

Energy Investing: What the Frack Are You Talking About?

Every industry has its own special nomenclature. To outsiders, it may seem as if industry insiders are speaking another language. Often, however, the terms are really not that difficult once you get a sensible explanation. In our series of energy investing explained, we will help you to get an understanding of the overall energy industry. With that knowledge, you may be able to invest in the energy sector with more confidence.

The Cushing® Sector Plus suite of ETFs offers investors exposure to the overall energy supply chain as well as complementary businesses.

What is Fracking?

Fracking has become prevalent in the crude oil and natural gas sector for its benefits, despite its potential dangers. So, what exactly is fracking?

Fracking is short for hydraulic fracturing, a drilling technique for extracting crude oil and natural gas from deep underground. While fracking has been around for a while, its use has expanded due to advances made in horizontal drilling. What is involved in fracking?

Crude oil and natural gas may become trapped in difficult to extract rock formations such as shale. In fracking, a well is drilled down to reach the shale layer. Once drilling reaches the shale, it may be turned horizontally to drill along the rock layer. Then, often a mixture of water, sand, and chemicals is pumped into the well at extremely high pressure. This fluid cracks open, or fractures, the shale rock, the sand holds the cracks open, and the chemicals help the crude oil or natural gas flow out and reach the surface. The chemicals act much like soap and help the crude oil release from the rocks.

What Has Fracking Accomplished?

Not that long ago, there were numerous reports about the world having reached peak crude oil production. There were concerns that all of the world's financially viable and accessible reserves of crude oil were mostly tapped.

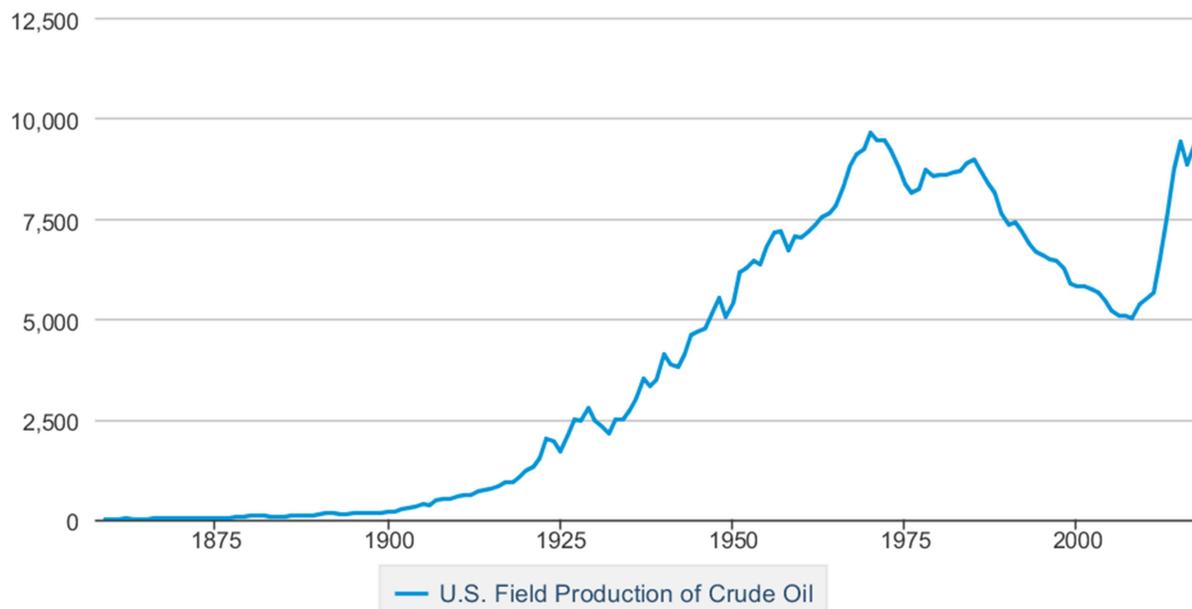
Fracking has enabled recovery of large amounts of crude oil and natural gas from areas where it was previously thought to be too difficult. The chart below highlights the upturn in U.S. oil production since 2010. As of the end of 2017, the U.S. was producing approximately 9.3 million barrels of oil per day (most recent annual figure). Much of that is due to fracking and the ability to extract shale oil. The EIA (Energy Information Administration) estimates in their Weekly Petroleum Status Report that U.S. oil production achieved 12 million barrels of oil per day February 15th 2019.

