

Summary

Idea – *Investing in the energy sector*

Strategy – Invest in the energy sector by using max CapEx, minimum Market Cap, Quarterly earnings growth > yearly earnings growth %, Free Cash Flow > 0 and filtering by top 10 rank on EPS

Historical Performance – Outperformed SPY by 826% and Bloomberg's Energy Index by 1024% from 2014-2024

Recommendation – Buy \$40k, in the School Fund

What to Sell – *Sell SPY to fund strategy*

Effect on Portfolio – Increase volatility and Idiosyncratic risk, but lowers beta





Strategy Details

Backtesting Method – *Bloomberg EQBT*

Rebalance frequency – *Annually*

Weighting – Equal

Sector - Energy

Number of positions -5 (Max 10)

Minimum stock market cap – 300M

CapEx to Sales – Max 15%

Latest Q Revenue Sequential Growth > Latest FY Revenue Sequential Growth

Free Cash Flow > 0

Top 10 Rank EPS – higher is better





Backtesting Implementation Details

# OF STOCKS	10
MIN MARKET CAP	\$300M
MIN MONTHLY TRADING VOLUME	*
WEIGHTING SCHEME	EQUAL
REBALANCING FREQUENCY	Annually
TIME FRAME	10 YEARS
CURRENCY	USD





Backtesting in Bloomberg









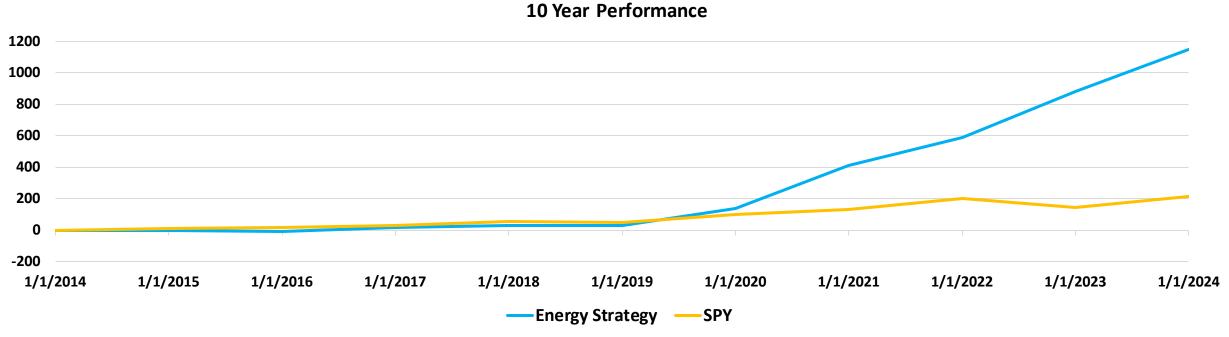
Backtesting Results - Characteristics

10-Year Analysis	Mean	Min	25%	Median	75%	Max
Market Cap (\$Millions)	26,628	309	668	3,082	9,827	393,260
P/E Ratio	22.76	1.33	10.18	16.00	22.48	246.19
Share Price (\$)	71.68	0.60	19.86	45.84	82.70	1,010.76





Backtesting Results - Performance



<u>Annualized</u>	Return	α*	β*	σ	Sharpe	Treynor	Max DD	Info Ratio	ldio. Risk
10 Year	1,150.9%	20.23	1.05	31.4%	1.1	0.3	-22.9	0.72	25.3
1 Year	27.7%	3.55	0.74	23.8%	1.1	0.3	-16.96	0.14	21.9
10 Year SPY	221.0%	0	1.0	17.7%	0.72		-13.0		
1 Year SPY	22.5%	0	1.0	12.6%	1.5		-8.93		





Company Overview







Baker Hughes >

NuStar Energy (NS)

Midstream (Oil & Gas)

Involved in the transportation and storage of crude oil and refined products

Manages pipelines, terminals, and storage facilities Hess Midstream Partners (HESM)

Midstream (Oil & Gas)

Focuses on the transportation and storage of oil and gas

Bridges the gap between production and refining segments

NGL Energy Partners (NGL)

Midstream & Downstream (Oil & Gas)

Involved in storing, marketing, and transporting oil and refined products within midstream and downstream segments.

