



THE UNIVERSITY OF
CHICAGO

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***α*lphaPoint Capital**

Fund Overview

Delivering Alpha Beyond Correlation

Introduction

- AlphaPoint Capital LP (“AlphaPoint”) is a market-neutral investment firm specializing in statistical arbitrage within the U.S. Energy sector. Our proprietary models identify inefficiencies in cointegrated stock pairs, executing precise mean-reversion opportunities. By leveraging advanced quantitative research and sector-specific expertise, AlphaPoint delivers consistent alpha for investors seeking uncorrelated, risk-adjusted returns. Through disciplined execution and rigorous attention to risk management, AlphaPoint is positioned to deliver consistent results across varying market environments.

Mission Statement

- To set a new standard for alpha generation by combining advanced statistical methods, disciplined risk frameworks, and a commitment to innovation. AlphaPoint is built to deliver superior, uncorrelated returns while safeguarding capital and continuously evolving through innovation to meet the changing needs of investors.

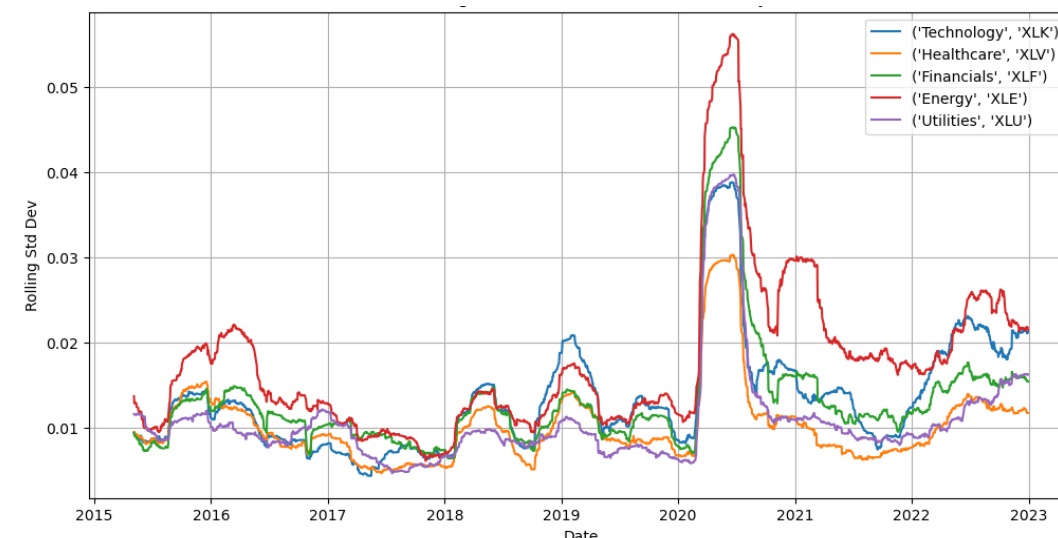
Market Focus & Opportunities

Why the Energy Sector?

- **Strong Fundamentals:** A cornerstone of global economic activity, backed by stable demand and advancements in clean and traditional energy.
- **Dispersion & Correlation:** High dispersion and moderate correlation create ideal conditions for mean-reversion strategies.
- **Volatility Creates Alpha:** Elevated sector volatility provides consistent alpha-generation potential, outperforming other sectors.
- **Statistical Stability:** Low Hurst Exponent confirms strong mean-reversion tendencies, perfectly aligning with our approach.

Opportunities for Investors

- **Precision in Pair Selection:** Generate alpha through statistical misalignments in cointegrated stock pairs with a disciplined approach.
- **Uncorrelated Returns:** Achieve risk-adjusted, market-neutral performance independent of broader market trends.
- **Capital Efficiency:** Optimize returns through dynamic rebalancing and robust risk management.