The increased production and supply of crude oil and natural gas has helped to lower the price of these commodities. As there is a vast potential supply of shale oil and natural gas, production can be ramped up when the price increases sufficiently, thereby potentially moderating the price of crude oil and natural gas.

Energy is the lifeblood of a healthy economy. Right now, fossil fuels are supplying that energy and fracking has expanded that supply at a time more conventional sources are becoming scarce.

U.S. Field Production of Crude Oil

Thousand Barrels per Day



Source: U.S. Energy Information Administration

What's the Controversy?

Fracking is resource intensive. It requires a lot of water to fracture the rock formation. In many areas, water itself is a scarce resource. Is the use of one scarce resource – water – to extract another scarce resource – oil and natural gas – justifiable? Not an easy question to answer.

There are also concerns that the chemical used in fracking may contaminate drinking water. Additionally, most of the water used in fracking returns to the surface. This flowback water may contain contaminants such as heavy metals, radioactive materials, and other toxins. Often, there are inadequate facilities to treat the flowback.

Finally, there is the argument that fracking just perpetuates the use of fossil fuels that are damaging to the environment when the world should really be looking at ways to increase the production of renewable energy.

Companies Involved in Fracking

As you would expect, many of the larger integrated energy companies such as Chevron and ExxonMobil have fracking operations. Additionally, many energy services companies, such as Halliburton Company are involved in fracking. The increase in oil and gas produced by fracking could help midstream companies who will transport and store these products.

Summary

The Cushing® Sector Plus suite of ETFs aims to provide investors with exposure to the entire energy supply chain and various components by seeking to replicate, before fees and expenses, various Cushing Asset Management sector indices.

The Cushing® Energy & MLP ETF (XLEY) seeks to replicate the performance of the Cushing® Energy Index.

The Cushing® Energy Supply Chain & MLP ETF (XLSY) seeks to replicate the performance of the Cushing® Energy Supply Chain Index.

The Cushing® Transportation & MLP ETF (XLTY) seeks to replicate the performance of the Cushing® Transportation Index.

The Cushing® Utility & MLP ETF (XLUY) seeks to replicate the performance of the Cushing® Utility Index.

The Cushing® Sector Plus ETFs seek to provide broad exposure to the energy supply chain by including MLPs and industrial consumers of crude oil and natural gas.

Investors looking for comprehensive exposure to the energy supply chain may be well-served by considering the Cushing® Sector Plus suite of ETFs.

Top 10 Holdings as of 3/31/2019	XLEY	Top 10 Holdings as of 3/31/2019	XLSY
WILLIAMS COS INC DEL	5.41%	WESTROCK CO	3.47%
ONEOK INC NEW	5.38%	LYONDELLBASELL INDUSTRIES	3.37%
HELMERICH & PAYNE INC	5.14%	INTL PAPER CO	3.18%
OCCIDENTAL PETE CORP	4.79%	WILLIAMS COS INC DEL	2.99%
KINDER MORGAN INC DEL	4.50%	ONEOK INC NEW	2.99%
EXXON MOBIL CORP	4.47%	HELMERICH & PAYNE INC	2.85%
SCHLUMBERGER LTD	4.44%	OCCIDENTAL PETE CORP	2.65%
VALERO ENERGY CORP NEW	4.40%	PACKAGING CORP AMER	2.51%
CHEVRON CORP NEW	4.25%	KINDER MORGAN INC DEL	2.50%
PHILLIPS 66	3.35%	EXXON MOBIL CORP	2.48%

Top 10 Holdings as of 3/31/2019	XLTY	Top 10 Holdings as of 3/31/2019	XLUY
NORFOLK SOUTHERN CORP	6.11%	PPL CORP	4.31%
UNITED PARCEL SERVICE INC	6.06%	DOMINION ENERGY INC	4.09%
DELTA AIR LINES INC DEL	6.05%	SOUTHERN CO	4.08%
UNION PACIFIC CORP	5.93%	DUKE ENERGY CORP NEW	3.40%
RYDER SYS INC	5.93%	ENTERGY CORP NEW	3.35%
C H ROBINSON WORLDWIDE INC	5.75%	EDISON INTL	3.23%
MATSON INC	5.74%	FIRSTENERGY CORP	3.16%
ALASKA AIR GROUP INC	5.39%	CONSOLIDATED EDISON INC	3.13%
FEDEX CORP	4.55%	CENTERPOINT ENERGY INC	2.92%
KANSAS CITY SOUTHERN	4.30%	PUBLIC SVC ENTERPRISE GRP INC	2.78%