Baker Hughes (BKR)

Oilfield Services

Oilfield services, technology, and systems.

Offers solutions across the entire oil and gas value chain.





Recommended Purchases

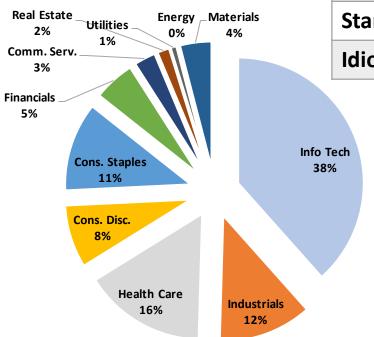
Name	Ticker	P/E Ratio	Monthly Trading Volume (\$M)	Market Cap (\$M)	Share Price	# of Shares	Total Value
NuStar Energy	NS	40.61	15.29	2684	21.32	469	10000
Hess Midstream	HESM	16.20	13.01	7517	32.73	306	10000
NGL Energy Partners	NGL	21.57	5.96	696	5.28	1894	10000
Baker Hughes	BKR	18.72	122.21	31,173	30.98	323	10000

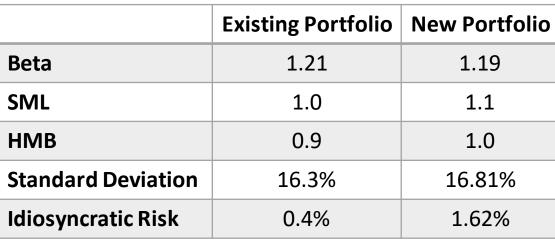




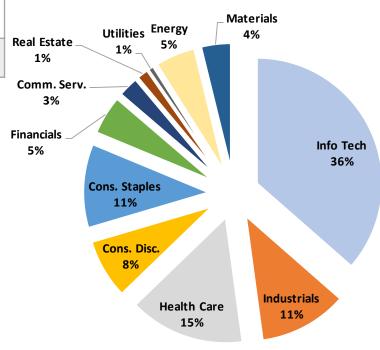
Effect on the Portfolio

Old Portfolio Breakdown





New Portfolio Breakdown







Recap

Idea – Invest in the energy sector, but

Strategy – Invest in the energy sector by using max CapEx, minimum Market Cap, Quarterly earnings growth > yearly earnings growth %, Free Cash Flow > 0 and filtering by top 10 rank on EPS

Historical Performance – Outperformed SPY by 826% and Bloomberg's Energy Index by 1024% from 2014-2024+

Recommendation – Buy \$40k, in the School Fund

What to Sell – Sell SPY

Effect on Portfolio – *Increase volatility and Idiosyncratic risk, but lowers beta*