4-Month Rolling Standard Deviation of Returns by Sector

Sector	Average Correlation	Hurst Exponent	Dispersion
Communication Services	0.197907	0.022309	0.022572
Consumer Discretionary	0.248120	0.005277	0.024633
Consumer Staples	0.209593	0.006135	0.020315
Energy	0.531601	0.006003	0.016164
Financials	0.337698	0.016064	0.017808
Health Care	0.182197	0.009455	0.024025
Industrials	0.270163	NaN	0.022886
Information Technology	0.304175	0.020536	0.028185
Materials	0.304050	0.012036	0.022770
Real Estate	0.486539	0.013862	0.014497
Utilities	0.526968	0.011807	0.014958

S&P 500 Sector Analysis (2024): Key Metrics for Statistical Arbitrage

Strategy Creation

Methodology

1. Identifying Pairs

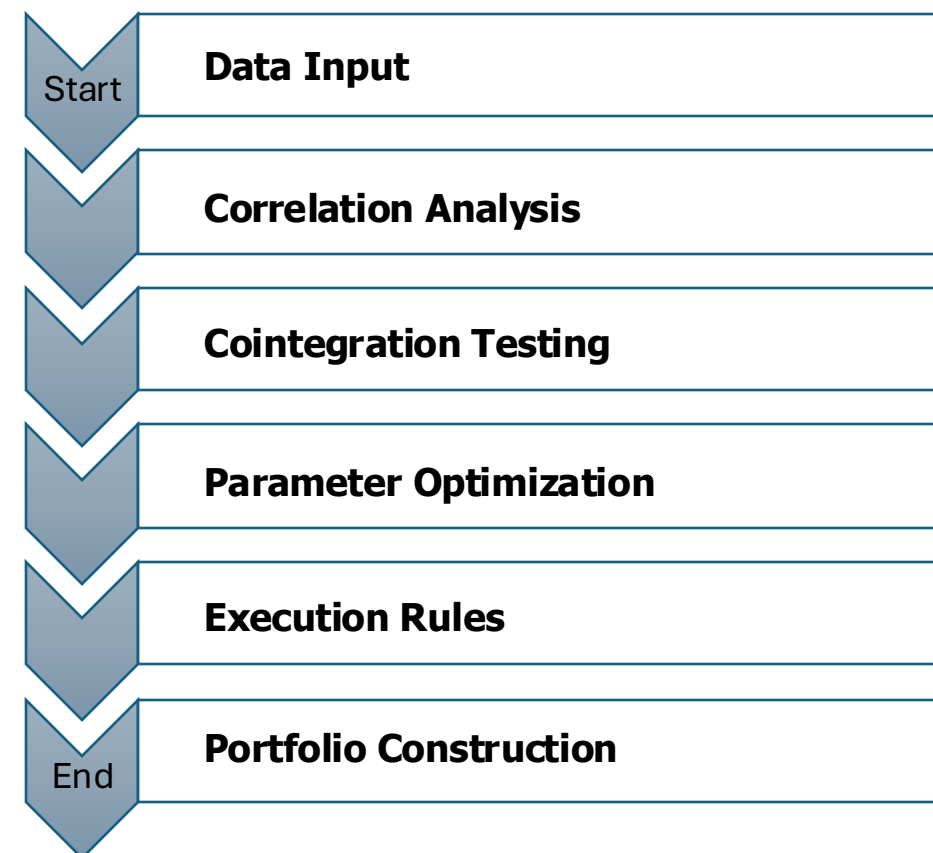
- Analyze historical price data to compute correlations and identify relationships within the Energy sector.
- Conduct cointegration testing to select statistically stable, mean-reverting pairs.

2. Parameter Optimization

- Optimize entry/exit thresholds and rolling window sizes to enhance signal accuracy and adapt to market dynamics.
- Apply dollar-volume weighting to ensure consistent exposure across pairs.

3. Execution Rules

- Set stop-loss thresholds to limit risk and preserve capital during extreme spread divergence.
- Define rebalancing intervals to minimize costs and maintain portfolio alignment.



Investment flowchart

Our Advantage

- **Liquidity:** Portfolio consists of the most highly-traded U.S. energy in the SP500, allowing us to greatly expand our trading capacity.
- **Flexibility:** Due to our high liquidity, our withdrawal lock-ups are much more flexible, especially compared to peers.
- **Agility:** As a small team, we are nimble and able to adapt quickly to changing market conditions, seizing opportunities as they arise. We prioritize creative investment approaches and concentrate on high-conviction ideas to deliver value.
- **High-Touch Approach:** Our compact size allows for a more personalized relationship with investors, ensuring direct communication and tailored attention to client needs. Each investor is a priority, and we are deeply committed to building long-term, trusted partnerships.
- **Talent-Driven:** Our team comprises of highly ambitious professionals with exceptional backgrounds in finance and mathematics.



