

ENERGY SECTOR



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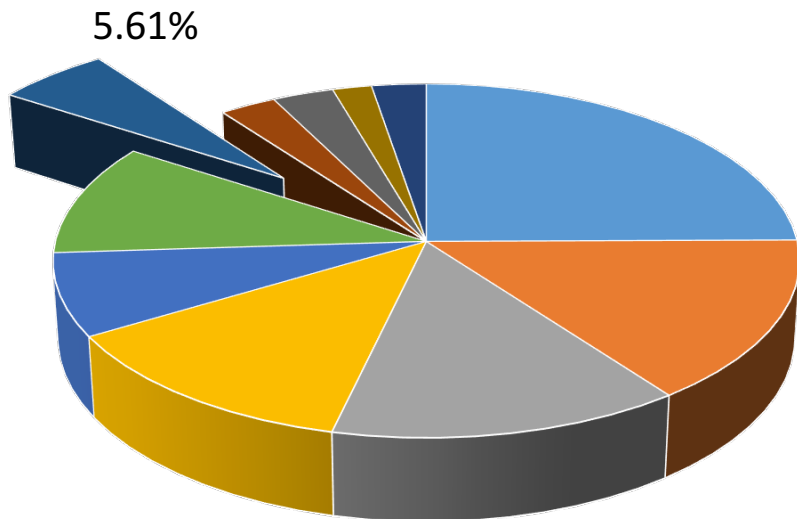
VALUATIONS

RECOMMENDATION

SECTOR OVERVIEW



S&P 500 SECTOR WEIGHTS



Securities Allocation				
Sector	S&P 500 Weight	SIM Weight	+/-	
Information Technology	24.87%	24.25%	-0.62%	
Financials	14.96%	14.69%	-0.27%	
Health Care	13.82%	13.66%	-0.16%	
Consumer Discretionary	12.75%	13.34%	0.59%	
Consumer Staples	7.58%	7.93%	0.35%	
Industrials	10.24%	10.38%	0.14%	
Energy	5.61%	6.68%	1.07%	
Utilities	2.72%	2.57%	-0.15%	
Materials	2.95%	2.96%	0.01%	
Telecommunication Services	1.88%	1.24%	-0.64%	
Real Estate	2.62%	2.32%	-0.30%	
Total	100.00%	100.00%	0.00%	

INDUSTRIES

Energy Equipment and Services

1. Oil and Gas Drilling Contractors
2. Manufacturers of Oil and Gas Drilling Rigs and Equipment
3. Drilling, Evaluation, and Completion of Oil and Gas Wells

Oil, Gas, and Consumable Fuels

1. Integrated Oil & Gas
2. Oil & Gas Exploration and Production
3. Oil and Gas Refining and Marketing
4. Oil and Gas Storage and Transportation
5. Coal and Consumable Fuels



