



# SPROTT ENERGY FUND

July 2017 Commentary

2017 so far has been an epically frustrating experience for energy investors. Despite a significant improvement in underlying oil fundamentals over the past several months (pg.4) and an ongoing strong operating environment for many of our holdings, the market has steadfastly refused to appreciate either reality and instead continues to shun/sell the sector. Even with oil rallying in recent weeks energy stocks have largely ignored this upward move (oil +6%, US oil stocks -2% and US service stocks -5%).



Source: Bloomberg

We have witnessed over and over companies reporting excellent results over the past several weeks with equally as strong forward looking guidance, only to have their shares sell off by as much as 16% on the day of their earnings release. With Q2 earnings season now behind us here is a summary of our seven service holdings' (~60% of Fund allocation) earnings relative to consensus, a quarter ago, and a year ago:

# SPROTT ENERGY FUND

July 2017 Commentary

	<u>Q2/2017</u> <u>EBITDA</u>	<u>Q2/2017</u> <u>Consensus</u>	<u>Q2/2016</u> <u>EBITDA</u>	<u>Q1/2017</u> <u>EBITDA</u>	<u>Consensus</u> <u>Beat</u>	<u>YOY</u> <u>EBITDA</u> <u>Change</u>	<u>QOQ</u> <u>EBITDA</u> <u>Change</u>	<u>Share price change</u> <u>since earnings</u> <u>announcement</u>	<u>YTD Share</u> <u>Performance</u>
Sand Co #1	\$75.1	\$76.7	\$5.4	\$42.7	-2.1%	1291%	75.9%	-12.7%	-55.1%
Sand Co #2	\$47.0	\$42.1	-\$21.8	\$21.7	11.7%	-	116.6%	-1.5%	-77.7%
Sand Co #3	\$26.8	\$23.9	-\$3.4	\$1.3	12.1%	-	1961.5%	-3.6%	-59.1%
AVERAGE					7.3%	1290.7%	718.0%	-5.9%	-64.0%
Pressure Pumper #1	\$12.0	\$0.3	-	-	3900.0%	-	-	0.6%	-24.1%
Pressure Pumper #2	\$28.8	\$19.0	-	\$16.2	51.6%	-	77.8%	1.0%	-14.6%
Pressure Pumper #3	\$25.1	\$23.0	-\$65.3	\$4.6	9.1%	-	445.7%	-11.1%	-28.0%
Pressure Pumper #4	\$36.0	\$25.9	-	\$13.1	39.0%	-	174.8%	-6.4%	-33.3%
AVERAGE (#2,3,4)					33.2%		232.7%	-5.5%	-25.3%

Source: Bloomberg

Generally speaking consensus beats of 7%/33% and sequential EBITDA growth of 718%/233% would usually be characterized as at least moderately palatable. In today's environment these results were met with an average decline of 5.7%. Imagine if they had missed expectations! One might ask then if these stocks were fully valued heading into the quarter with expectations already baked in. To that we would direct your attention to the YTD performance column with average performance of -64%/-25% and forward EV/EBITDA multiples now sitting at 3.5X/4.5X respectively vs. more typical valuations of 8.0X/7.0X.

Our frac sand holdings all reported very good quarters with pricing up 7%-12% quarter over quarter, volumes up 8%-52% quarter over quarter, and contribution margin (margin per ton sold) up 61%-105% quarter over quarter. On future pricing outlook, one holding on their conference call said they have seen "surprisingly strong pricing [increases] again in July" and guided for another 5%-10% price increase next quarter given "growing customer demand." Another said "we anticipate positive pricing trends to continue particularly for fine mesh sands as demand continues to outstrip supply." Despite concerns about too much growing capacity (more below) they noted that "interest in our mine capacity is strong and we're in advanced discussions with numerous customers looking to secure contracts." Another holding noted that "customers are suggesting prepayments and other mechanisms to lock up the supply." In short, business is booming, demand continues to exceed available supply, and customers are willing to sign up to 10 year contracts with pre-payments and guaranteed minimum pricing at attractive margins. Yet, these stocks remain for sale (YTD -55% to -77%) due to a profoundly overly pessimistic outlook on future supply growth which we will expand on in more detail later.

# **SPROTT ENERGY FUND**

July 2017 Commentary

So too were results generally fantastic for our pressure pumping holdings with our four holdings beating consensus by 3900%, 52%, 9%, and 39% respectively. Of our 3 US holdings where Q2 is not impacted by Winter weather they averaged a 232% sequential increase in EBITDA as they were able to deploy more equipment into the field and raise prices given the strong underlying demand trends (our Canadian pumper negotiated a 2H'17 20%-25% price increase from Q1'17 levels). Our Canadian pressure pumper reported that their Q2 represented "the highest quarterly volume of proppant [sand] pumped in Canada [despite Q2 usually being the weakest quarter of the year due to Spring breakup]." Most holdings reported full utilization for the remainder of the year and similarly to our sand companies reported that E&P companies are interested in exploring longer term commitments with guaranteed margins and some form of prepayment. Following Q2 results 2018 consensus EBITDA estimates for our pressure pumping holdings INCREASED by 5%-13% and as a consequence as a group are trading at 64% of their historical mid-cycle multiples. The fact that business is booming in the quarter (and YTD) despite WTI averaging \$49.50/bbl confirms to us that we do not need further oil price increases for these stocks to work. What we need is for the market to regain confidence in an oil price of ~\$50/bbl being sustainable and at that point the pressure pumper stocks should regain their lost multiples. This week a Simmons & Company's service analyst estimated that in a \$45-\$50/bbl environment that US pressure pumping demand would be 14.5-15.0MM HP and in a \$50-\$55/bbl environment that demand would equal around 18.0MM HP. In either scenario implied utilization would range from 90%-100%+ demonstrating that 2018 should extend the trend of further price increases (which is not baked into current expectations). Aiding this demand visibility is the recent uptick in hedging on the part of US companies; over the past 3 months Small and Midcap oil companies (the ones responsible for the majority of US oil production growth) have increased their 2018 hedge positions from 27% to 41% with an average hedge price of \$49.92 giving greater clarity on 2018 spending plans. One analyst noted that "to the extent they can lock in \$50 or above, indications by firms are that those levels could result in maintaining or increasing activity" and this would be in absolute stark contrast to current consensus that the US rig count (and by extension demand for pressure pumping) must fall due to the chronic "oil glut."