Decision

Proposal: \$40k in Energy Strategy into the School Fund

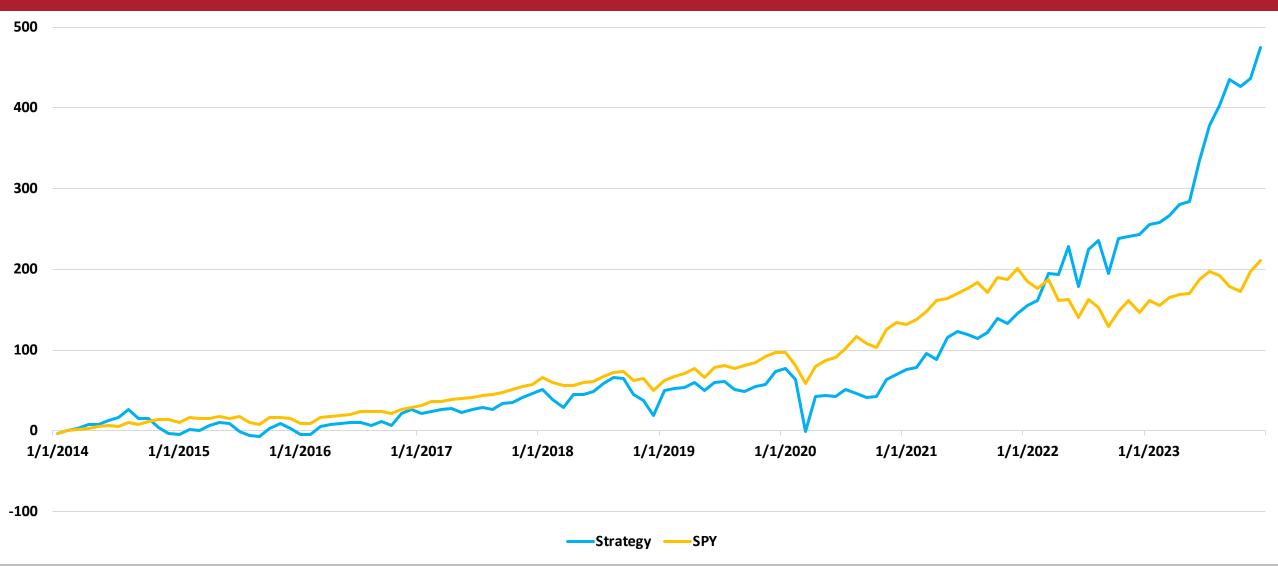
Results: Yes: 15

No: 0





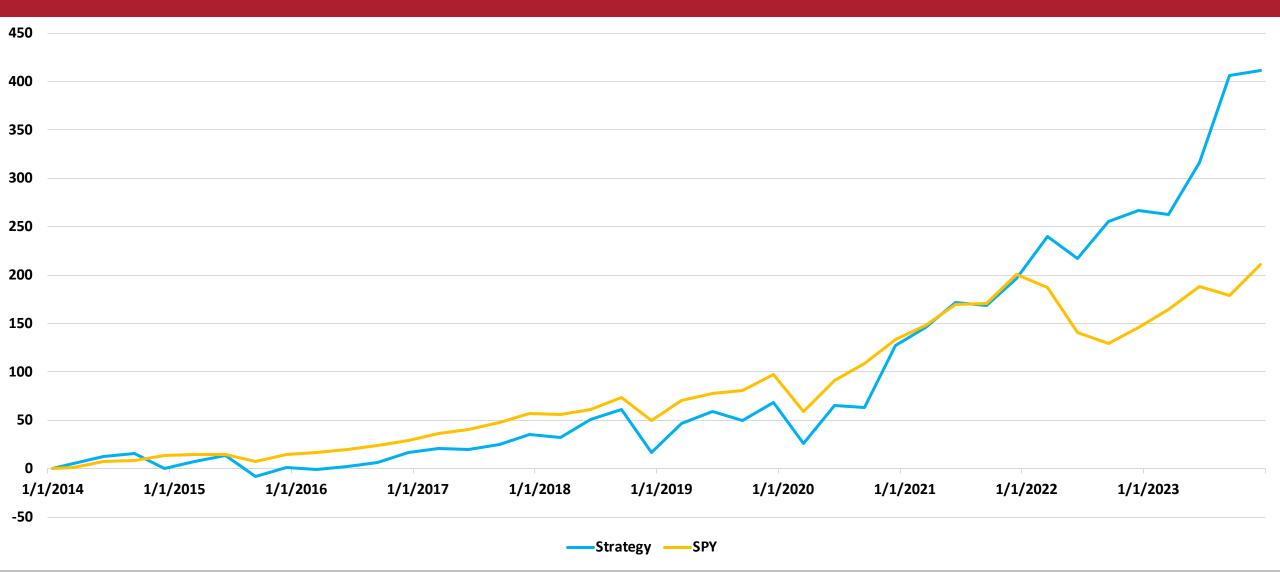
10 Year Performance Monthly Rebalancing