KEY COMPANIES

ExxonMobil

XOM: \$308.87B

Schlumberger

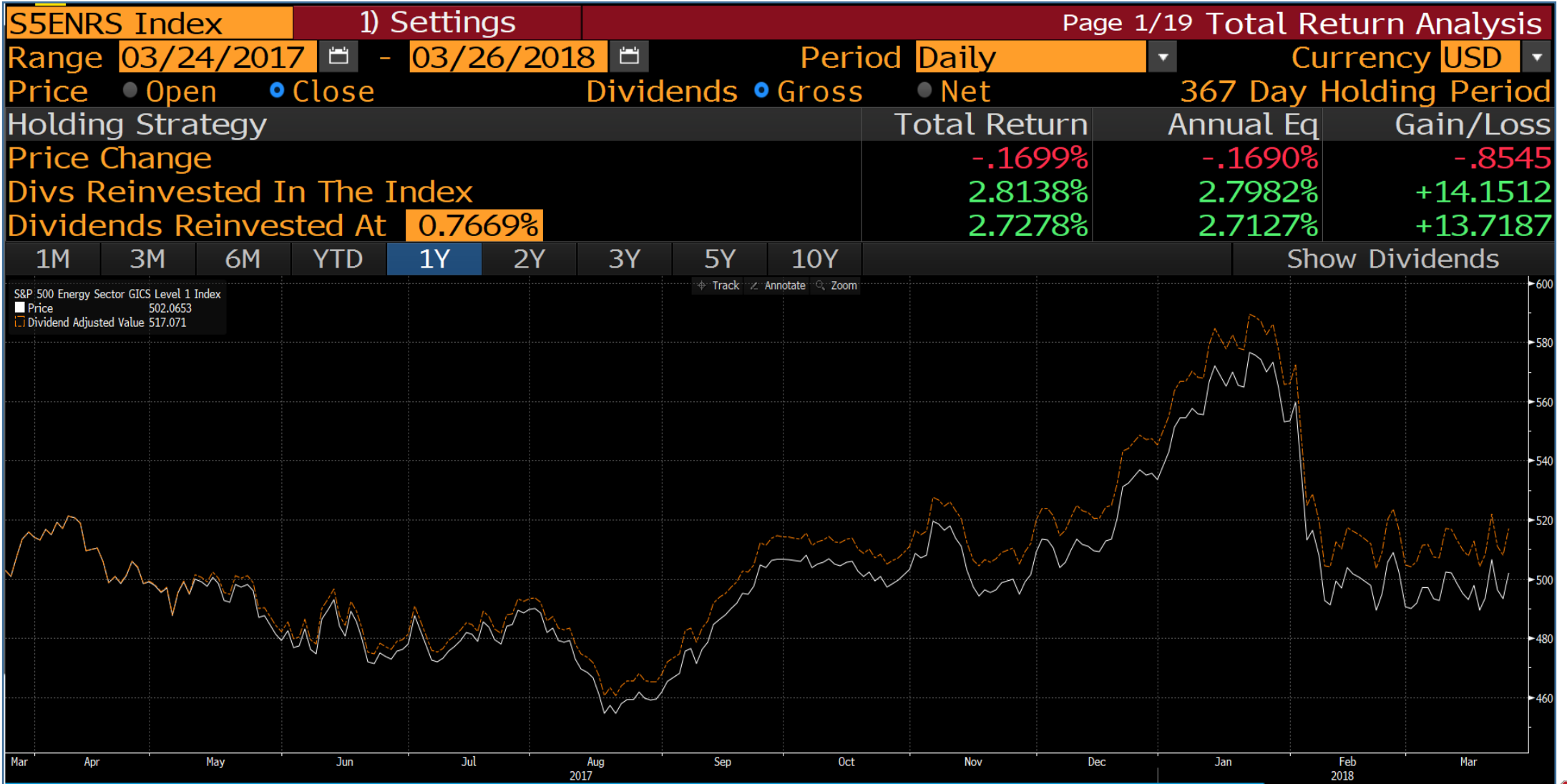
SLB: \$88.9B

Chevron



CVX: \$215.82B

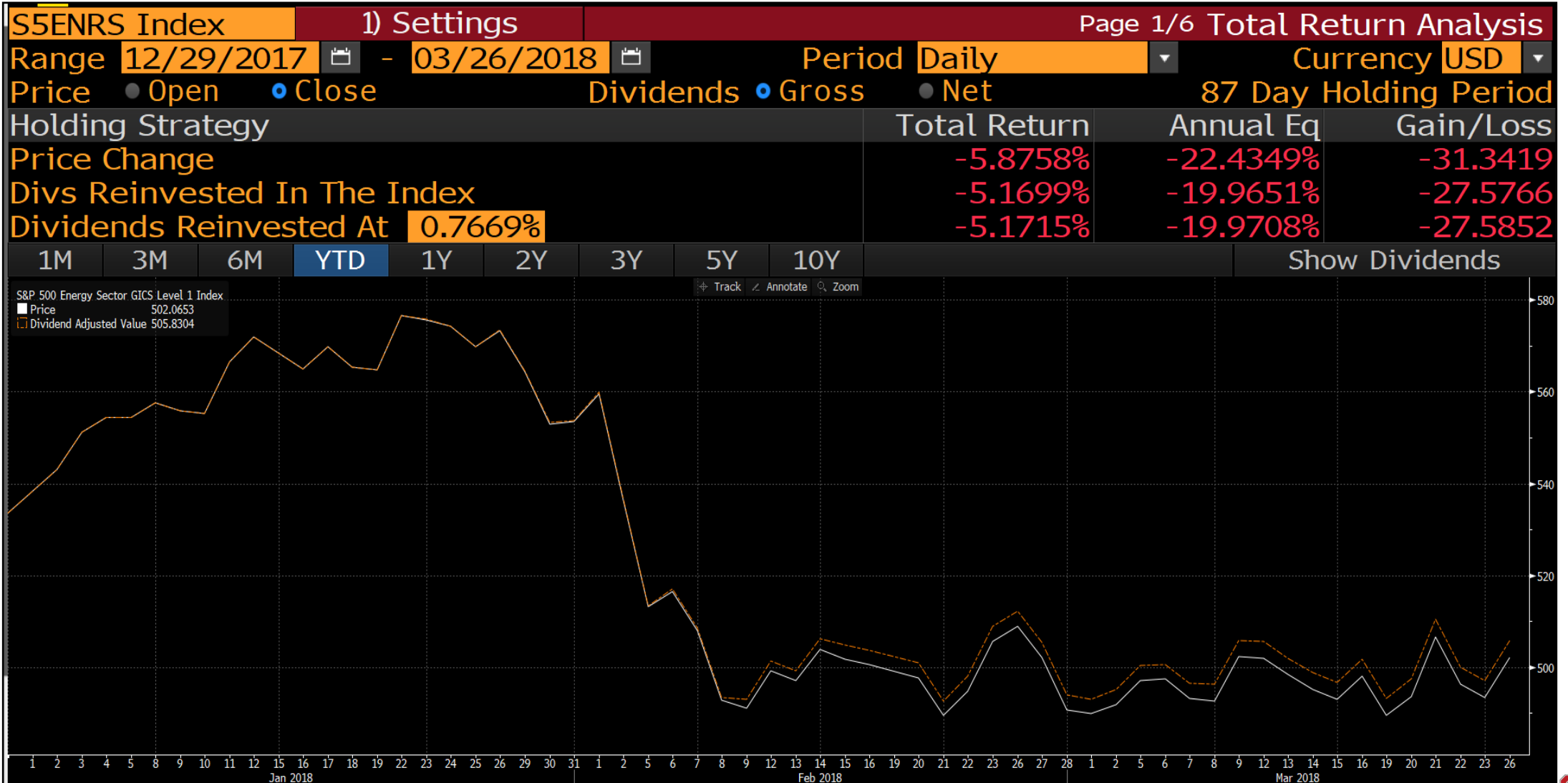
TTM TOTAL RETURN



Source: Bloomberg



YTD TOTAL RETURN



Source: Bloomberg

BUSINESS ANALYSIS

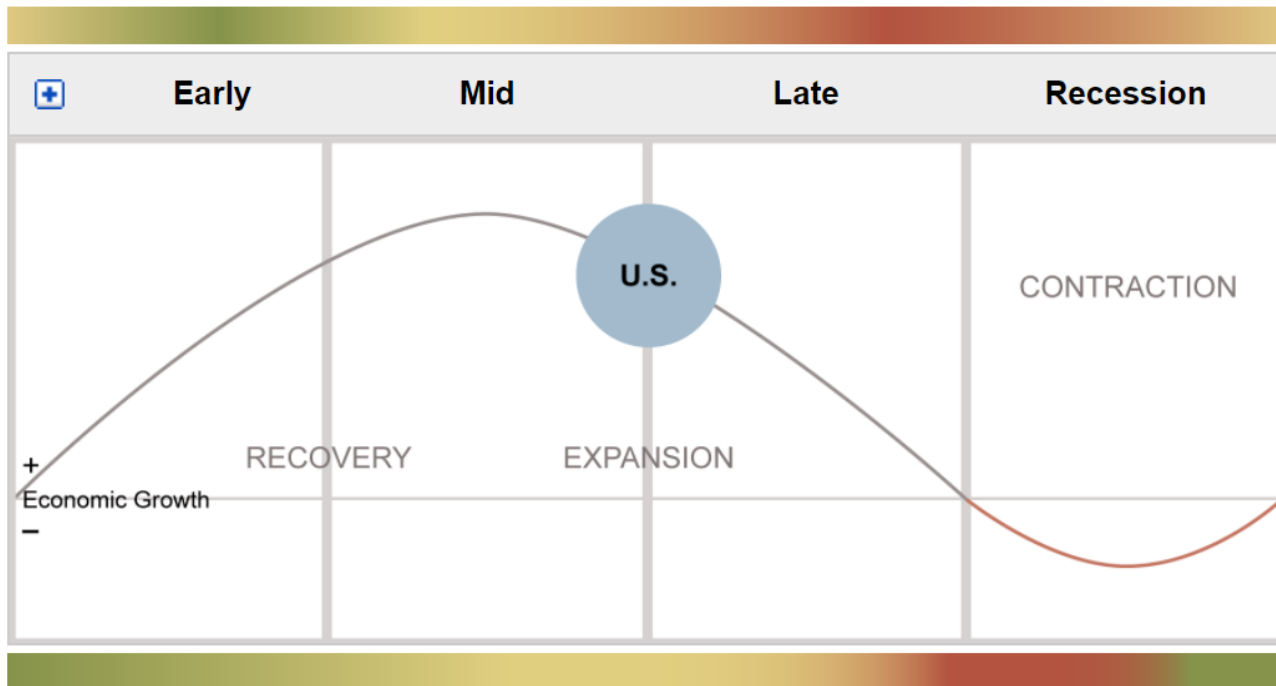


BUSINESS CYCLE

Sector	Early	Mid	Late	Recession
Energy	--		++	

Late in the Expansionary Period

INFLATIONARY PRESSURES / Red=High

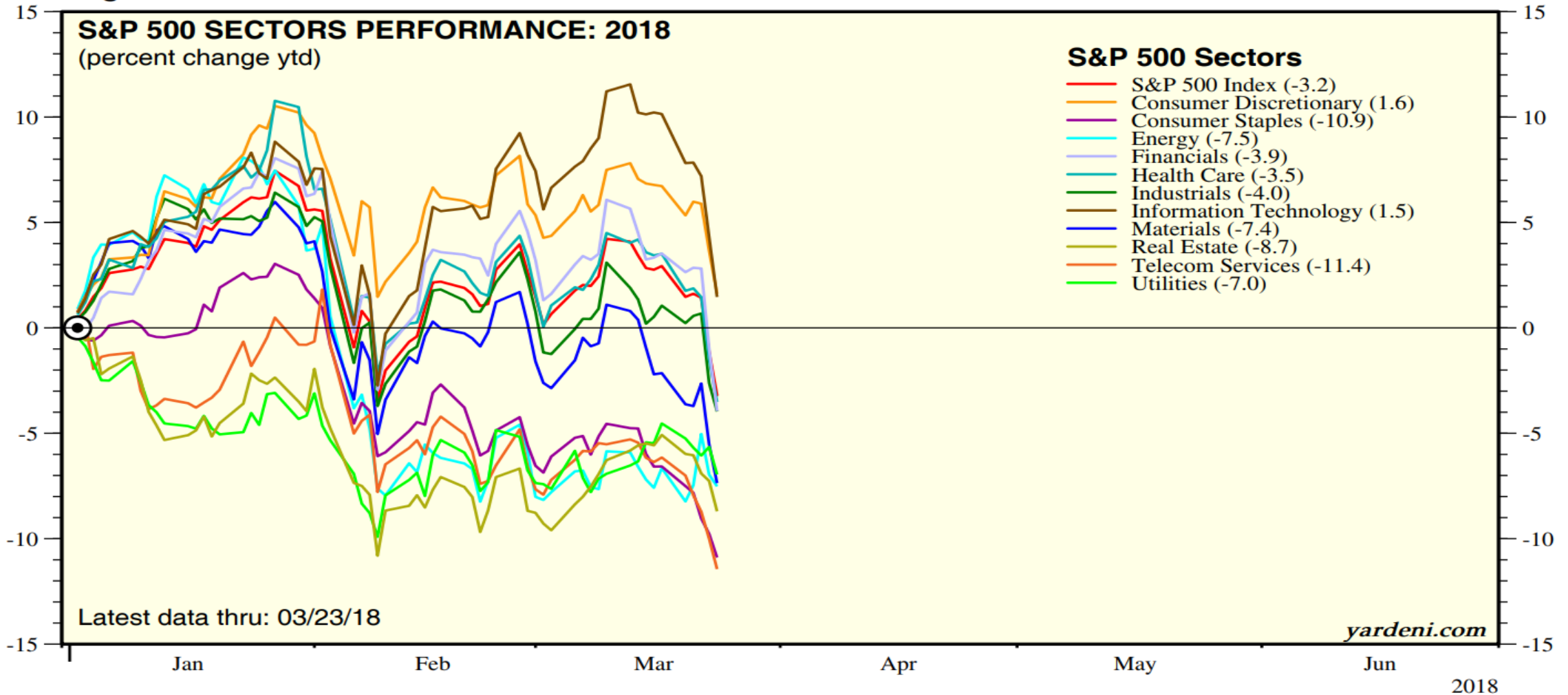


RELATIVE PERFORMANCE OF ECONOMICALLY SENSITIVE ASSETS / Green=Strong

- The Energy sector performs best in the late stages of the business cycle
- Recent decline due to oversupply
- Added drilling rigs mean long term upside

