for rutile) can now be exported directly as non-metal.

PYX announced on 17 August 2023 the receipt of an export license for rutile and ilmenite from Indonesian authority. The export license coupled with newly issued 2023 Working Plan and Budget allow the Company to extract, produce, and export 24kt of zircon, 20kt of rutile and 50kt of ilmenite, alongside extraction and production of other by-products such as silicon dioxide² ("SiO₂"). This new license enables PYX to proceed with exports of titanium feedstocks, including 8.5kt as at the end of August 2023 in inventory. Importantly, PYX is authorized to produce more. Titanium feedstock annual production is valued at around US\$4.5 billion³.

With this regulatory change, PYX can monetize ilmenite and rutile by-products on top of premium zircon in its mineral sands deposits, adding and diversifying revenue streams accompanied by enhancing its margins.

Zircon Price Increase

Premium zircon has experienced a remarkable upward trend in price. Starting from January 2021 at US\$1,400/t, international pricing (as reported by Asian Metal) steadily increased throughout the year, reaching US\$1,800/t in 2H 2021 and US\$2,000/t by January 2022. Since 3Q 2022, pricing has remained stable at an impressive level of US\$2,300/t, a 64% surge over the price in the beginning of 2021, defying the volatility faced by other minerals. This positive price trajectory basically continued in 2Q 2023, hitting US\$2,100/t. The exceptional performance underscores in part the imbalanced supply and demand dynamics.

Rising Production and Sales

PYX provided an operational update for the six months ended 30 June 2023 ("HY 2023") ahead the publication of its financial results for the same period on 13 September 2023.

² Also known as silica, most commonly found in nature as quartz. In many parts of the world, silica is the major constituent of sand

³ <u>https://www.kenmareresources.com/en/our-products/titanium-feedstocks</u>

Exhibit I-1: HY 2023 Operation Summary

	HY 2023	HY 2022	Variance
Zircon Produced (kt)	5.7	4.3	+33%
Zircon Sold (kt)	5.2	3.9	+34%
Yearly Average Zircon Price (US\$/t)	1,927	2,749	-30%
Total Mineral Sands Produced (kt)	6.8	9.2	-26%
Total Mineral Sands Sold (kt)	5.2	3.9	+34%

Source: PYX and Cedrus' analysis

Premium zircon sales volume experienced robust growth during HY 2023, with a notable increase of 34% relative to HY 2022 to 5.2kt. Meanwhile, PYX's premium zircon production also made substantial progress, with a noteworthy increase of 33% when compared to the same period in 2022. In HY 2023, premium zircon production volume reached 5.7kt, showcasing PYX's operational efficiency and dedication to meeting market demand as a leading supplier of premium zircon to the global markets.

PYX's total output of mineral sands in HY 2023 amounted to 6.8kt, a 26% reduction over the same period in 2022 attributable to the Company's decision to focus on the production and sales of premium zircon owing to its high demand. The reduction also followed last year's production ramp up of its rutile and ilmenite by-products, following the award of exploration and extraction licenses. By the end of HY 2023, PYX had stockpiled 8.0kt of titanium feedstocks (it grew to 8.5kt at the end of August 2023), which can now be sold overseas after the export license was granted. We remain confident in PYX's ability to maintain its growth trajectory and deliver long-term value to stakeholders particularly with the successful renewal of the exploration and mining license for a maximum term of 10 years regarding its Tisma deposit, which has around 4.5 million tonnes of contained zircon together with gold and titanium minerals (rutile and ilmenite).

PYX's 6% revenue decline in HY 2023 relative to HY 2022 was tied to lower zircon prices during the two comparing periods, as the Company took advantage of surging zircon spot prices, which were as high as US\$3,100 per tonne during HY 2022. On the contrary, PYX sold most of its premium zircon during HY 2023 at contract prices, which followed international pricing. We believe the expected continued rising in demand for PYX's various mineral products, strong market fundamentals and the Company's operational capabilities will better position PYX to capitalize on the global demand trend for mineral sands, paving the way for the Company's sustained and profitable growth.

Therefore, we view the recent developments in PYX being a testimony to the market that it is on the right track to achieve persistently various operational and financial milestones, becoming an emerging force in the mineral sands industry by positioning itself as a growing supplier of premium zircon and titanium dioxide minerals. PYX will also benefit from serving an increasingly diverse and high-quality customer base from its mature operations in Indonesia, which is a politically stable and geopolitically advantaged country due to its hosting of abundant natural resources and having the largest population (273.8 million in 2021) and biggest economy (GDP of US\$1.186 trillion in 2021) in Southeast Asia, according to the World Bank.



