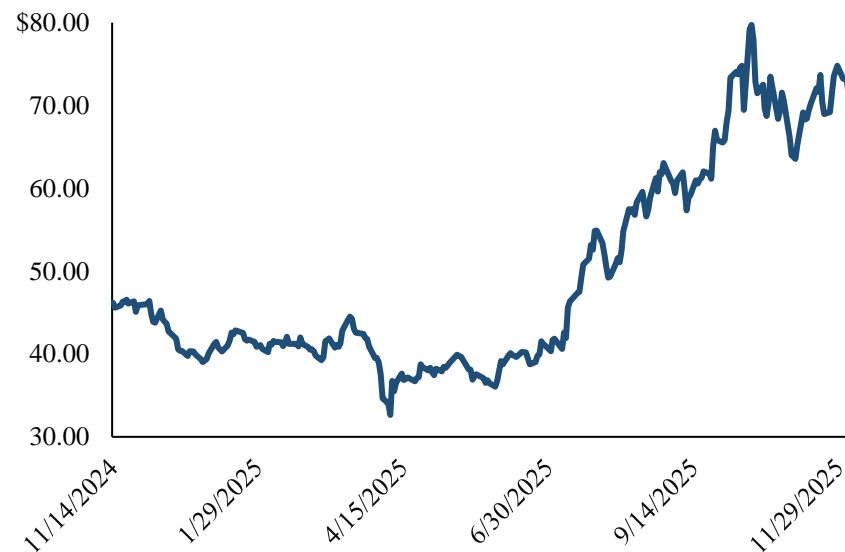


### VanEck Rare Earth and Strategic Metals ETF | One-Year Price Chart



### Metals Sector

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### Position Details

- VanEck Rare Earth and Strategic Metals ETF | REMX
- Underlying Price: \$70.88
- Bull Call Spread
- Expiration Date: May 15, 2026

## Table of Contents

- I. Product & Position Overview
- II. Macroeconomic Thesis
- III. Risk Analysis
- IV. Technical Bias & Fair Value
- V. Capital Allocation



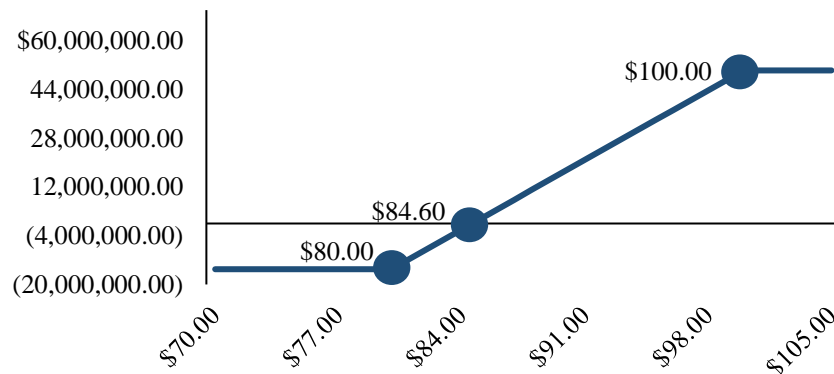
## I. Product & Position Overview

## Product & Position Overview

### Product Description

- **REMX-VanEck Rare Earth and Strategic Metals ETF**
  - REMX is designed to closely track the performance of the MVIS Global Rare Earth/Strategic Metals Index, providing investors with diversified exposure to companies around the world that produce, refine, and recycle rare earth and other strategic metals
  - Rare earth metals, ~90.00% of which are controlled extensively by China, are becoming increasingly essential components used in technology, renewable energy systems, aviation, defense applications, and industrial chemical processes
- **Major Countries Involved:**
  - Australia | 30.74%
  - China | 25.82%
  - U.S. | 16.81%
- **Major Holdings:**
  - PLS Group Ltd | 9.03%
  - Albemarle Corp | 8.45%
  - Lithium Americas Corp | 7.16%

### Payoff Diagram



### Trade Breakdown

- **Bull Call Spread**
  - This strategy benefits from a bullish price movement in the underlying asset prior to the expiration date
- **Setup**
  - We Buy – 32,609.00 OTM \$80.00 Calls | REMX
  - We Sell – 32,609.00 OTM \$100.00 Calls | REMX
  - Max Profit: \$50,217,860.00
  - Max loss: (\$15,000,140.00)
- **Expiration**
  - Date: May 15, 2026