2018 S&P SECTOR PERFORMANCE

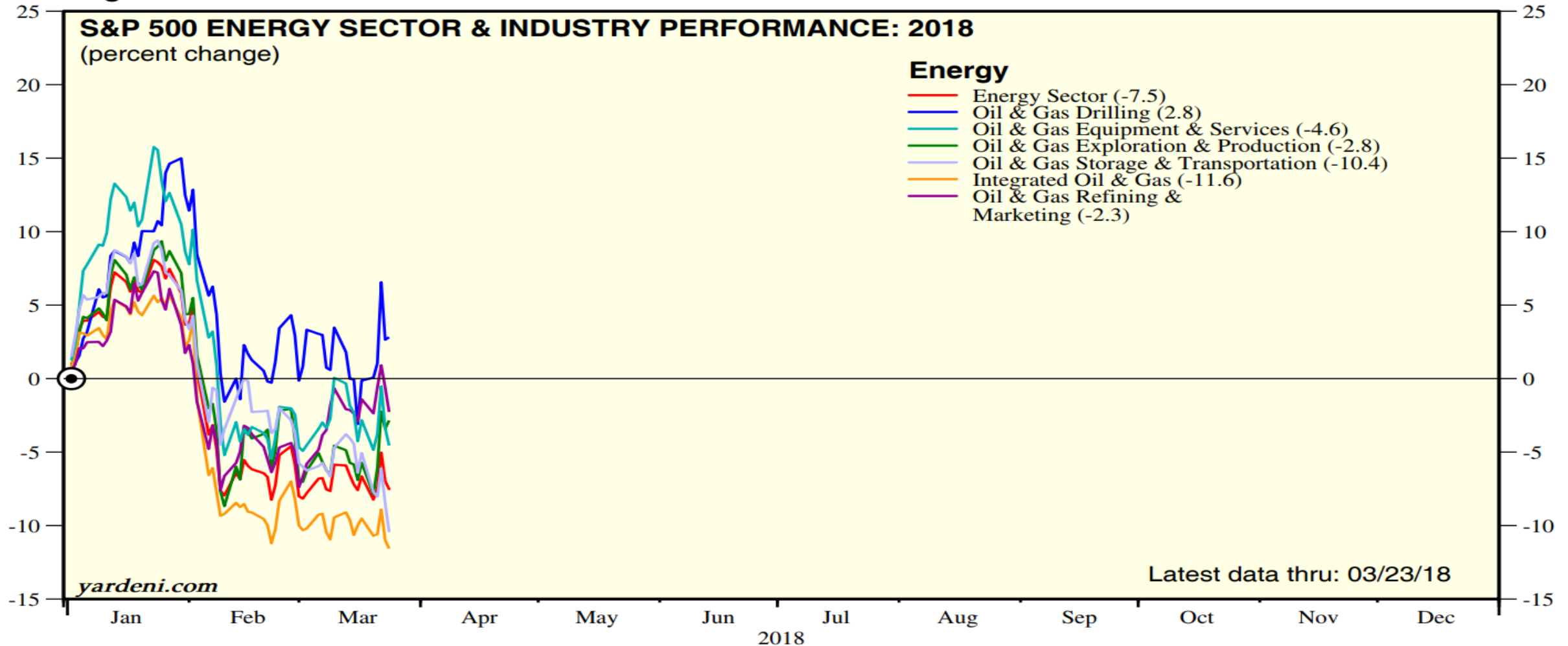
Figure 1.



Source: Standard & Poor's.

2018 ENERGY SECTOR & INDUSTRY PROJECTIONS

Figure 8.



Source: Standard & Poor's Corporation.

EXTERNAL FACTORS



- Political Risk
- Regulations, Tariffs, etc.

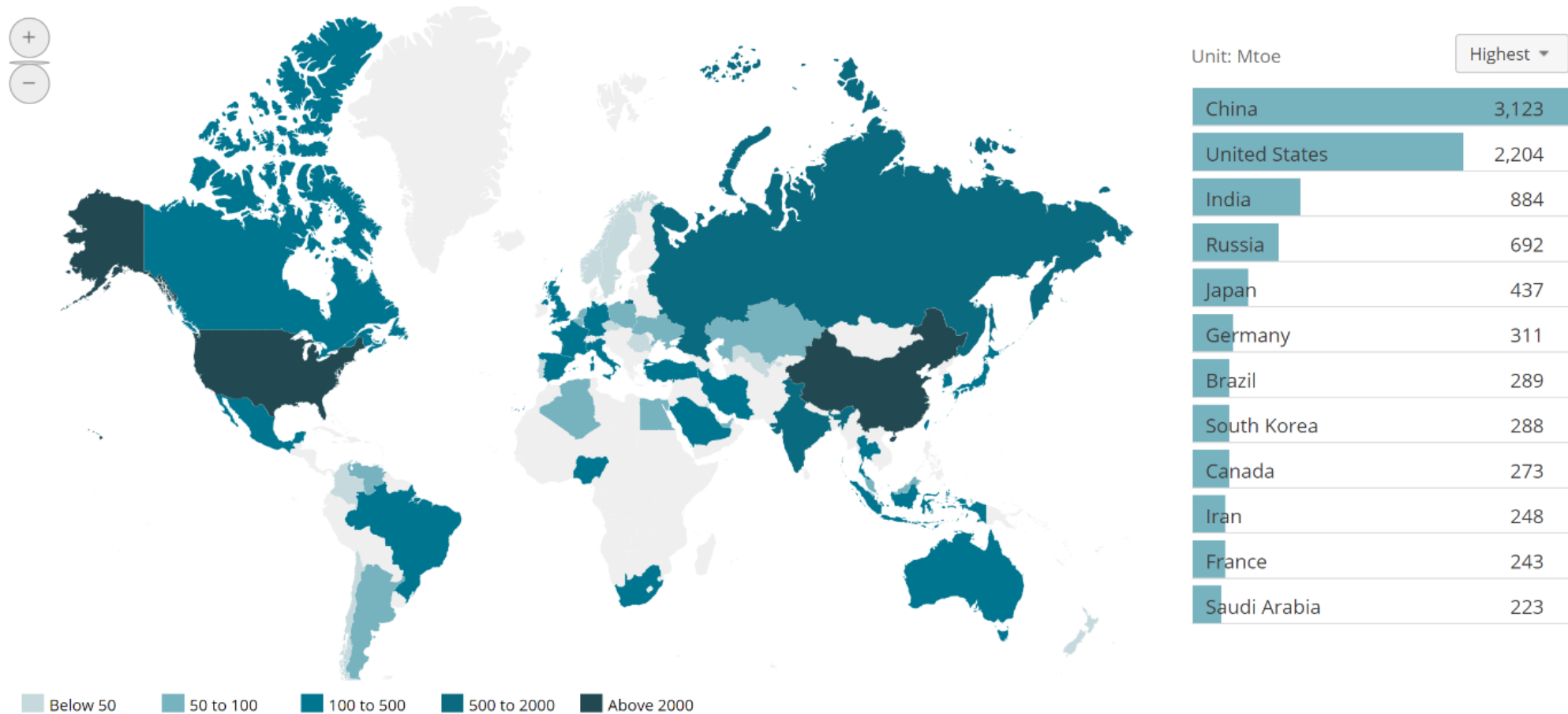


- Oil Price Movement
- Divergence from Oil Price and Energy
- Performance Correlation



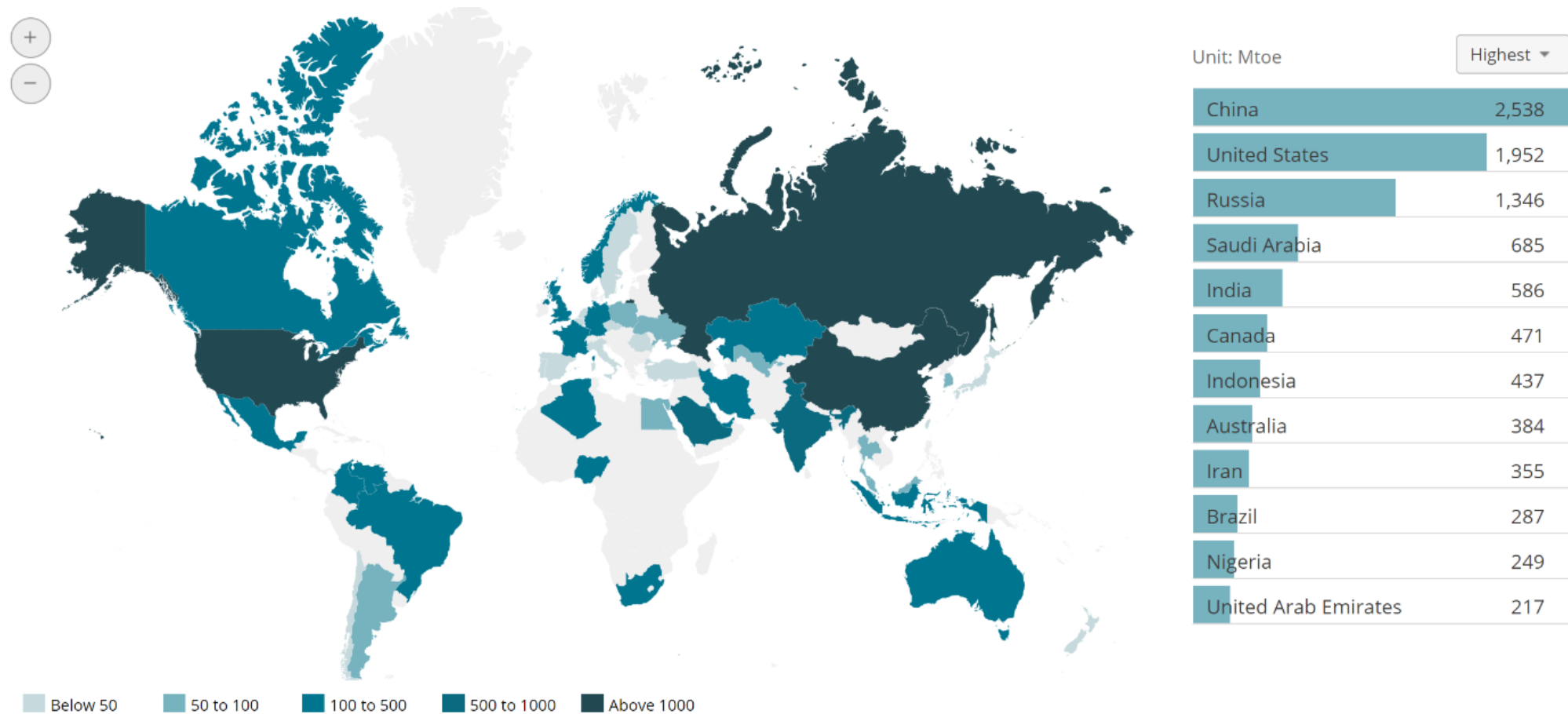
- Accidents (ex. BP Oil Spill)
- Alternative Energy Pressure

