

"Introducing Citi Bike, which commenced operations on May 27, 2013, with an initial 332 stations. Fast forward to 2023, the program boasts 180,000 annual subscribers, 1915 stations, and a daily ridership of approximately 131k. Notably, the system set an all-time ridership record in August 2023, with 4.07 million rides in a single month.

In the midst of the rapid and modern automotive era, how has a simple bicycle managed to establish such a robust sharing system in just a decade? What factors contribute to Citi Bike's sustained ridership, increasing station count, and loyal subscriber base? Furthermore, what insights can electric vehicle (EV) ventures draw from this bicycle sharing system to address their long-term profitability challenges?"

Exploring the US Electric Vehicle Through the US Bicycle Sharing System

Florence Chen Xu

Key Summary

- ❖ A robust lithium supply chain leads to reduced battery production costs, contributing to a more cost-effective framework for electric vehicle (EV) sales. Consequently, this has the potential to stimulate consumer demand. However, All stakeholders, including lithium producers, refiners, automakers, and government entities, must be mindful of potential losses due to lithium futures market volatility.



Customer Acceptance

Demand

BICYCLE

ELECTRIC VEHICLE (EV)

Cost

BICYCLE

- ❖ The cost calculation for bicycle production is more simplistic than that for vehicles.
 - ❖ Raw Materials
 - ❖ Production
 - ❖ System
- ❖ Furthermore, bicycle cost budgeting entails less uncertainty, particularly in regard to factors like climate risks, market's volatility (e.g. crude oil, lithium, etc).

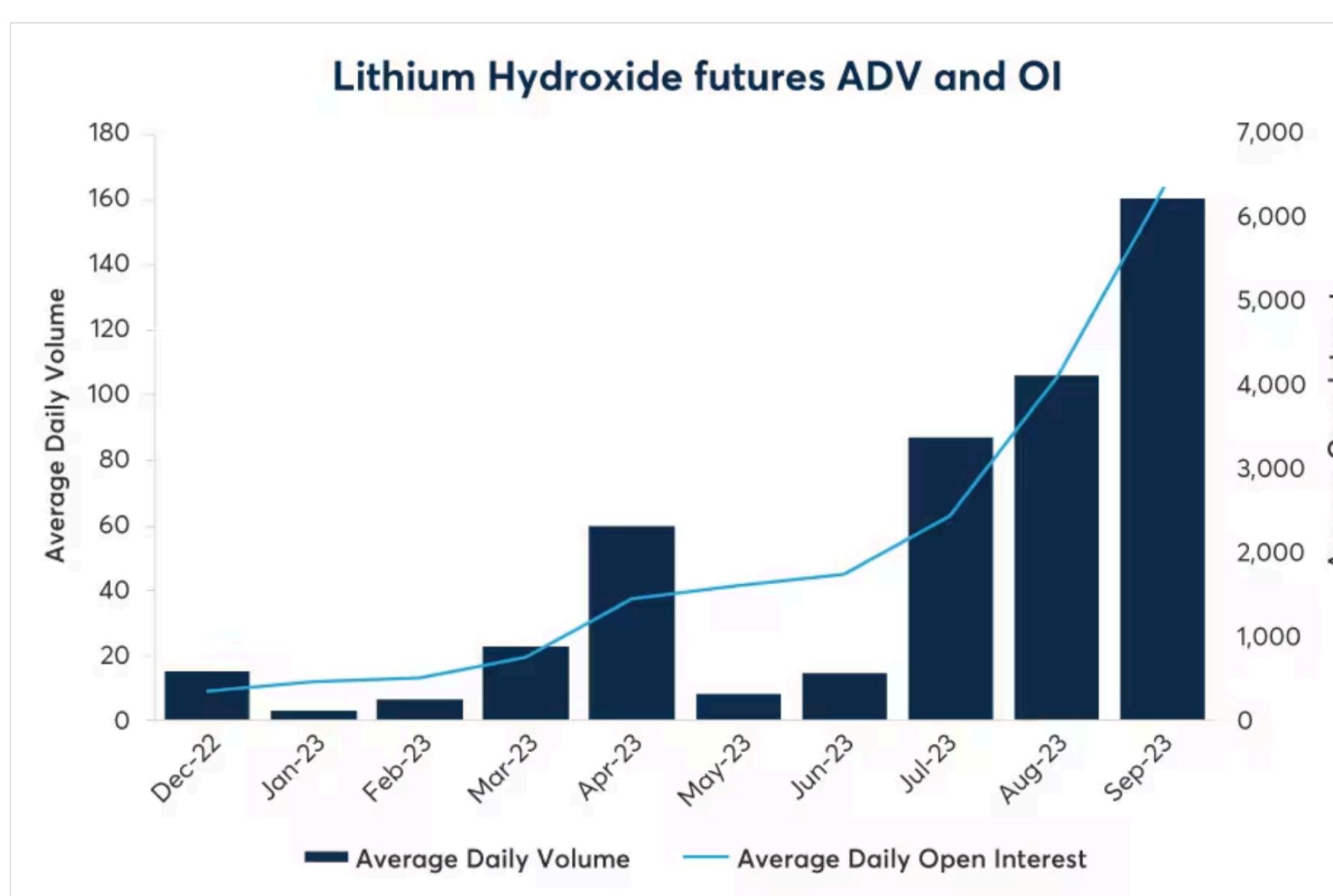
ELECTRIC VEHICLE (EV)