### Exit Strategy & Potential Hedge Strategy

- **Bull Base & Bear Case**
  - **\$110.00 / \$94.00 / \$80.00**
  - Breakeven – \$84.60
- **Methodology**
  - The Metals Sector looks to benefit from a ~38.00% bullish movement in the price of the underlying before expiration
- **Hedge Strategy**
  - In the event of bearish price movement in the underlying asset, the Sector would look to reverse trade to minimize losses



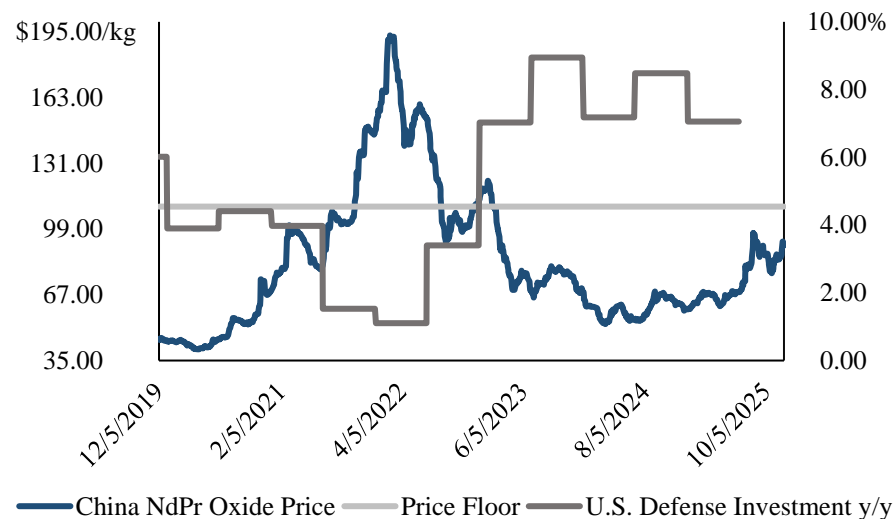
## II. Macroeconomic Thesis

## Macroeconomic Thesis

### Macroeconomic Summary

- National Security Concerns Over the Global Rare Earth Supply Chain**
  - Since 2Q2025, the U.S. DoD and DoE have committed more than \$1.40 bn toward domestic rare-earth capacity, including a \$400.00 mm investment in MP Materials, one of REMX's largest holdings
  - The DoD has established a ten-year price floor of \$110.00/kg for key magnet rare earths, improving margin visibility and boosting 2026-2027 earnings expectations for U.S. producers
  - On December 1st, the EU adopted the RESourceEU Action Plan, designating ~60.00 strategic projects and deploying ~€3.00 bn over the next year to help European supply-chain development
- Chinese Export Controls Fuel Near-Term Supply Risk**
  - In October, China, controlling 90.00% of global refining, imposed stricter controls on rare-earth products, including dual-use licensing requirements, even for trace-content materials
  - After a recent meeting with the U.S. administration, China "streamlined" general export licenses for select large entities, but continues to maintain broad discretionary authority over volumes
  - Chinese rare-earth magnet exports fell ~19.00% y/y in the first half of 2025, including a 31.00% m/m drop in September
- Industrial, Defense, and High-Tech Demand Continues to Grow**
  - Neodymium, praseodymium, dysprosium, and terbium continue to face the most significant supply constraints, and together, drive roughly 40.00% of total global rare-earth demand
  - EV motors require 1.00-2.00 kg of NdFeB magnets per vehicle. With EV sales projected to reach 20.00-25.00 mm units globally in 2026, analysts estimate NdPr demand will grow at an 8.00-10.00% CAGR, outpacing supply growth outside China

### China NdPr Oxide vs U.S. Defense Investment | Six-Year Chart



### Market Pros & Cons

- Sustained cost inflation supports higher rare-earth pricing power
- Expanded deployment of clean-energy and renewable installations
- Continued ESG risks delay permitting in the U.S. and Australia
- Rapid EU progress could deflate rare-earth prices, limiting REMX upside

## III. Risk Analysis

## Risk Analysis

### Directional & Magnitude Risk

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- **Delta Analysis:**
  - The delta for this trade is 0.2248
  - For every \$1.00 movement in the price of the underlying asset, this strategy gains or loses \$0.2248
- **Gamma Analysis:**
  - The Gamma value for this trade is 0.0049, as delta shifts by 0.0049 for every \$1.00 change in the price of the underlying
  - Gamma is relatively low because both strikes are OTM and the expiration date is distant, which causes delta to adjust gradually