TOP ENERGY CONSUMERS



Source: <https://yearbook.enerdata.net/crude-oil/world-production-statistics.html>

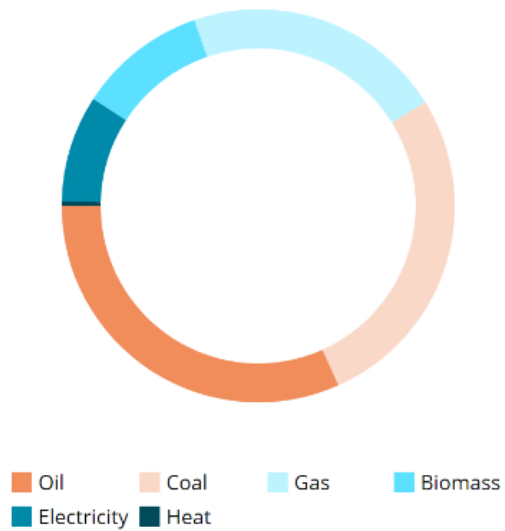
TOP ENERGY PRODUCERS



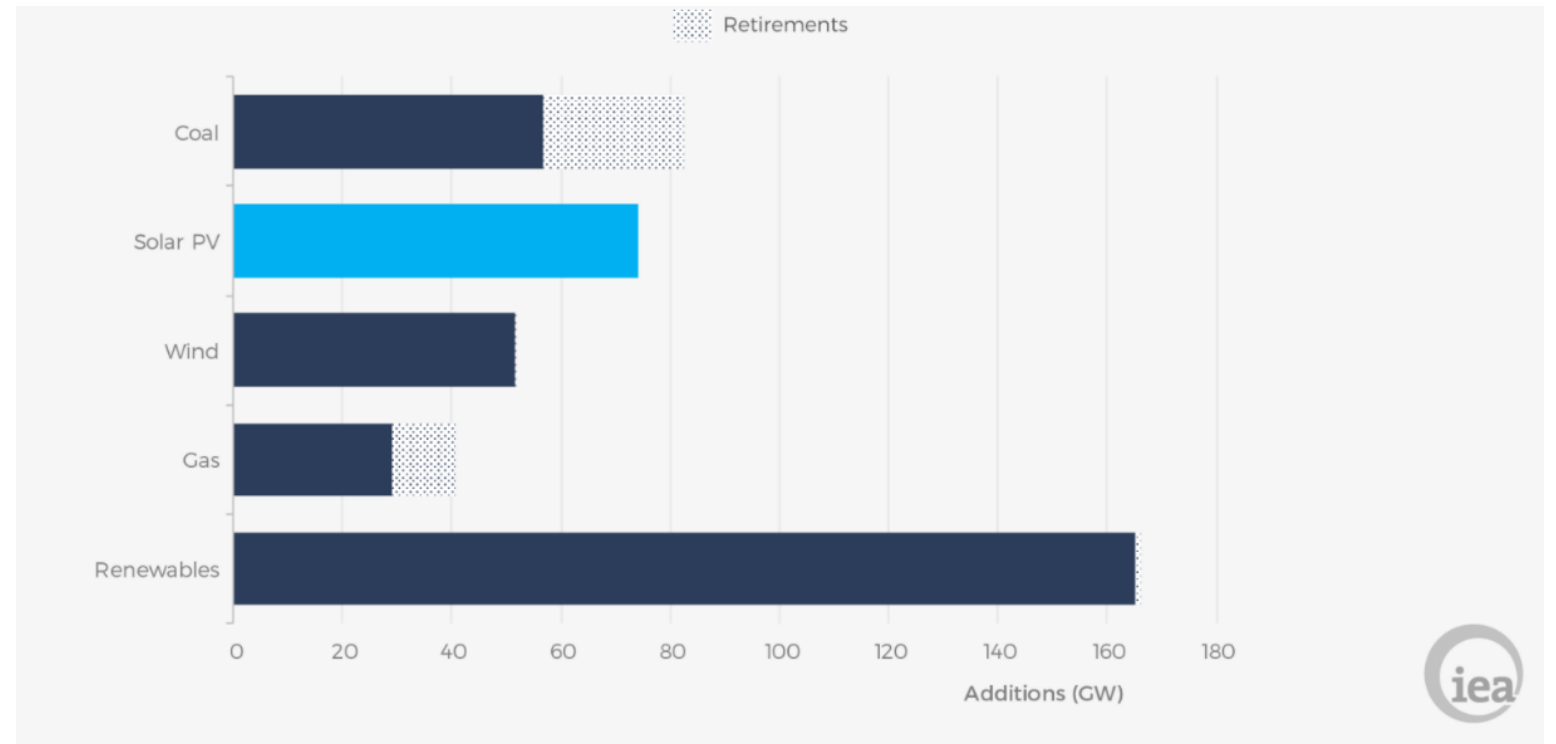
Source: <https://yearbook.enerdata.net/crude-oil/world-production-statistics.html>

ENERGY BREAKDOWN AND FORECAST

Breakdown by energy (2016)



Source: <https://yearbook.enerdata.net/total-energy/world-consumption-statistics.html>