Notable PYX Cares Program Achievements and Recognitions in HY 2023

Throughout HY 2023, the Company remained committed to the PYX Cares program and submitted its Second Communication on Progress Report to the United Nations Global Compact Organization, which encompasses five key pillars: People, Planet, Prosperity, Peace, and Partnership.

PYX firmly believes in the importance of community engagement and environmental stewardship. The Company is committed to implementing community projects that not only empower the local population but also contribute to the protection of wildlife and the preservation of the natural environment. Through these projects, the Company aims to create sustainable and inclusive opportunities for the community, fostering economic development and improving its quality of life. A concrete example of its engagement is PYX's partnership with the Indonesian Red Cross Society for the third year in the annual Indonesian National Blood Donor Day. Besides its involvement in community affairs, PYX received the Award for Prevention and Management of COVID-19 in the Workplace in 2023 and the Zero Accident Award 2023, both from the government authorities in Kalimantan.

II. FINANCIAL RESULTS FOR HY 2023 REMAIN ROBUST AND SUSTAINABLE

PYX has announced its financial results for the first six months of 2023 ("HY 2023"), which showed continued improvement in its operations with increased production and sales of premium zircon. PYX maintained a positive and achieved a 46% jump in underlying EBITDA in HY 2023 versus HY 2022. The accomplishments were attained just under two years since its listing in London and three years since its listing in Australia.

The following are the financial highlights of PYX in HY 2023:

- Premium zircon production rose 33% to 5.7kt;
- Premium zircon sales ascended 34% to 5.2kt;
- Cash cost of production per tonne of premium zircon reduced by 8%;
- Negative EBITDA of about US\$9.8 million mainly due to the non-cash share-based payment provision of US\$7.6 million and the loss on fair value change of financial instruments of US\$1.2 million;
- But underlying EBITDA was positive and improved by 46% to around US\$131k; and
- Cash on balance sheet totaled approximately US\$7.2 million with no debt.

In line with its plan, premium zircon production and sales further improved. HY 2023 output of the mineral was lifted 33% from 4.3kt to 5.7kt, while sales were up 34% from 3.9kt to 5.2kt. Production volume increase helped lower the Company's cash cost of production in US\$ per tonne by 8% compared to HY 2022.

The negative EBITDA and net loss were the consequence of the non-cash loss on fair value change of financial instrument of US\$1.2 million and the cancellation of 20,332,494 performance rights convertible into a maximum of 23,532,494 shares.

In accordance with the Australian Accounting Standards Board 2, share-based payments should be settled or cancelled as an acceleration of vesting. None of the above two items had any impact on the Company's cash position. PYX's cash on its balance sheet as at 30 June 2023 was about US\$7.23 million, marginally higher



than that at the end of HY 2022. An increase in operating working capital of US\$1.4 million needed for raising output, a capital expenditure investment of US\$1.3 million, along with a positive US\$2.8 million from financial activities (indicating strong shareholder support and confidence in the Company's prospects) were contributing factors for the slight increase in cash in HY 2023.

	Half Year Ended 30 June 2023	Half Year Ended 30 June 2022	Variance	Variance
	kt	kt	kt	%
Zircon Produced	5.7	4.3	+1.4	+33%
Zircon Sold	5.2	3.9	+1.3	+34%
TiO ₂ Minerals Produced	1.1	4.9	-3.8	-78%
TiO ₂ Minerals Sold	0	0	-	N.M.
Yearly Avg. Zircon Price per Tonne	US\$1,927/t	US\$2,749/t	-US\$822/t	-30%
Total Mineral Sands Produced	6.8	9.2	-2.4	-26%
Total Mineral Sands Sold	5.2	3.9	1.3	+34%
	US\$	US\$	US\$	%
Sales Revenue	9,971,528	10,645,890	-674,362	-6%
Cash Cost of Production	8,935,118	7,333,047	+1,602,071	+22%
Cash Cost of Production per Tonne	1,568	1,705	-138	-8%
EBITDA*	(9,806,788)	(3,486,822)	-6,319,966	+181%
EBIT*	(9,973,755)	(3,598,520)	-6,375,235	+177%
Net Loss Before Tax*	(9,982,705)	(3,613,644)	-6,369,061	+176%
Net Loss After Tax* (NLAT)	(9,834,516)	(3,623,751)	-6,210,765	+171%
Underlying EBITDA	131,356	90,008	+41,348	+46%
	As at	As at		
	30 June 2023	31 Dec 2022	Variance	Variance
	US\$	US\$	US\$	%
Cash	7,232,727	7,221,085	+11,642	+0%
Total Assets	91,246,272	89,124,565	+2,121,707	+2%
Total Liabilities	7,094,719	5,570,118	+1,524,601	+27%
Short or Long-Term Debt	0	0	-	N.M.