Management & Execution

Precision-driven execution for market-neutral excellence

Active Monitoring and Rebalancing

- Daily monitoring of all trade signals ensures precision in capturing market inefficiencies.
- Monthly rebalancing adjusts portfolio weights and updates cointegrated pairs to reflect changing dynamics.

Efficient Execution Framework

- Trades executed exclusively in high-volume Energy sector stocks to minimize slippage and transaction costs.
- Average transaction cost of **0.065% per stock/transaction**, based on NYSE benchmarks for cost efficiency.

Portfolio Scope and Scale

- Tracking and trading **20+ carefully selected tickers**, ensuring statistical stability and market liquidity.

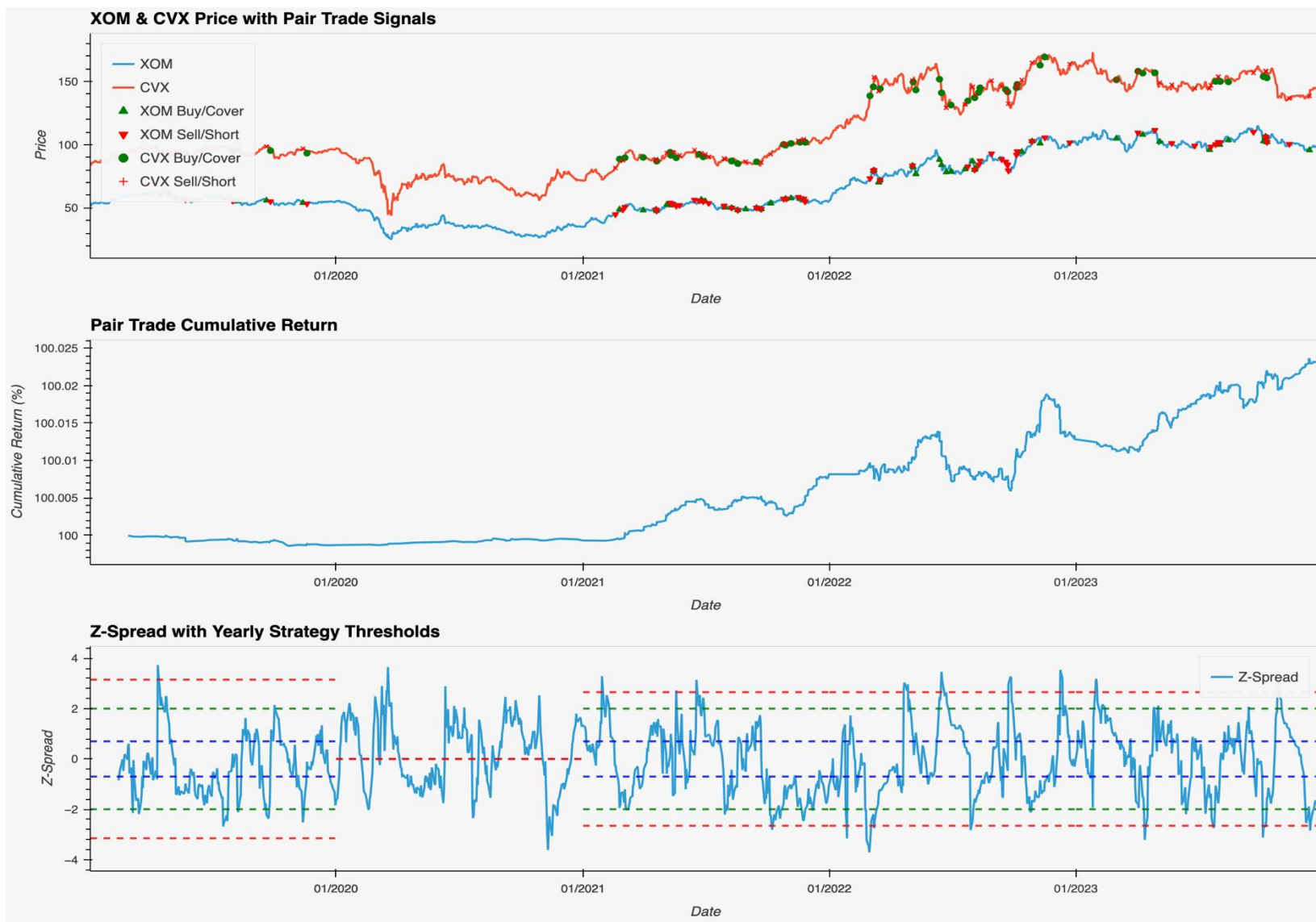
Risk Management Framework

- Carefully calibrated **stop-loss orders** cap downside risk and safeguard capital
- **Dynamic optimization** of stop-loss thresholds, ranging from **1.65 to 3.2** (incremented by **0.5**), ensures a strategic balance between risk mitigation and return maximization.

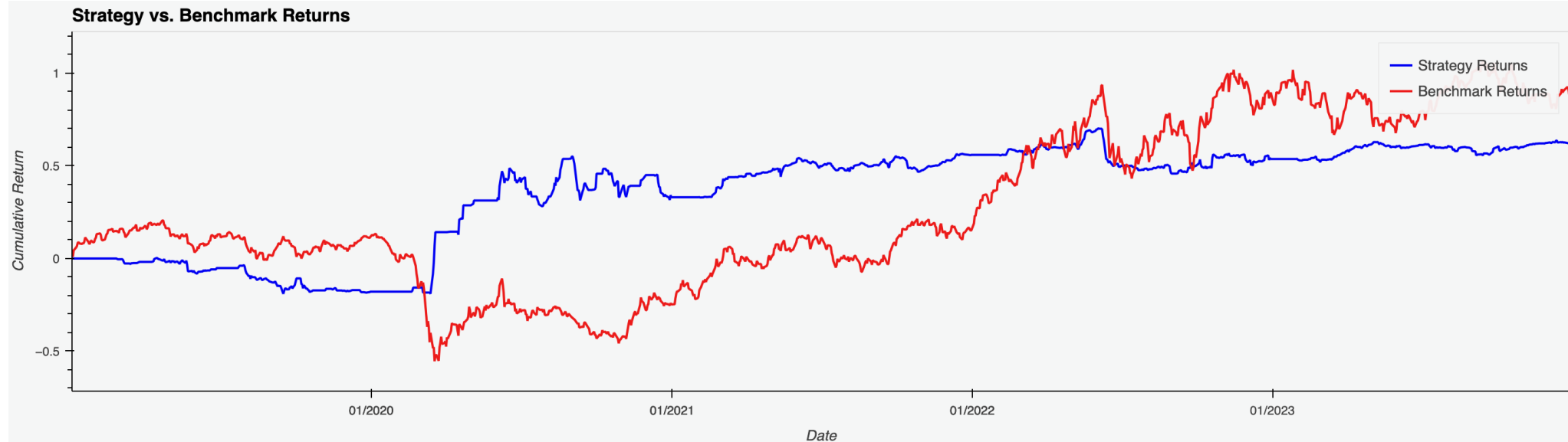
Strategic Leverage Utilization

- Leveraging our capital at a **6:1 ratio**, aligned with FINRA's 15-20% margin requirements for market-neutral equity portfolios, we amplify return potential while adhering to rigorous risk management protocols. This disciplined approach ensures efficient capital deployment without compromising portfolio integrity.