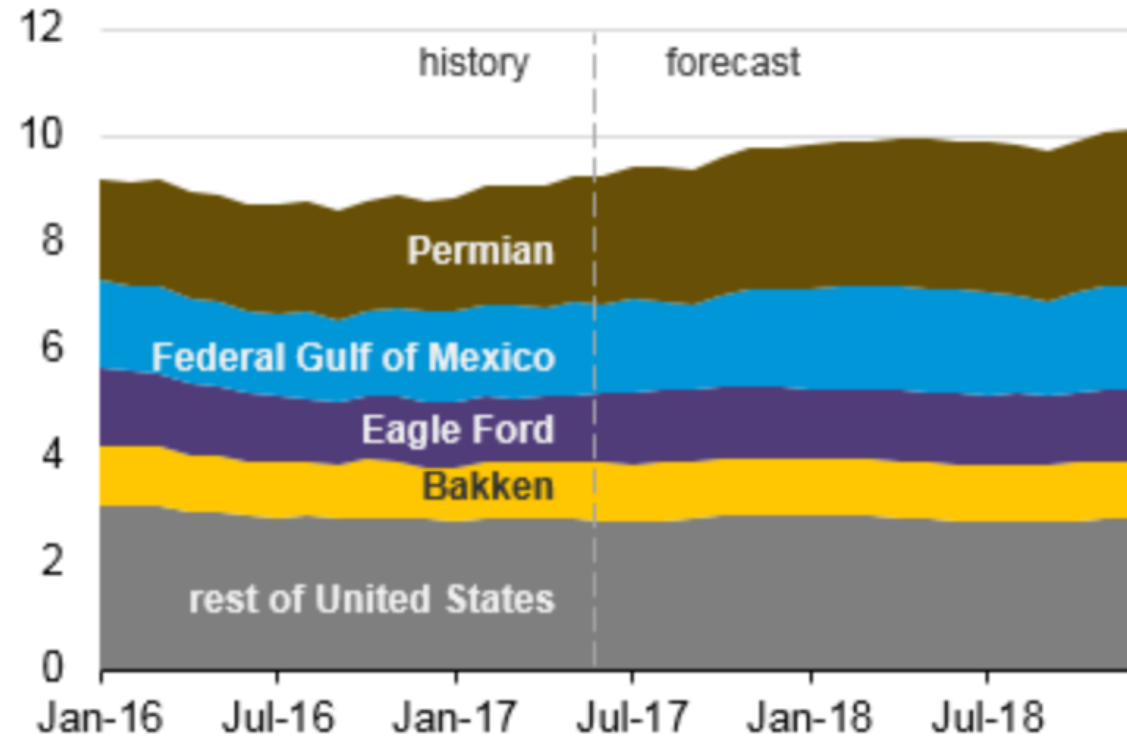


Source: <https://www.iea.org/weo2017/>

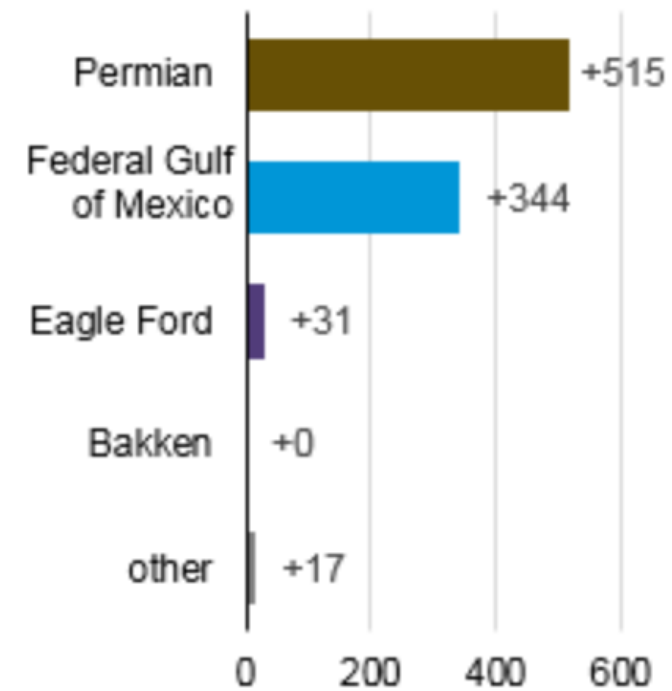


ENERGY SUPPLY

Monthly U.S. crude oil production by region
Jan 2016 - Dec 2018
 million barrels per day

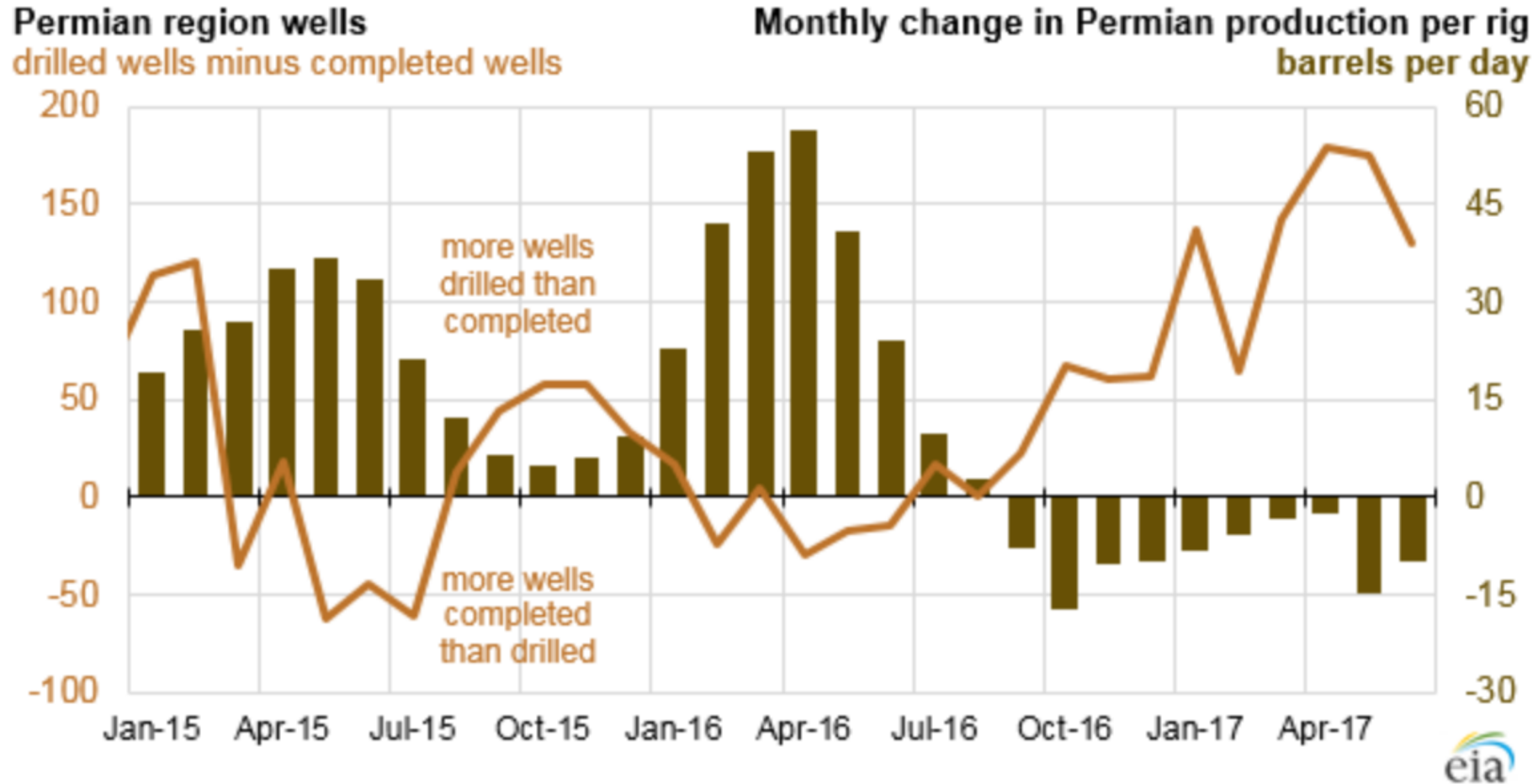


Forecasted change
Jun 2017 - Dec 2018
 thousand barrels per day



Source: U.S. Energy Information Administration, *Short-Term Energy Outlook*, July 2017

DRILLING PRODUCTIVITY



Source: U.S. Energy Information Administration, [Drilling Productivity Report](#), July 2017



KEY TAKEAWAYS

- Demand is steady in the late periods of the business cycle and is projected to stay steady
- Irregular divergence of oil price and energy sector performance
- Many unknowns but current administration favors traditional energy sources
- Could stall alternative energy takeoff
- Supply is large and is keeping oil prices lower than they could be
- Increased US production as their oil drilling industry matures means increasing supply



PROFITABILITY AND PRICING

Energy Supply

- Very Controlled
- OPEC has significant power to stabilize prices

Energy Demand

- Cyclical
- High during economic booms

Product Segmentation

- Extremely limited
- Oil, natural gas, equipment

Industry Concentration

- Oligopolies dominate
- Top 5 largest Energy Companies by Market Capitalization
 - Exxon: \$317.98B
 - Chevron: \$223.58B
 - Total S.A.: \$150.14B
 - B.P.: \$133.25B
 - PetroChina: \$130.40B