Exhibit II-1: Summary of Key Operational and Financial Metrics

Note: *Due to non-cash loss on fair value change of financial instrument of US\$1.2 million and the cancellation of 20,332,494 performance rights convertible

Source: PYX

III. VALUATION

We have also evaluated the valuation of PYX in light of the market conditions and its corporate planning. Our valuation is comprised of two methodologies, namely discounted cash flow analysis and comparable company analysis.



3.1 Discounted Cash Flow ("DCF") Valuation

We performed a DCF analysis with the following key assumptions to estimate the current value of PYX based on its future cash flow generation by applying a discount rate, in our opinion, appropriate for PYX's operations.

Key Assumptions

According to the Independent Technical Assessment Report ("ITAR"), the Mandiri deposit is in possession of JORC-compliant inferred mineral resources of about 126 million tonnes, which contain 9.4 million tonnes of heavy minerals at a superb heavy mineral grade of 7.43%.

On the other hand, the Tisma deposit has a JORC-compliant inferred mineral resources of roughly 137 million tonnes, containing 5.5 million tonnes of heavy minerals at a superior heavy mineral grade of 3.99%. PYX has successful renewed Tisma's exploration and mining license for another 10 years (maximum term) and received approval for the Tisma Work Plan and Budget for 2023 from the Energy and Resource Service Department of the Government of the Province of Central Kalimantan. The approval permits PYX to extract and process 24kt of zircon from the Tisma asset in a year.

Key assumptions of our DCF analysis include the following:

- A risk-adjusted (real) discount rate of 10% was used to reach the valuation;
- Using zircon price of US\$2,100 per tonne, ilmenite price of US\$250 per tonne, rutile price of US\$1,200 per tonne and gold price of US\$1,800/oz to determine the valuation;
- Only JORC 2012-compliant mineral resources were used;
- Effective tax rate assumed was 20%;
- Ignoring the likelihood of discovering and developing new deposits in the future;
- Assuming additional working capital of US\$125,000 is required to run every 100 tonnes/month of incremental production/supply;
- All cost assumptions are based on historical or current actual cost structures with a 35% reduction owing to expected favorable long-term trend in Indonesian rupiah to U.S. dollar exchange rate movement;
- Export tax calculated based on a rate of 1.5% on free on board ("FOB") price;
- Depreciation of fixed assets is charged at the rate in proportion to Mandiri's production levels. More precisely, on the volume of zircon produced; and
- Artisanal mining and processing using third-party funded equipment co-exist with in-house operations in the next 2 years.

In accordance with the above assumptions, the **net present value ("NPV") of the Mandiri operations using the DCF method is US\$673 million** and the **NPV of the Tisma asset is US\$382 million**. After adjusting for its cash balance of around US\$7.23 million as at 30 June 2023 and taking into consideration that PYX does not have any debt outstanding or preferred shares issued, the resulting **total equity value is US\$1,062 million (after rounding)**.



3.2 Comparable Company Analysis – EV/Resources

The valuation of a mineral sands asset is highly correlated with the weighted average assemblage value of its resources. Hence, enterprise value over total mineral resources as expressed in the form of in-situ total heavy minerals is used as the valuation metric.

Exhibit III-1: Correlation between EV/Resource Multiple and Weighted Average Assemblage Value



Source: Bloomberg, Company Annual Reports & Announcements, Cedrus' analysis

Owning to the extremely high zircon content, both PYX's Mandiri and Tisma assets have impressive assemblage value, resulting in a weighted average assemblage value for PYX being US\$1,824 per tonne as represented by the reddish dotted line in the above exhibit, topping most of their peers. This assemblage value line intersects the valuation multiple trend line between US\$50 per tonne and US\$60 per tonne of HM.