Trade Lifecycle Example



Strategy Performance



Performance Summary

#	index	Mean	Volatility	Sharpe Ratio	Sortino Ratio	Skewness	Excess Kurtosis	VaR (0.05)	CVaR (0.05)	Min	Max	Max Drawdown	Peak	Bottom	Recovery
0	2019_Strategy_	-0.189	0.125	-1.512	-0.949	-1.56	7.766	-0.012	-0.025	-0.044	0.022	-0.193	2019-04-15	2019-09-16	
1	2019_XLE_Retu	0.129	0.19	0.68	0.655	-0.177	0.505	-0.019	-0.026	-0.039	0.034	-0.179	2019-04-22	2019-08-27	
2	2020_Strategy_	0.526	0.305	1.725	1.567	1.839	14.43	-0.019	-0.035	-0.096	0.132	-0.153	2020-09-01	2020-09-11	
3	2020_XLE_Retu	-0.209	0.604	-0.347	-0.353	-0.313	5.767	-0.051	-0.09	-0.201	0.16	-0.606	2020-01-06	2020-03-18	
4	2021_Strategy_	0.162	0.087	1.857	1.856	0.254	7.694	-0.006	-0.012	-0.031	0.026	-0.055	2021-09-30	2021-10-27	2021-12-13
5	2021_XLE_Retu	0.471	0.296	1.592	1.66	0.027	-0.357	-0.029	-0.035	-0.045	0.045	-0.177	2021-06-15	2021-08-19	2021-10-05
6	2022_Strategy_	-0.008	0.117	-0.065	-0.055	-2.025	22.849	-0.01	-0.019	-0.063	0.037	-0.143	2022-06-03	2022-09-06	
7	2022_XLE_Retu	0.561	0.353	1.592	1.522	-0.461	0.553	-0.034	-0.048	-0.083	0.057	-0.26	2022-06-08	2022-07-14	2022-11-01
8	2023_Strategy_	0.059	0.05	1.183	1.026	-0.594	4.09	-0.006	-0.008	-0.014	0.013	-0.044	2023-05-09	2023-09-14	2023-12-08
9	2023_XLE_Retu	0.02	0.229	0.086	0.084	-0.05	0.821	-0.022	-0.03	-0.054	0.045	-0.173	2023-01-26	2023-03-17	2023-09-08
10	Total_Strategy_	0.111	0.164	0.676	0.647	2.378	42.53	-0.011	-0.022	-0.096	0.132	-0.193	2019-04-15	2019-09-16	2020-03-18
11	Total_XLE_Retu	0.194	0.365	0.532	0.518	-0.439	11.049	-0.033	-0.052	-0.201	0.16	-0.63	2019-04-22	2020-03-18	2021-10-25

Strategy Performance

Total Trades	Winning Trades	Losing Trades	Win %	Lose %
1143	675	468	59.06%	40.94%

Trade performance summary

- **Resilience in Volatile Markets:** Delivered **52.6%** return in 2020 vs. benchmark's **-20.9%**, capitalizing on market downturns with stability.
- **Superior Risk Efficiency:** Sharpe Ratio of **0.68** (vs. **0.53** benchmark) and lower volatility (**16%** vs. **37%**) reflect disciplined risk management.
- **Drawdown Control:** Maximum drawdown of **-19.3%** vs. benchmark's **-63%**, prioritizing capital preservation for risk-averse investors.
- **Limited Upside in Bull Markets:** Underperformed during rallies, with a **-0.8%** return in 2022 vs. benchmark's **56.1%**, signaling refinement opportunities for capturing momentum.