PORTER'S FIVE FORCES



PORTER'S CONTINUED

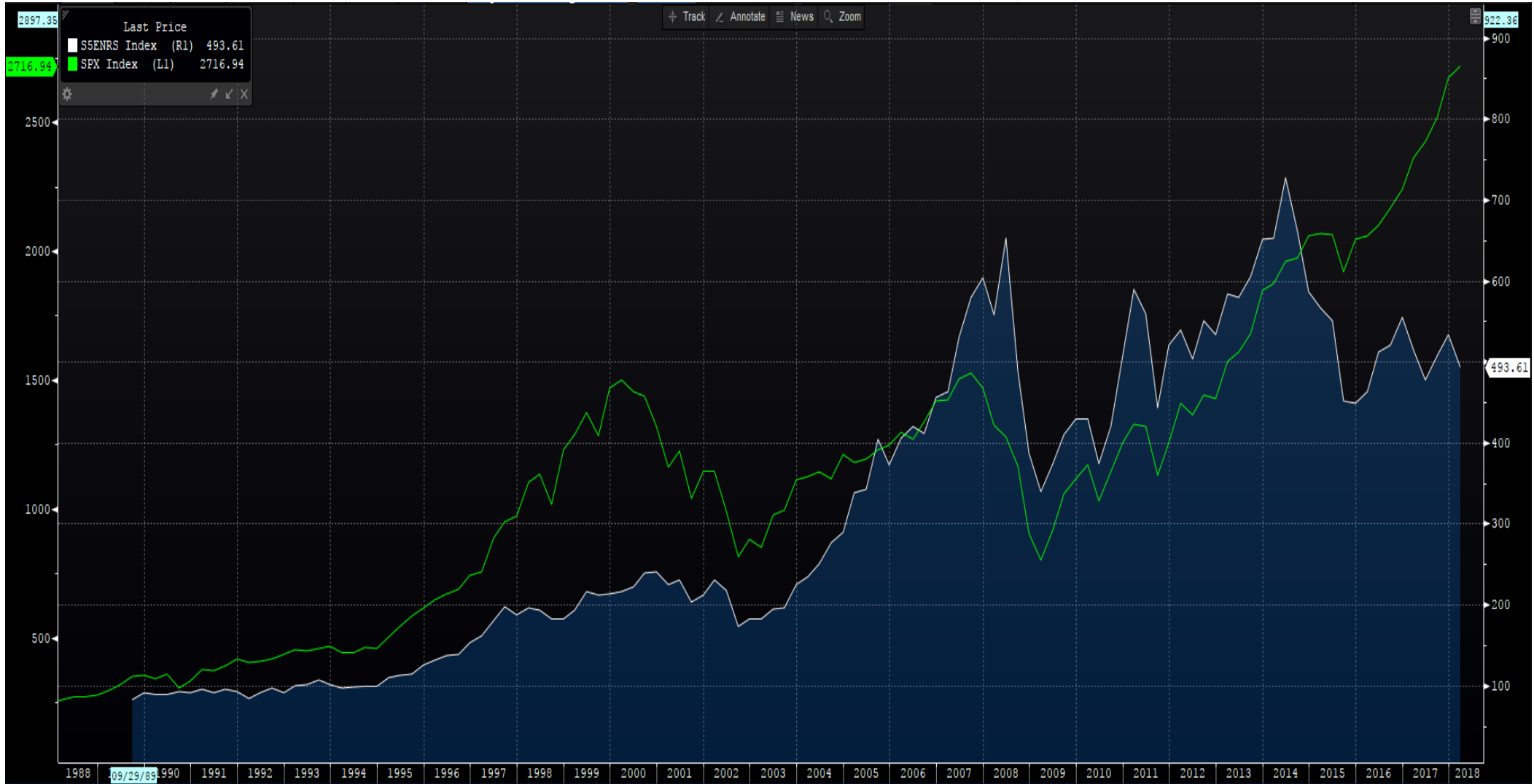
Suppliers	Buyers	Potential Entrants	Substitutes	Industry Rivalry
<ul style="list-style-type: none"> Companies are vertically integrated They are their own suppliers 	<ul style="list-style-type: none"> Switching costs are generally low Very difficult to control prices 	<ul style="list-style-type: none"> Capital requirements are substantial Regulations are plentiful Mature market 	<ul style="list-style-type: none"> Alternative energy <ul style="list-style-type: none"> Wind Solar Biofuels 	<ul style="list-style-type: none"> Handful of major industry rivals Cooperation exists
POWER: Low	POWER: Medium	POWER: Low	POWER: Low (currently)	POWER: Medium



ECONOMIC ANALYSIS

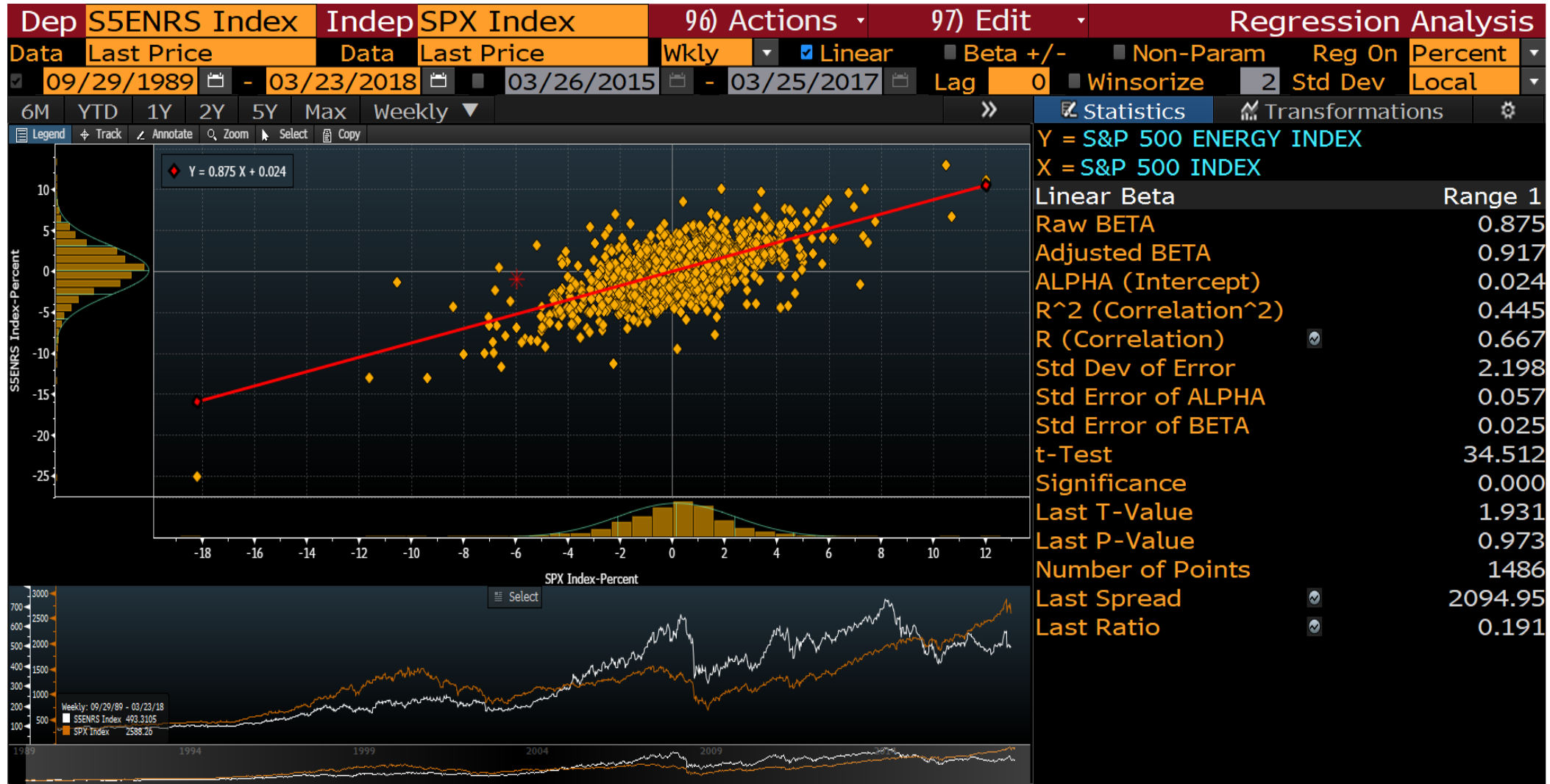


ENERGY (S5ENRS) vs S&P 500



Source: Bloomberg

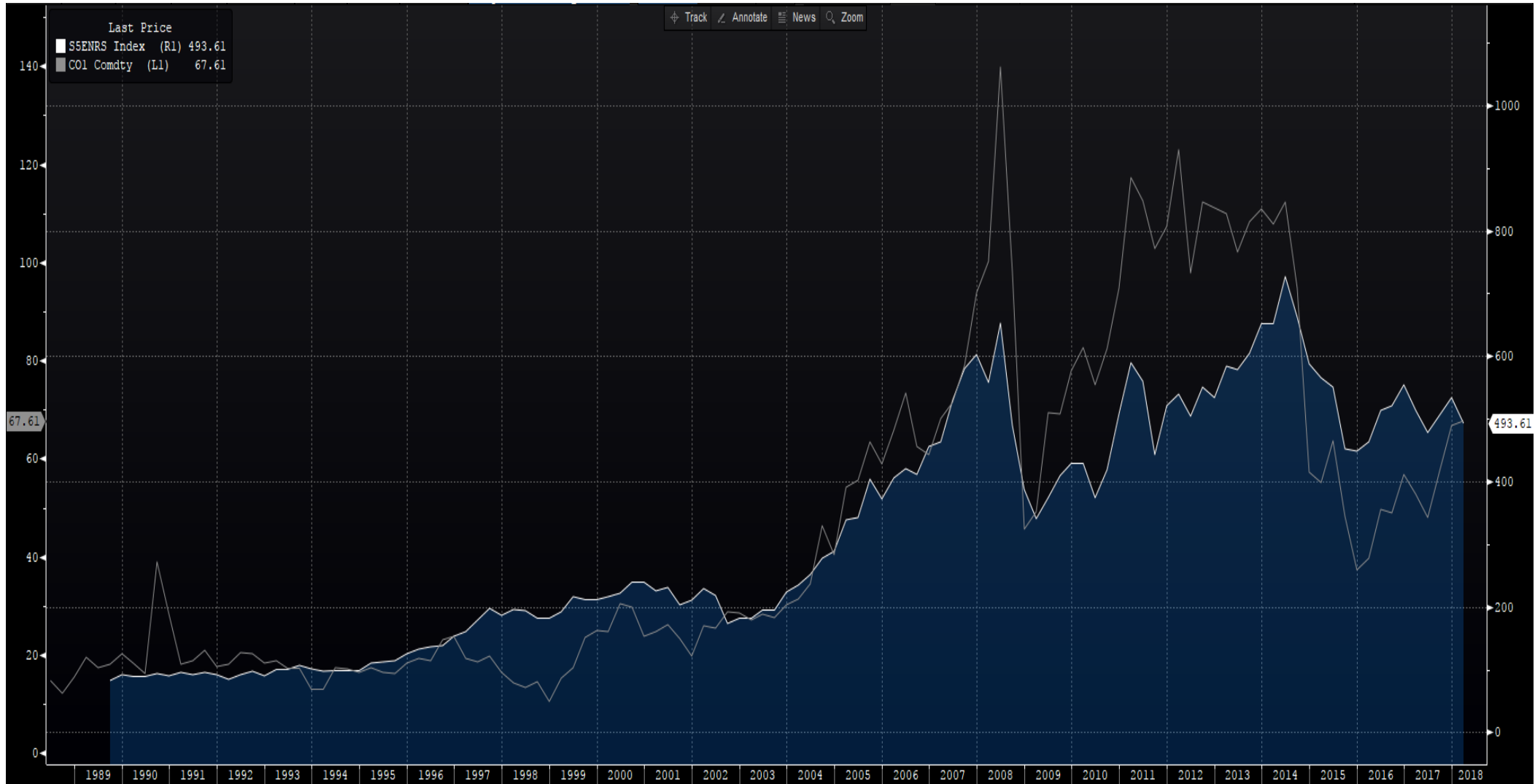
REGRESSION ANALYSIS: ENERGY (S5ENRS) vs S&P 500