### Implied Volatility Risk

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- **Vega Analysis:**
  - This trade has a vega value of 0.0544
  - The implied volatility for this trade is 50.00%
  - For every 100.00 bps change in implied volatility, the strategy's value is expected to increase or decrease by \$0.0544
  - Having a higher volatility increases our chance to profit, as large price swings have the potential to swing the underlying ITM

### Time Risk

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- **Theta Analysis:**
  - The value of the theta for this trade is (0.0291)
  - The trade experiences a loss of \$0.0291 for every 1.00-day decrease in time to expiration, with time decay accelerating as the contract approaches our proposed expiration date
  - Theta is negative in this trade, because the probability of the position landing ITM decreases as time passes

### Interest Rate Risk

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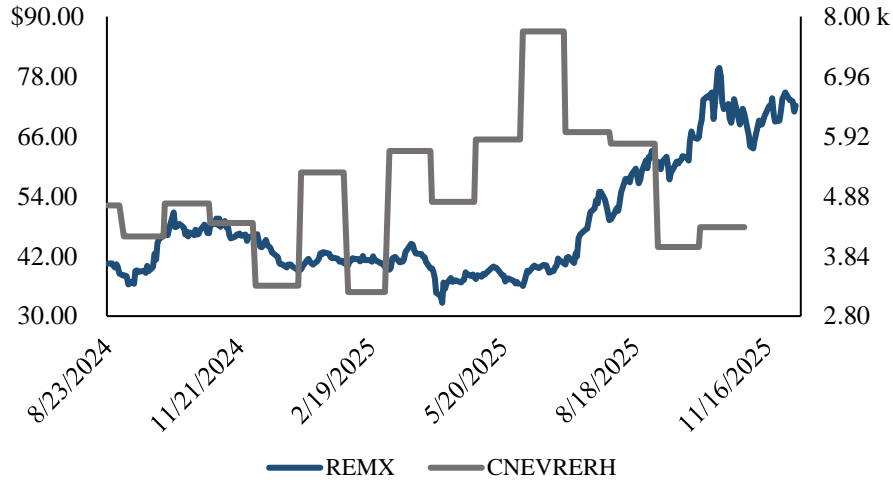
- **Rho Analysis:**
  - The rho in this trade is (0.0170)
  - For every 100.00 bps change in the risk-free interest rate, the contract's value is expected to gain or lose \$0.0170
  - Rho has less of an impact on the option's premiums than other Greeks, but due to the long-term nature of the strategy, significant reductions in the risk-free rate could reduce the value of the contracts as the Fed leans dovish in the coming months



## IV. Technical Bias & Fair Value

## Technical Bias & Fair Value

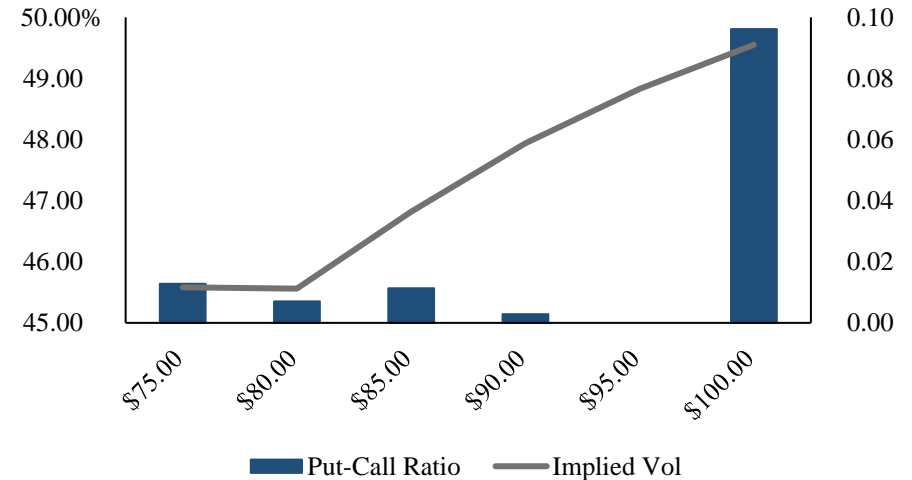
China Rare Earth Export Volume vs REMX | One-Year Chart