- ❖ Operating within cyclical industries, cost control poses a formidable challenge in the EV sector, heavily contingent on technological advancements and a stable economic environment.
 - ❖ Lithium Supply Chain
 - ❖ Chips

Cost

The lithium market is currently more active than in previous periods, evidenced by the increased variety of financial products trading in lithium. This trend underscores the strong demand prevailing in the market.

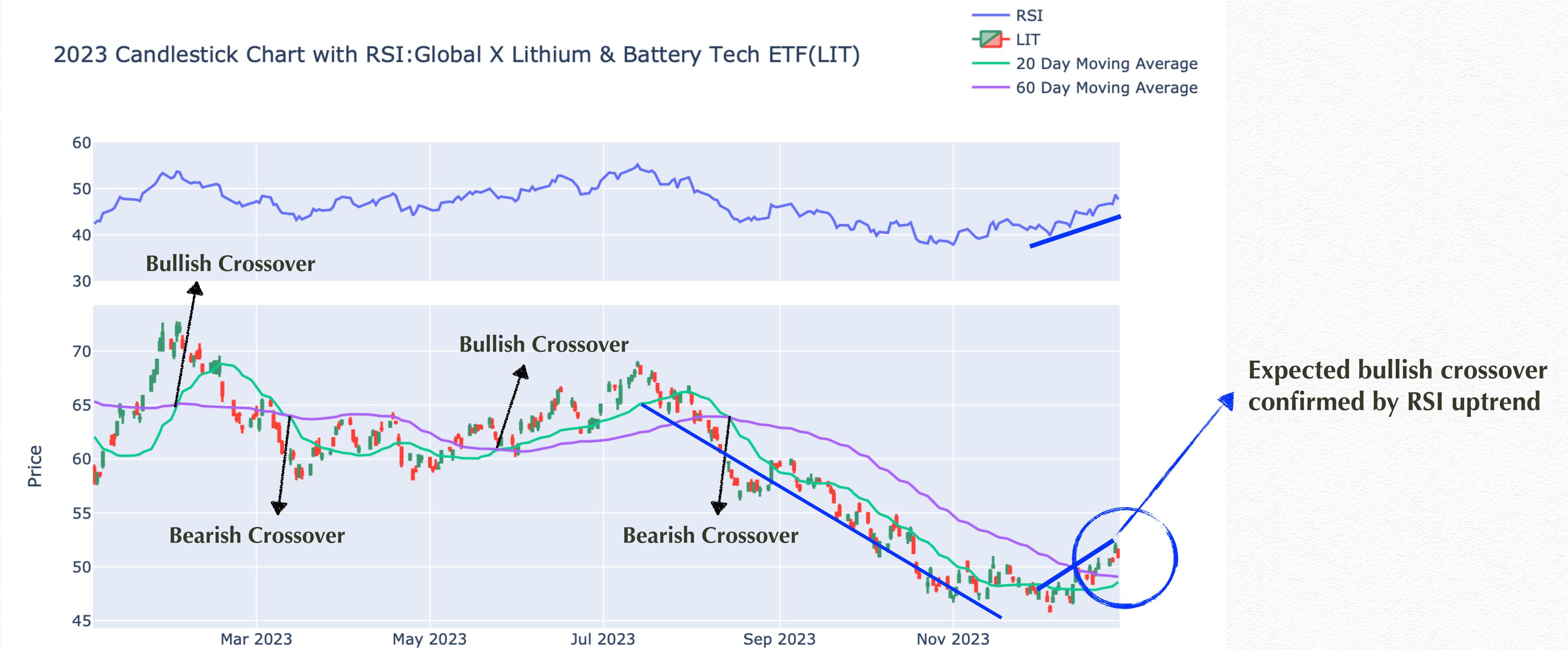
Source: CME Group



- ❖ As per CME Group, there is an anticipated surge in lithium demand in the upcoming years.
- ❖ Examining Global X Lithium & Battery Tech ETF's monthly trading volumes, although a clear year-long increasing trend is not evident, December recorded the highest total trading volume compared to January.