Source: Bloomberg



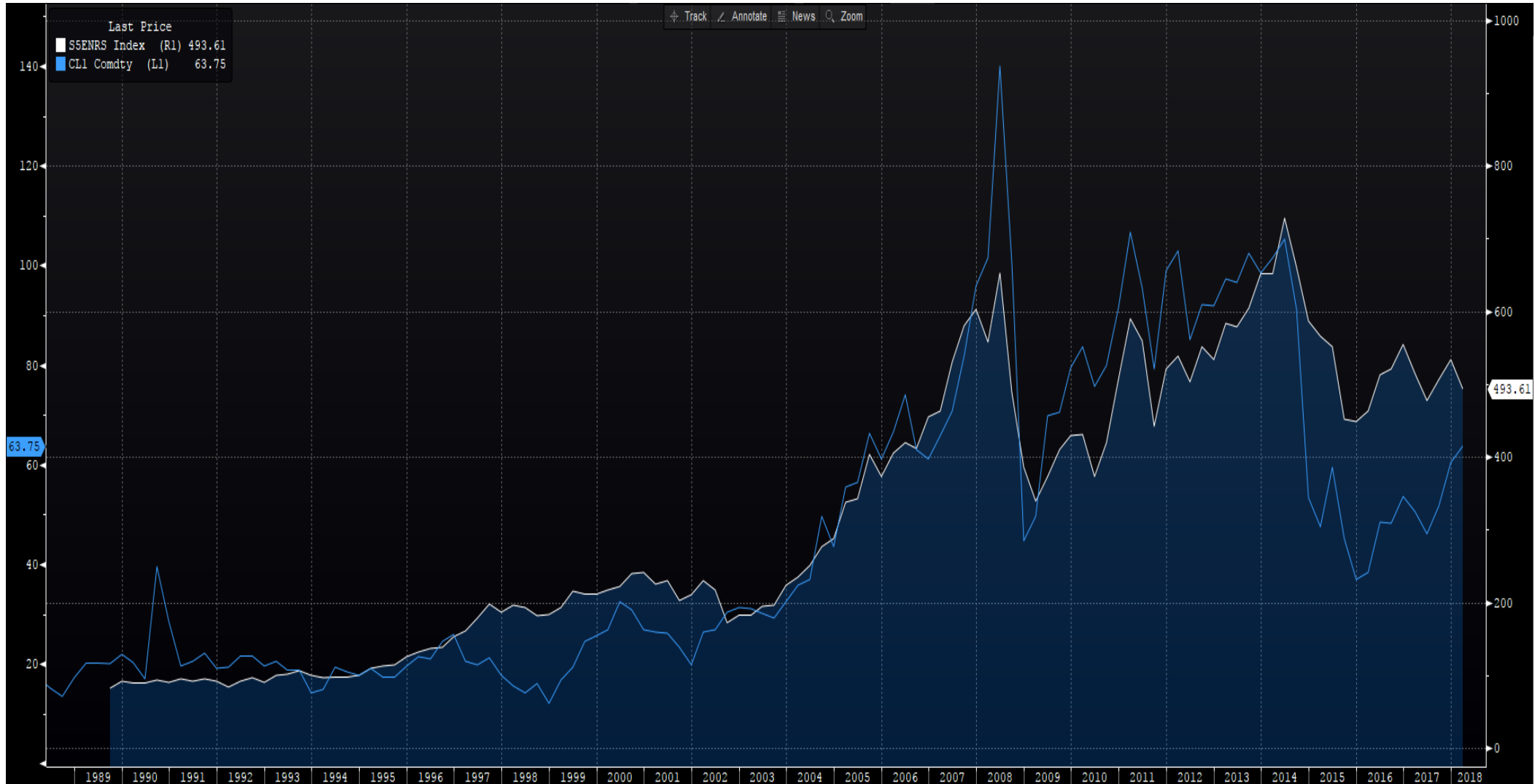
ENERGY (S5ENRS) vs CRUDE OIL (BRENT)



Source: Bloomberg

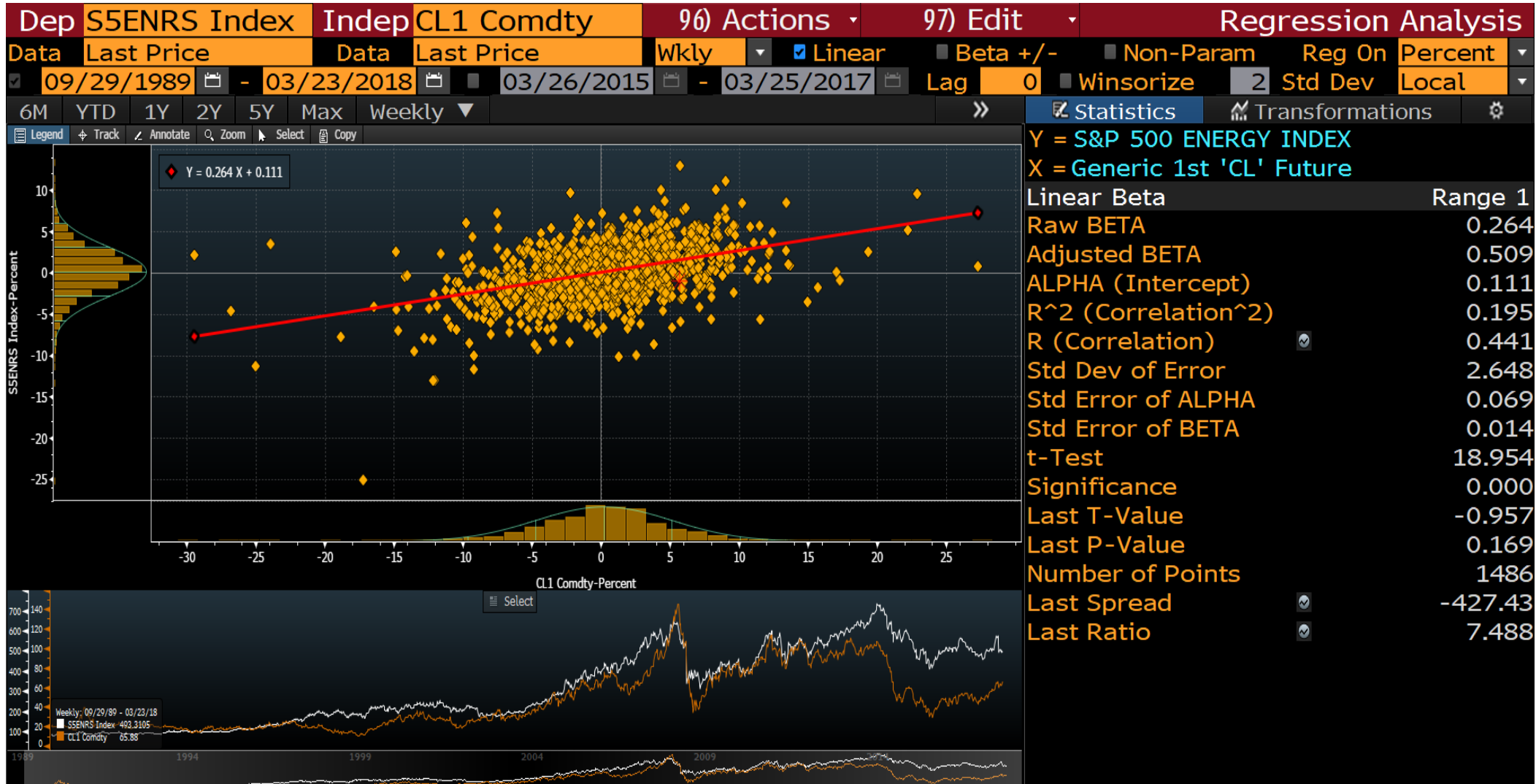


ENERGY (S5ENRS) vs CRUDE OIL (WTI)