Backtesting Results

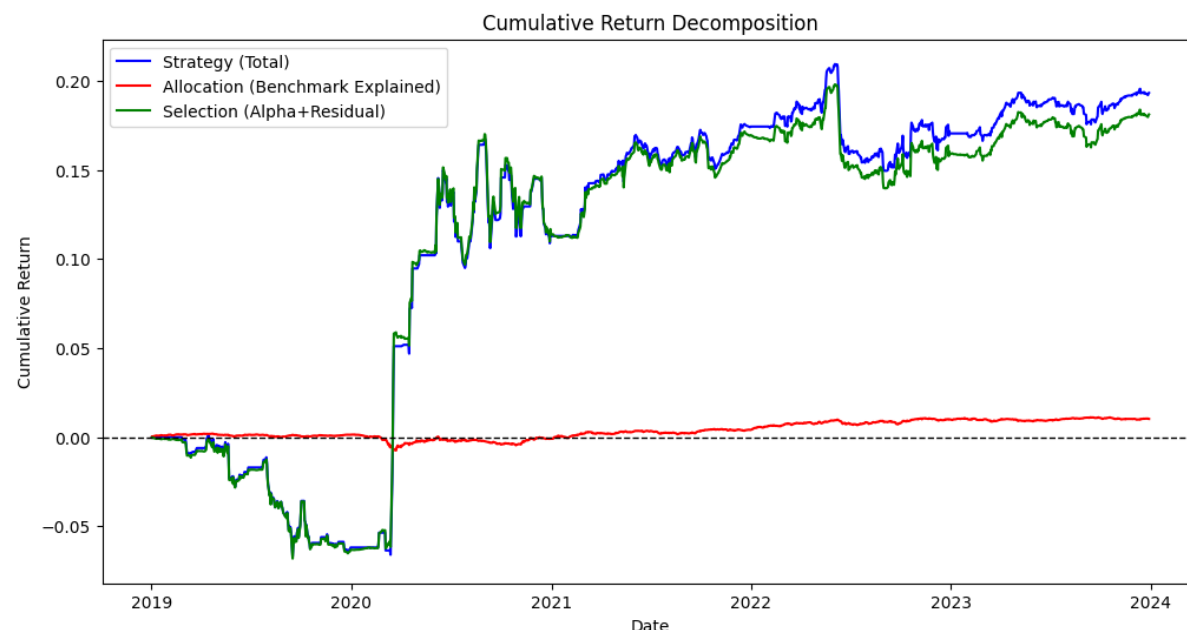
Methodology – Walk-Forward Analysis

- Training Period:** 4 years (e.g. 2019–2022) used to calibrate pair selection, entry/exit thresholds, and stop-loss optimization.
- Testing Period:** 1 year (e.g. 2023) used to validate the strategy’s performance on data outside the training set.

Pair	Entry Threshold	Exit Threshold	Stop-Loss Threshold	Rolling Window	Sharpe Ratio	Test Sharpe
CVX, XOM	2.0	0.3	2.15	30	1.213522	1.487088
XOM, PSX	2.5	0.7	3.15	30	1.087939	1.453604
FANG, OXY	2.0	0.9	2.15	10	0.874993	1.411750
APA, OXY	2.5	0.3	2.65	20	0.574739	1.272597
COP, XOM	2.0	0.9	2.15	20	1.249250	1.163305
XOM, VLO	1.5	0.7	1.65	20	0.928852	1.060992

Optimized Pair Parameters and Performance Metrics

Performance Attribution & Return Decomposition



Pair	Pair Alpha (Daily)	Pair Alpha (Annualized)	Pair Beta to Benchmark	Pair R-squared
(OKE, WMB)	0.003655	0.921068	0.064607	0.000961
(CVX, KMI)	0.001993	0.502338	0.078305	0.003603
(DVN, SLB)	0.001543	0.388843	-0.045946	0.004912
(EOG, SLB)	0.001521	0.383195	0.077508	0.008028
(COP, KMI)	0.001453	0.366082	0.069462	0.005266

Pair-level attribution

- **Market-Neutral Allocation:** Negligible allocation effect confirms the strategy's independence from sector or market-wide movements.
- **Selection-Driven Returns:** Strategy performance overwhelmingly driven by selection effects, showcasing the success of pair selection and entry/exit timing.
- **Alpha Generation:** Idiosyncratic stock-pair trades and mean-reversion profits dominate returns, with residuals capturing reversion dynamics beyond benchmark explanations.
- **Low Benchmark Dependency:** Extremely small R-squared values at the pair level highlight minimal reliance on benchmark-driven returns.

Strategic Summary

Core Strategy

- A market-neutral approach leveraging statistical arbitrage in the U.S. energy sector.
- Focused on identifying inefficiencies in cointegrated stock pairs for mean-reversion opportunities.

Methodology Highlights

- **Pair Selection:** Advanced cointegration analysis to identify stable, mean-reverting pairs.
- **Parameter Optimization:** Adaptive thresholds and rebalancing to ensure precision and resilience.
- **Execution Excellence:** High-frequency execution in liquid markets minimizes costs and slippage.

Performance Highlights

- Proven resilience in volatile markets, with superior Sharpe ratios and controlled drawdowns.
- Demonstrated low benchmark dependency and high selection-driven returns.

Investor Value

- Delivering consistent alpha through uncorrelated, risk-adjusted strategies.
- Combining sector expertise, innovation, and disciplined execution for long-term success.