Therefore, we believe PYX should be traded at a valuation of approximately US\$60 per tonne of the aggregate defined heavy mineral resources of 14.9 million tonnes, or **approximately US\$894 million**.

3.3 Valuation Results

We take the valuation result from the DCF method discussed above of US\$1,062 million or AU\$1,593 million (both after rounding and based on the exchange rate of US\$1 = AU\$1.5) as the risk-adjusted equity value for PYX and our near-term (12- to 18-month) valuation target, corresponding to a share price of **AU\$3.81**, or approximately a 647% potential upside over PYX's share price of AU\$0.51 with market capitalization of AU\$232.1 million as at 15 September 2023.

In addition, it is worth noting that PYX's underlying cash flows are in US\$ and our valuation analysis is also conducted in US\$ terms, while our target price is in AU\$. The increase in AU\$ target price (from AU\$3.40 to AU\$3.81) is primarily due to the exchange rate fluctuations, as AU\$ is weakening against the greenback since our last research report. Meanwhile, the GBp target price increased much less as the GBP to US\$

exchange rate remained essentially stable (in fact, GBP has slightly strengthened against US\$) in the same period.

Exhibit III-2: Key Valuation Metrics

Valuation Metrics				
Market Capitalization (15 September 2023)	AU\$232.1 million			
Total Outstanding Shares (30 June 2023)	441,349,100			
Performance Shares Cancelled	23,532,494			
Estimated Total Outstanding	417,816,606			
Enterprise Value	US\$1,055 million			
Implied Equity Value (US\$)	US\$1,062 million			
Implied Equity Value (AU\$)	AU\$1,593 million			
Current PYX Share Price (15 September 2023)	AU\$0.51			
Target Price (12- to 18-month)	AU\$3.81			
Upside Potential	+647%			

Source: Company reports, Bloomberg and Cedrus' estimates

Our analysis of PYX's current and future financial positions rests on the following publicly-available information obtained from the Company's reports and Bloomberg.

To arrive at our price target, we have taken into account the performance rights to be issued to PYX's management with details as follows:

- Potentially, PYX's management will be granted shares following the conversions of performance rights between 1 November 2019 and 31 December 2024 upon the fulfillments of certain conditions or performance criteria such as continuous employment with the Company, reaching pre-defined sales volume and EBITDA targets in each assessment year and PYX's shares hitting certain predetermined price targets;
- Assessment of the issuance of these performance rights will be made in tranches, namely on each of the following expiry dates: 31 March 2020 (already issued), 30 June 2020 (already issued), 30 June 2021 (already issued), 30 June 2022 (already issued), 31 December 2022 (already issued), 30 June 2023 (cancelled), 31 December 2023 and 30 June 2024.
- The management has cancelled 20,332,494 performance rights, which can be converted to a maximum of 23,532,494 shares.

The current valuation has also taken into consideration current operations based on ore reserves as well as mineral resources from all deposits and mines PYX owns. Nonetheless, it has not included other upside potential arising from resources of new discoveries; therefore, in our view, the current valuation is relatively conservative.

Valuation Upside Potential

We believe there is still significant upside potential for PYX because of the following factors:

- Extra mineral resources to be uncovered from deeper zones in existing resource definition areas;
- Other exploration targets available within the tenements not covered by current exploration and drilling campaign;
- Existence of gold is evidenced by assay from past operations, but this has not been taken into account while making the JORC-compliant resource estimation and arriving at PYX's current valuation. Recovery of gold in future operations would likely boost the value of PYX notably;
- Potential opportunity for further operating cost reduction due to economies of scale;
- Realizing enhanced value from sales of by-product (rutile and ilmenite) after being granted the export license for these minerals from the Indonesian government; and
- Emergence of more favorable economic conditions worldwide and more novel applications are found due to ongoing research and development efforts.

IV. CONCLUSION

We have witnessed another six months of improvement in both operational and financial performance by PYX for HY 2023, with a sizable and sustainable growth in zircon production and sales of 33% and 34% respectively in tonnage, as well as a 46% increase in underlying EBITDA to US\$131k, when compared to the same period in 2022. PYX ended HY 2023 with a cash position of around US\$7.23 million, slightly higher than the balance stood at the end of HY 2022.