Source: Bloomberg

REGRESSION ANALYSIS: ENERGY (S5ENRS) vs CRUDE OIL



Source: Bloomberg



ECONOMIC ANALYSIS TAKEAWAYS

- 1) Energy Stocks historically ran very much in line with the overall market up until recent years
- 2) Energy stocks can be buoyed by increased oil prices during economic turndowns (and vice versa)
- 3) Oil, Oil, Oil



FINANCIAL ANALYSIS



SALES COMPARISON

S5ENRS SALES

	2018	2017	2016	2015	2014	2013
Sales	\$ 335.73	\$ 339.67	\$ 278.82	\$ 343.12	\$ 529.40	\$ 543.51
<i>Sales Growth</i>	-1.16%	21.82%	-18.74%	-35.19%	-2.60%	-1.08%
EBIT	\$ 11.73	\$ 12.01	\$ (10.20)	\$ (28.15)	\$ 49.83	\$ 61.03
<i>Operating Margin</i>	3.5%	3.5%	-3.7%	-8.2%	9.4%	11.2%
EBITDA	\$ 48.28	\$ 48.86	\$ 28.70	\$ 12.91	\$ 89.90	\$ 97.61
<i>EBITDA Margin</i>	14.4%	14.4%	10.3%	3.8%	17.0%	18.0%
TTM EPS	\$ 14.80	\$ 15.00	\$ 4.71	\$ 17.01	\$ 41.51	\$ 43.38
<i>EPS Growth</i>	-1.33%	218.47%	-72.31%	-59.02%	-4.31%	-4.69%
R&D Expense	\$ 1.18	\$ 1.18	\$ 1.18	\$ 1.34	\$ 1.49	\$ 1.75

Source: Bloomberg

SPX SALES

	2018	2017	2016	2015	2014	2013
Sales	\$1,217.20	\$1,215.91	\$1,132.03	\$1,109.57	\$1,136.53	\$1,096.40
<i>Sales Growth</i>	0.11%	7.41%	2.02%	-2.37%	3.66%	3.00%
EBIT	\$ 163.00	\$ 163.29	\$ 146.15	\$ 138.31	\$ 153.29	\$ 152.24
<i>Operating Margins</i>	13.4%	13.4%	12.9%	12.5%	13.5%	13.9%
EBITDA	\$ 233.17	\$ 233.28	\$ 210.79	\$ 195.82	\$ 210.44	\$ 206.53
<i>EBITDA Margin</i>	19.2%	19.2%	18.6%	17.6%	18.5%	18.8%
TTM EPS	\$ 123.65	\$ 123.54	\$ 108.92	\$ 108.79	\$ 112.40	\$ 105.85
<i>EPS Growth</i>	0.09%	13.42%	0.12%	-3.21%	6.19%	
R&D Expense	\$ 39.45	\$ 39.45	\$ 36.65	\$ 33.36	\$ 31.30	\$ 29.21

Source: Bloomberg

Sales

- S5ENRS: Negative sales growth, CAGR of -9.19%
- SPX: CAGR of 2.11%

EBIT

- Declining EBIT from 2013
- Margins greatly lag behind SPX

EBITDA

- Declining EBITDA from 2013
- Improving trend from 2016

EPS

- Negative EPS growth with the exception of 2017



MARGIN COMPARISON

Gross Margin

- Declining GM and OM from 2013
- Improving margins; grown from 2016

Profit Margin

- Declining PM from 2013
- Negative PM in 2015&2016
- 50% lower than PM for SPX

ROA

- Recovering from 2015 & 2016
- Comparable SPX in 2017 & 2018

ROE

- Significantly trails SPX from 2014

S5ENRS MARGINS

	2018	2017	2016	2015	2014	2013
Gross Margin	13.08%	13.67%	9.85%	14.58%	17.81%	17.32%
Operating Margin	3.51%	3.56%	-3.66%	-8.15%	9.35%	11.08%
Profit Margin	4.94%	4.99%	-4.05%	-5.69%	6.90%	7.91%
ROA	2.85	2.88	(1.94)	(3.06)	5.29	6.59
ROE	6.10	6.25	(4.34)	(6.50)	11.07	13.61

Source: Bloomberg

SPX MARGINS

	2018	2017	2016	2015	2014	2013
Gross Margin	33.65%	33.72%	33.59%	33.20%	32.61%	32.26%
Operating Margin	13.79%	13.83%	12.77%	12.28%	13.32%	13.70%
Profit Margin	9.10%	9.19%	8.87%	8.23%	9.28%	9.61%
ROA	2.86	2.88	2.73	2.63	3.14	0.03
ROE	13.55	13.66	13.12	12.22	14.40	0.15

Source: Bloomberg

CASH FLOWS

S5ENRS CASH FLOWS

	2018	2017	2016	2015	2014	2013
Cash from Operations	\$ 48.00	\$ 48.22	\$ 38.08	\$ 52.42	\$ 85.99	\$ 87.12
Investing	(23.96)	(24.34)	(29.90)	(56.28)	(72.99)	(68.45)
Financing	(22.62)	(22.73)	(7.05)	(0.04)	(13.08)	(18.11)
CapEx	(34.53)	(35.43)	(36.57)	(59.70)	(85.20)	(77.23)
FCF	13.20	12.53	1.00	(7.42)	0.63	10.28
Dividends	\$ 17.45	\$ 17.19	\$ 14.15	\$ 16.80	\$ 16.14	\$ 13.64

Source: Bloomberg

Cash From Operations

- 55% decline from 2013
- Trending upward from 2016

Free Cash Flows

- Recovering FCF
- Lower CapEx and Investing activities

SPX CASH FLOWS

	2018	2017	2016	2015	2014	2013
Cash from Operations	\$ 185.44	\$ 185.74	\$ 181.97	\$ 190.02	\$ 187.36	\$ 201.09
Investing	(149.82)	(147.96)	(171.63)	(144.68)	(157.02)	(148.46)
Financing	(18.20)	(19.52)	(19.63)	(41.24)	(29.84)	(47.29)
CapEx	(71.63)	(71.78)	(70.66)	(74.93)	(77.23)	(72.31)
FCF	113.73	113.85	111.26	114.35	110.08	128.96
Dividends	\$ 51.37	\$ 50.47	\$ 46.73	\$ 43.86	\$ 40.16	\$ 35.00

Source: Bloomberg

Dividends

- Increasing dividends since 2016
- 21.5% increase from 2016 to 2017



VALUATIONS



VALUATION ABSOLUTE BASIS

S5ENRS VALUATION ABSOLUTE BASIS

	High	Low	Mean	Median	Current
P/E	139.6x	12.1x	36.2x	18.7x	33.5x
P/B	2.2x	1.5x	1.9x	1.9x	1.8x
P/S	2.0x	1.0x	1.4x	1.3x	1.5x
P/EBITDA	149.9x	5.4x	20.2x	9.9x	10.3x

Source: Bloomberg

P/E

- Overvalued
- Current P/E greater than median
- Mean is larger due to outliers

P/B

- Undervalued
- Only metric to suggest correct pricing

P/S

- Overvalued
- Current P/S greater than mean and median

P/EBITDA

- Overvalued
- Current P/EBITDA greater than median
- Mean is larger due to outliers



VALUATION RELATIVE BASIS

S5ENRS VALUATION ABSOLUTE BASIS

	High	Low	Mean	Median	Current
P/E	139.6x	12.1x	36.2x	18.7x	33.5x
P/B	2.2x	1.5x	1.9x	1.9x	1.8x
P/S	2.0x	1.0x	1.4x	1.3x	1.5x
P/EBITDA	149.9x	5.4x	20.2x	9.9x	10.3x

Source: Bloomberg

SPX VALUATION ABSOLUTE BASIS

	High	Low	Mean	Median	Current
P/E	24.1x	12.1x	17.5x	17.5x	21.5x
P/B	3.5x	1.6x	2.5x	2.4x	3.2x
P/S	2.3x	0.7x	1.5x	1.5x	2.2x
P/EBITDA	12.1x	4.4x	8.4x	8.3x	11.4x

Source: Bloomberg

S5ENRS VALUATION RELATIVE BASIS

	High	Low	Mean	Median	Current
P/E	5.8x	1.0x	2.1x	1.1x	1.6x
P/B	0.6x	0.9x	0.8x	0.8x	0.6x
P/S	0.9x	1.3x	0.9x	0.9x	0.7x
P/EBITDA	12.4x	1.2x	2.4x	1.2x	0.9x

Source: Bloomberg

RECOMMENDATION

Sell off to NEUTRAL weighting

- **Pro's**
 - Both absolute and relative valuations indicate the sector is overvalued
 - With a market neutral weighting the portfolio will be less exposed to volatility in oil price movements
 - Will be in a more advantageous position to recalibrate to overweight/underweight later in the year as WTI and Brent price shifts
 - Possible recalibration of Energy Stock Prices and oil price movements
- **Risks**
 - No convergence of Energy Stock Prices and oil price movements
 - Currently entering the late stage of economic expansion
 - Potential for overproduction from U.S. forces a further decline in WTI and Brent



WHAT QUESTIONS DO YOU HAVE?