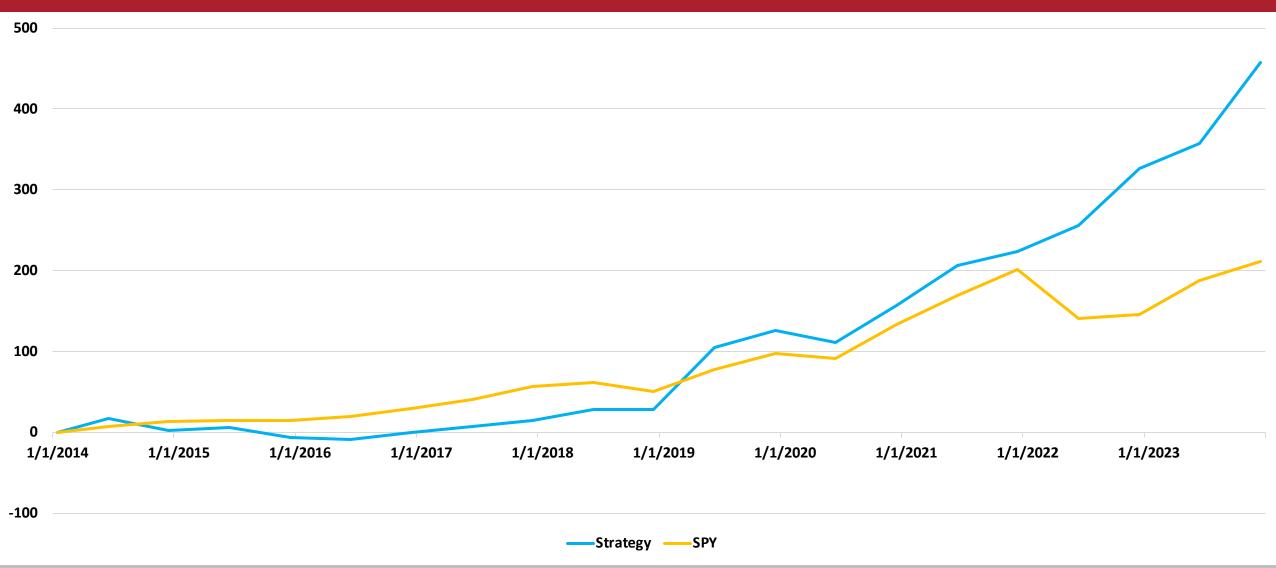
10 Year Performance Quarterly Rebalancing







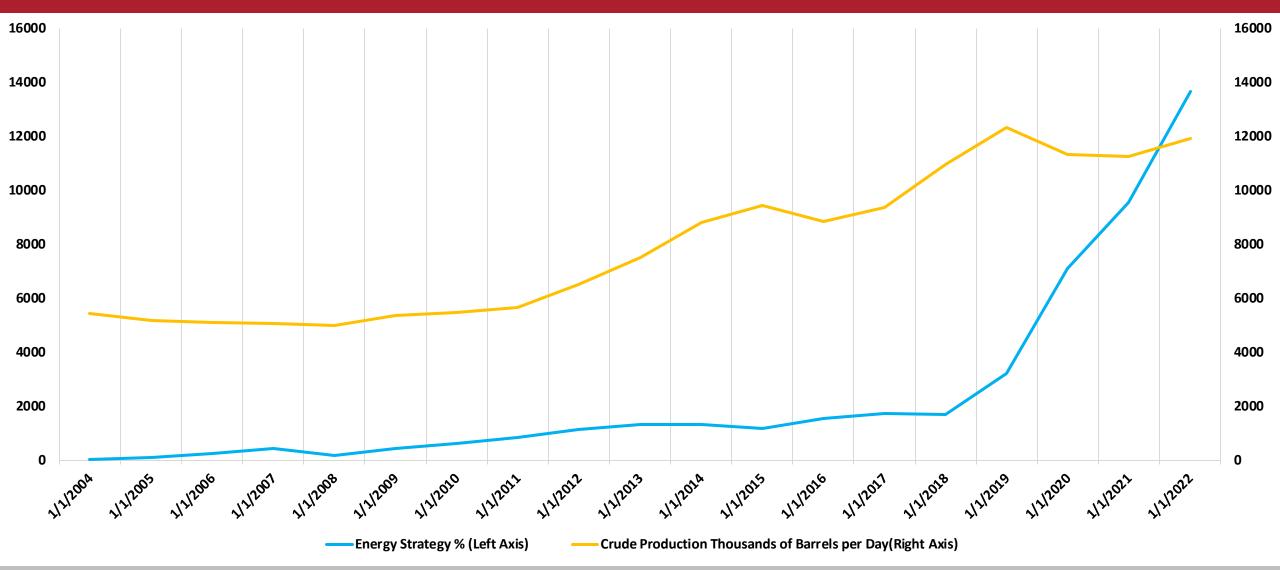
10 Year Performance Semi-Annual Rebalancing