Moreover, even better performance can be expected going forward with the export sales of rutile and ilmenite ores. Actually, PYX has already been producing these titanium dioxide products since January 2022 and June 2022 respectively. With the award of the export license by the Indonesian government, PYX is ready to ship the 8.5kt of these minerals stockpiled as at the end of August 2023.

As the world's third-largest publicly-listed premium zircon producer by zircon resources, we believe PYX remains well positioned for persistent growth following the renewal of the exploration and mining license for the Tisma asset for 10 more years as well, providing another potential growth engine by capturing more business opportunities. Thus, PYX is poised to deliver tremendous long-term value to its shareholders especially in our view that PYX's shares are overwhelmingly undervalued.

As a result, we reiterate PYX an **Overweight** rating and raise the **12- to 18-month price target to AU\$3.81** (mostly due to the weakening of AU\$ against US\$), representing an upside potential of about 647% over the closing price of AU\$0.51 as at 15 September 2023.



IMPORTANT DISCLOSURES

STOCK OWNERSHIP AND CONFLICT OF INTEREST DISCLOSURE

Neither Dr. Thomas Kenny, Charlie Yang, Hilda Gao nor any member of the research team or their households is an owner of Pyx Resources Limited common shares.

Cedrus Investments Ltd. ("Cedrus") does and seeks to do business with companies covered in research reports distributed by Cedrus, and Cedrus may or may not be an investor of the subject company and may have investment banking relationship with the subject company. As a result, investors should be aware that the firm may have a conflict of interest that could affect the objectivity of this report. Cedrus will identify such companies in the reports of the companies covered. Therefore, investors should consider this report as only a single factor in making their investment decision. Specifically for PYX Resources Limited, Cedrus does not own any shares directly, but holds shares on behalf of its clients in the capacity as a custodian only through Cedrus Investments - Nominees.

Cedrus will receive or has received compensation for investment banking services provided within the past 12 months from PYX Resources Limited.

Cedrus will receive or has received within the past 12 months compensation from PYX Resources Limited.

ANALYST CERTIFICATION

Dr. Thomas Kenny, Charlie Yang and Hilda Gao hereby certify that the views expressed in this research report accurately reflect their personal views about the subject companies and their securities. They also certify that they have not been, and will not be, receiving direct or indirect compensation in exchange for expressing the specific recommendations in this report.

For additional information, please send an e-mail to information@cedrusinvestments.com

For private circulation only. This report is prepared by Cedrus and is for informational purposes only and is not intended to be, nor should it be construed to be, an advertisement or an offer or a solicitation of an offer to buy or sell any securities. The information herein, or upon which opinions have been based, has been obtained from sources believed to be reliable, but no representations, express or implied, or guarantees, can be made as to their accuracy, timeliness or completeness. The information and opinions in this report are current as of the date of the report. We do not endeavor to update any changes to the information and opinions in this report. Unless otherwise stated, all views expressed herein (including estimates or forecasts) are solely those of our research department and subject to change without notice.

The information provided in this research report is not provided to and may not be used by any person or entity in any jurisdiction where the provision or use thereof would be contrary to applicable laws, rules or regulations of any governmental authority or regulatory or self-regulatory organization or clearing organization or where Cedrus is not authorized to provide such information.

This report does not take into account the specific investment objectives, financial situation, and the particular needs of any specific company that may receive it. Before acting on any information in this report, readers should consider whether it is suitable for their own particular circumstances and obtain professional advice related to their own investment needs and objectives. The value of securities mentioned in this report and income from them may go up or down, and investors may realize losses on any investments. Past performance is not a guide to future performance. Future terms are not guaranteed, and a loss of original capital may occur.

Neither the analysts responsible for this report nor any related household members are officers, directors, or advisory board members of any covered company. No one at a covered company is on the Board of Directors of Cedrus or its affiliates. The compensation for the analysts who prepare reports is determined exclusively by senior management. Analyst compensation is not based on investment banking revenues; however, compensation may relate to the revenues of Cedrus as a whole, of which investment banking, sales and trading are a part.

Cedrus does engage in investment banking. Cedrus does trade securities on a principal basis; however, Cedrus' research analysts are prohibited from owning securities they cover through Research Reports.

Copyright 2023 Cedrus Investments Ltd. All rights reserved. Any unauthorized use or disclosure prohibited.