Disclosure

Fund holdings and sector allocations are subject to change and are not a recommendation to buy or sell any security

An investor should consider the investment objective, risks, charges and expenses of a Fund carefully before investing. To obtain a prospectus and summary prospectus, which contain this and other information, call (800) 617-0004 or visit cushingetfs.com. Please read the prospectus and summary prospectus carefully before investing.

Investing involves risk. Principal loss is possible. Fund shares are bought and sold at market price (not NAV) and are not individually redeemable and will be issued and redeemed at their NAV only through certain authorized broker-dealers in large, specified blocks of shares called creation units and otherwise can be bought and sold only through exchange trading. Creation units are issued and redeemed principally in kind. Shares may trade at a premium or discount to their NAV in the secondary market. Brokerage commissions will reduce returns. The Funds are non-diversified, meaning it may concentrate its assets in fewer individual holdings than a diversified fund. Therefore, the Funds are more exposed to individual stock volatility than a diversified fund. As with all index funds, the performance of each Fund and its Index may differ from each other for a variety of reasons. For example, each Fund incurs operating expenses and portfolio transaction costs not incurred by the Index. In addition, each Fund may not be fully invested in the securities of the Index at all times or may hold securities not included in the Index.

Each Fund's assets will be concentrated in the energy sector, so it will be more effected by the energy sector's performance. Master Limited Partnerships (MLPs) concentrate investments in the natural resource sector and are subject to the risks of energy prices and demand and the volatility of commodity investments. MLPs are subject certain risks inherent in the structure of MLPs, including complex tax structure risks, the limited ability for election or removal of management, limited voting rights, potential dependence on parent companies or sponsors for revenues to satisfy obligations, and potential conflicts of interest between partners, members and affiliates. The potential tax benefits from investing in MLPs depend on them being treated as partnerships for federal income tax purposes. If the MLP is deemed to be a corporation then its income would be subject to federal taxation at the entity level, reducing the amount of cash available for distribution to the Fund which could result in a reduction of the Fund's value.

Any tax or legal information provided is merely a summary of our understanding and interpretation of some of the current income tax regulations and is not exhaustive. Investors must consult their tax advisor or legal counsel for advice and information concerning their particular situation. Neither the Funds nor any of their representatives may give legal or tax advice.

Cushing[®] Energy Index (CENI) tracks the performance of large cap energy companies selected from the S&P 500 Energy Index and master limited partnerships (MLPs) selected from the Cushing[®] 30 MLP Index.

Cushing[®] Energy Supply Chain Index (CSCI) selects its constituents from the S&P 500 Energy Index, the S&P 500 Materials Index, and MLPs in the Cushing 30 MLP Index.

The Cushing[®] Utility Index (CUTI) selects its constituents from companies within the S&P 500 Utility Index and MLPs within the Cushing 30 MLP Index.

Cushing[®] Transportation Index (CTRI) selects its constituents from companies within the Dow Jones Transportation Average and MLPs within the Cushing 30 MLP Index.

The S&P 500 Index is an index of 500 stocks used industry wide as a macro level indicator of the overall U.S. equity market. The S&P 500 Energy Index (SPN) comprises those companies included in the S&P 500 that are classified as members of the GICS energy sector. The S&P 500 Materials Index (S5MATR) comprises those companies included in the S&P 500 that are classified as members of the GICS materials sector. The S&P 500 Utilities Index (S5UTIL)

comprises those companies included in the S&P 500 that are classified as members of the GICS utility sector. The Dow Jones Transportation

Average (TRAN) represents the stock performance of large, well-known U.S. companies within the transportation industry. Cushing 30 MLP Index (MLPX) tracks the performance of midstream energy companies who typically are involved in the transportation and storage of natural gas, crude oil, and refined products.

It is not possible to invest directly in an index.

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