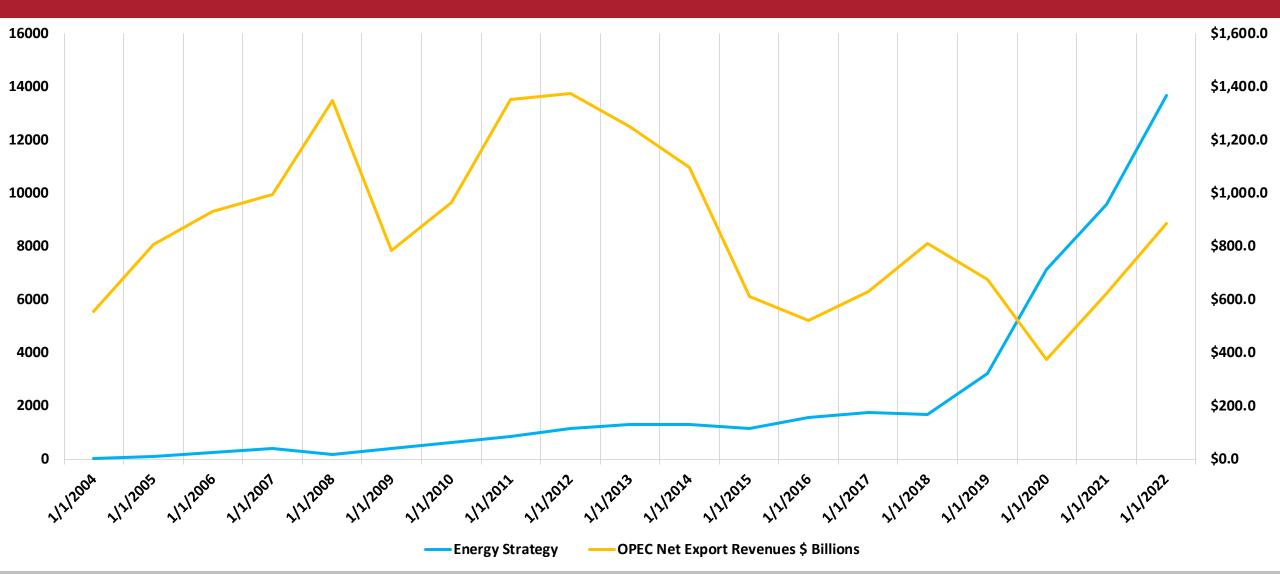
Energy Strategy Referenced to U.S Crude Production