Monte Carlo

	Long Call	Short Call
Value	\$25.0792	\$15.7045

REMX Put-Call Ratio vs Implied Vol | \$75.00-\$100.00 Strikes



Synopsis

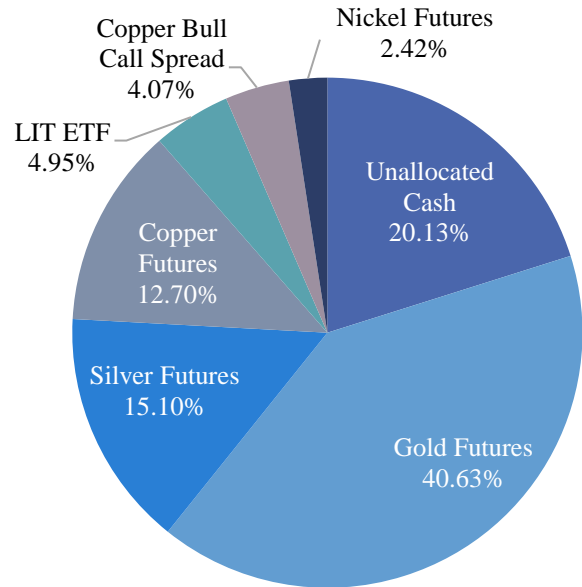
- REMX's performance remains tightly linked to China's rare-earth export flows, but recent movement since mid-2025 suggests the market is beginning to price in Western supply-chain realignment. Export values experienced sharp drops following expanded Chinese licensing controls, yet REMX continued to trend higher, signaling investor confidence in non-Chinese production growth and strategic-minerals funding in the U.S. and Australia
- The top right graph shows REMX option activity with put-call volume ratios and implied volatility across different strike prices. The put-call ratios remain extremely low, while implied volatility rises towards the higher strikes, indicating that the market is pricing in a greater probability for large upward movements in the ETF. Together, these indicators suggest a favorable time for our trade, with markets already leaning toward bullish strategies



## V. Capital Allocation

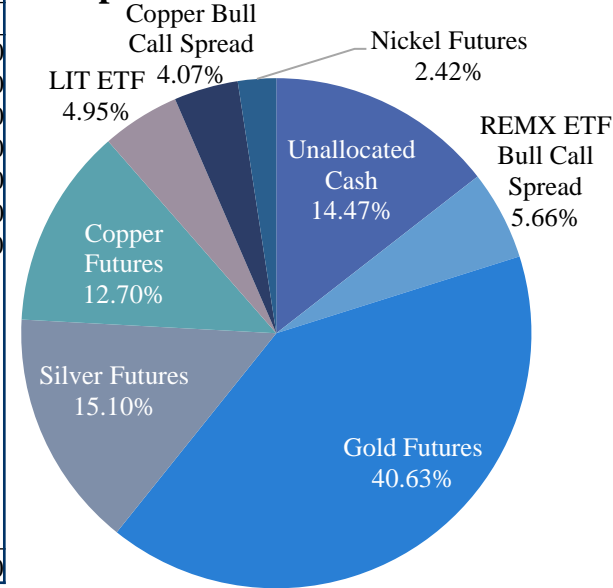
### Capital Allocation

#### Current Portfolio Allocation

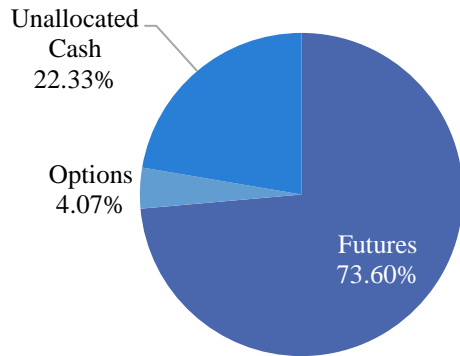


Transaction Summary			
Ticker	Position Change		Allocation
	Contracts		
Gold Futures	0		\$0.00
Silver Futures	0		\$0.00
Copper Futures	0		\$0.00
LIT ETF	0		\$0.00
Copper Bull Call Spread	0		\$0.00
Nickel Futures	0		\$0.00
REMX ETF	+80324		\$15,000,140.00
Allocation Change			\$15,000,140.00

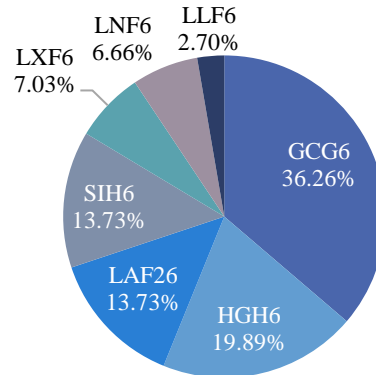
#### Proposed Portfolio Allocation



#### Current Position Allocation



#### Benchmark Allocation



#### Proposed Position Allocation