Cost

A stable lithium market is essential for long-term EV sales, benefiting both automakers and consumers. This significance is particularly pronounced in the current economic environment, where the volatility of the crude oil market already poses substantial challenges.



- ❖ Global X Lithium & Battery Tech ETF, following a clear downtrend lasting five months, commencing in July, a brief period of consolidation period followed.
- ❖ In early 2024, an anticipated bullish crossover, confirmed by the Relative Strength Index (RSI), indicates enhanced internal momentum. Significant potential remains for an upward trajectory in the price of this prominent lithium commodity.

Cost

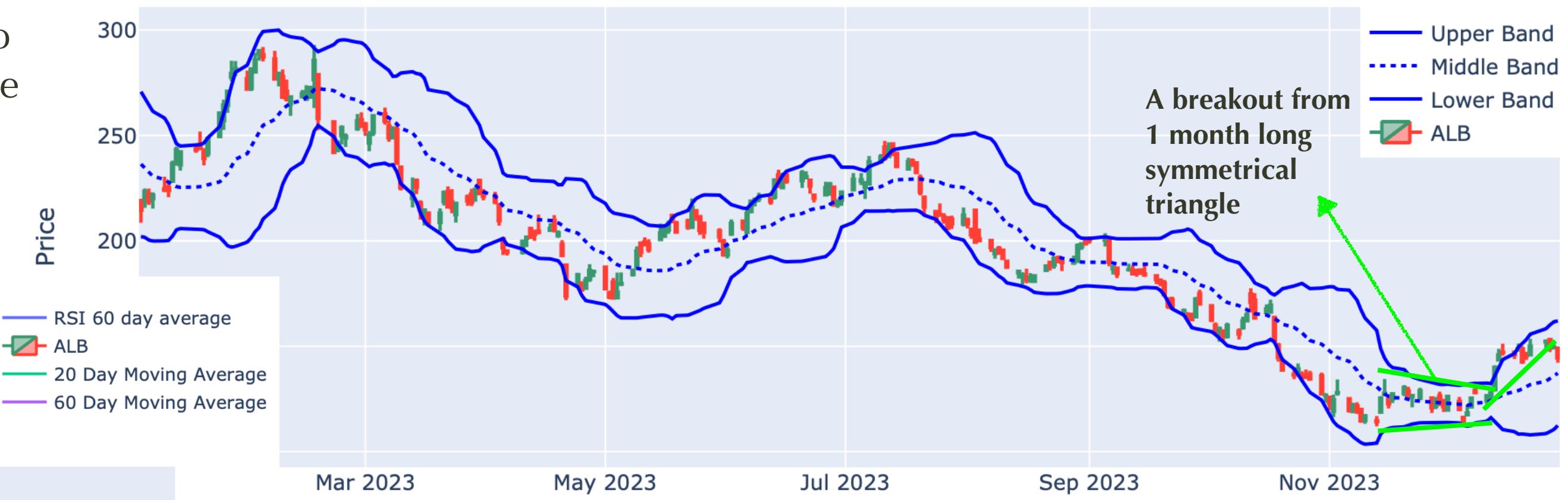
Maintaining equilibrium between supply and demand is imperative. Blindly augmenting supply without commensurate demand is not an optimal strategy for enhancing the value of the lithium supply chain.

- ❖ Albemarle Corp., a leader in the lithium industry, is expected to undergo a bullish crossover in early 2024. Its stock performance closely mirrors that of the Global X Lithium & Battery Tech ETF, with simultaneous instances of bearish and bullish crossovers.

2023 Candlestick Chart with RSI:Albemarle Corporation(ALB)



2023 Bollinger Bands Using 20-day Average and 2 Stdv:Albemarle Corporation(ALB)



- ❖ In December 2023, a breakout was followed by a month-long consolidation, marked by Bollinger Bands' reduced width signaling low volatility. This may suggest an impending period of increased volatility.

Infrastructure

Alternatives

Recommendation