Energy Strategy Referenced to OPEC Production







Security Analysis

REX	US	REX AMERICAN RES	440,232,384.00	11.11 %	30.67 %	Out I	In	
SUN	US	SUNOCO LP	2,863,605,504.00	11.11 %	55.29 %	Out (Out	
TA	US	TRAVELCENTERS OF	469,292,928.00	11.11 %	58.34 %	Out I	In	
				Total	305.96 %			
2019 Point In	Time Results	for 'In' (20 year CF+ Capex En R	Rebalance Period: 12/3	1/2019		Previous I	Next	
Ticker		Short Name	Market Cap	Weight	Return	In/Out I	In/Out	
BPMP	US	BP MIDSTREAM PAR	1,635,354,752.00	25.00 %	(23.62)%	In (Out	
DRQ	US	DRIL-QUIP INC	1,697,232,128.00	25.00 %	(36.86)%	Out (Out	
ENPH	US	ENPHASE ENERGY	3,197,940,224.00	25.00 %	571.53 %	In (Out	
GPP	US	GREEN PLAINS PAR	320,078,816.00	25.00 %	(37.23)%	Out (Out	
					470.00.0/			
				Total	473.82 %			
2018 Point In	Time Results	for 'In' (20 year CE+ Caney En B	Rehalance Period: 12/3		4/3.82 %		Next	
2018 Point In	Time Results	s for 'In' (20 year CF+ Capex En R Short Name	Rebalance Period: 12/3 Market Cap	1/2018		Previous I	Next In/Out	
	Time Results			1/2018		Previous I		
Ticker		Short Name	Market Cap	1/2018 Weight	Return	Previous I In/Out I	In/Out	
Ticker BPMP	US	Short Name BP MIDSTREAM PAR	Market Cap 1,627,831,680.00	1/2018 Weight 14.29 %	Return 9.03 %	Previous I In/Out I Out I	In/Out In	
Ticker BPMP CZZ	US US	Short Name BP MIDSTREAM PAR COSAN LTD - A	Market Cap 1,627,831,680.00 2,153,146,368.00	1/2018 Weight 14.29 % 14.29 %	Return 9.03 % 159.55 %	Previous IIn/Out IIOut IIIOut IIOut IIOut IIIOut IIIIIIIIII	In/Out In Out	
Ticker BPMP CZZ ENPH	US US US	Short Name BP MIDSTREAM PAR COSAN LTD - A ENPHASE ENERGY	Market Cap 1,627,831,680.00 2,153,146,368.00 504,997,696.00	Weight 14.29 % 14.29 % 14.29 %	Return 9.03 % 159.55 % 452.43 %	Previous IIn/Out IIOut IIIOut IIOut IIOut IIOut IIOut IIOut IIOut IIOut IIOut IIIOut IIIIOut IIIOut IIIOut IIIOut IIIOut IIIOut IIIOut IIIIOut IIIIOut IIIIIIIIII	In/Out In Out	
Ticker BPMP CZZ ENPH MDRIQ	US US US US	Short Name BP MIDSTREAM PAR COSAN LTD - A ENPHASE ENERGY MCDERMOTT INTL	Market Cap 1,627,831,680.00 2,153,146,368.00 504,997,696.00 1,181,020,160.00	1/2018 Weight 14.29 % 14.29 % 14.29 % 14.29 %	Return 9.03 % 159.55 % 452.43 % (89.65)%	Previous IIn/Out IIOut IIIOut IIOut IIOut IIOut IIOut IIOut IIOut IIOut IIOut IIIOut IIIIOut IIIIIIIIII	In/Out In Out In Out Out	
Ticker BPMP CZZ ENPH MDRIQ MTRX	US US US US US	Short Name BP MIDSTREAM PAR COSAN LTD - A ENPHASE ENERGY MCDERMOTT INTL MATRIX SERVICE	Market Cap 1,627,831,680.00 2,153,146,368.00 504,997,696.00 1,181,020,160.00 485,667,296.00	1/2018 Weight 14.29 % 14.29 % 14.29 % 14.29 % 14.29 %	Return 9.03 % 159.55 % 452.43 % (89.65)% 27.54 %	Previous IIn/Out IIOut IIIOut IIIOut IIOut IIOut IIOut IIOut IIOut IIOut IIOut IIIOut IIIIOut IIIOut IIIOut IIIOut IIIOut IIIOut IIIOut IIIOut IIIOut IIIIIIIIII	In/Out In Out In Out Out Out	
Ticker BPMP CZZ ENPH MDRIQ MTRX NOV	US US US US US US	Short Name BP MIDSTREAM PAR COSAN LTD - A ENPHASE ENERGY MCDERMOTT INTL MATRIX SERVICE NOV INC	Market Cap 1,627,831,680.00 2,153,146,368.00 504,997,696.00 1,181,020,160.00 485,667,296.00 9,852,520,448.00	1/2018 Weight 14.29 % 14.29 % 14.29 % 14.29 % 14.29 %	Return 9.03 % 159.55 % 452.43 % (89.65)% 27.54 % (1.68)%	Previous IIn/Out IIOut IIIOut IIOut IIIOut IIOut IIOut IIOut IIOut IIOut IIOut IIOut IIOut IIOut IIIOut IIIIIIIIII	In/Out In Out In Out Out Out Out	

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