While both our frac sand and pressure pumping themes battle a common and misplaced narrative of imminent supply additions overwhelming the growth in demand the largest hurdle has been the exhaustingly persistent theme of the "oil glut." While supply additions from Libya and Nigeria have certainly pushed out the oil market's rebalancing to early 2018, as written in earlier monthly commentaries, the oil market despite these headwinds has been materially improving. We do not believe the market appreciates the extent of these improvements. Entering into 2017 there was an excess of

# SPROTT ENERGY FUND

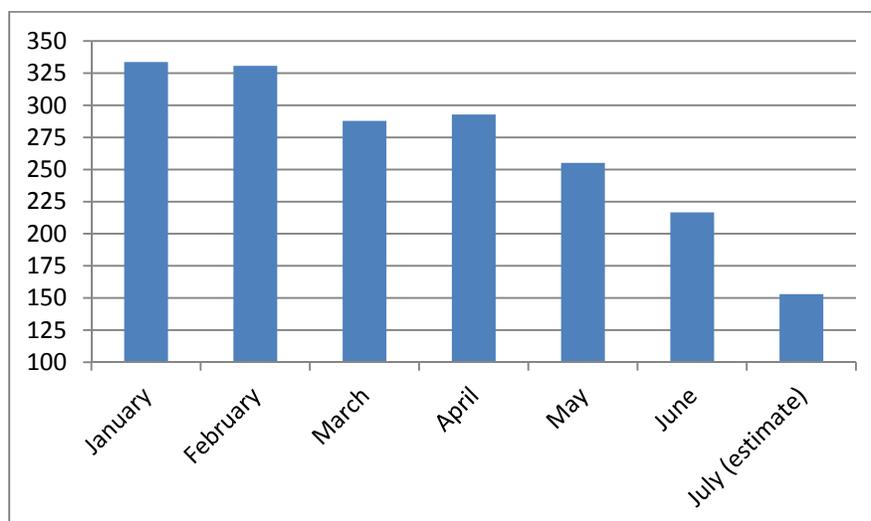
July 2017 Commentary

282MM Bbls relative to the 5 year average in OECD inventories. Despite a difficult-to-explain increase of 82MM Bbls in January this 282MM Bbl “glut” has been worked down steadily to 217MM Bbls as at the end of June (using IEA data). Importantly, when comparing to 2016 it should become obvious that the market is and has remained “undersupplied” for most of this year and shall remain so as extremely strong demand growth coupled with decent OPEC compliance is overwhelming the supply additions from the US and Libya/Nigeria. Here are the builds/draws in OECD countries YTD relative to 2016 and the 5 year average:

	2017 build (MM Bbls)	2016 build (MM Bbls)	5 year avg. build	Implied Undersupply vs. 2016 (MM Bbl/d)	Implied Undersupply vs. 5 year avg. (MM Bbl/d)
January	82	36	30	<b>-1.5</b>	-1.7
February	-10	0	-7	<b>0.4</b>	0.1
March	-27	-7	15	<b>0.6</b>	1.4
April	24	12	19	<b>-0.4</b>	-0.2
May	-6	26	32	<b>1.0</b>	1.2
June	-26	0	13	<b>0.9</b>	1.3

Source: International Energy Agency

What this table shows is that while the market has been underwhelmed by monthly draws of 6-20ish MM Bbls/ per month in the context of a widely believed ~300M Bbl oversupply (which still seems to get referenced despite the cumulative declines YTD) it has failed to compare these draws to what are normally BUILDS in the same month. When you do that one can quickly see that despite the January hiccup (OPEC export flush? Bad data? European fuel oil inventory reclassification?) that the market has been UNDERSUPPLIED (i.e. inventories have been falling) and hence why the YOY OECD oil glut versus the commonly used 5-year average has been steadily reduced:



Source: International Energy Agency

# SPROTT ENERGY FUND

July 2017 Commentary

Despite supply additions from Libya and Nigeria, the mismatch between OPEC production cuts and actual export cuts, tepid demand growth in the beginning of the year, and US supply growth exceeding earlier expectations the market has remained undersupplied and inventories have continued to fall. We believe this trend will continue and barring some massive change in our assumptions OECD inventories should normalize in early 2018. We continue to believe that visibility towards this milestone will act as a positive catalyst for the price of oil and with it energy stocks in general. Given our deplorable YTD performance and that of most energy stocks we continue to see very attractive upside.

Before ending this monthly commentary we wanted to specifically talk to what has become a highly, highly contentious subsector and that is frac sand (FS). Generally speaking you would be forgiven for thinking this to be a very dull subject matter however given the enormous downward volatility (we've endured the occasional -10% day on no news), implosion in share prices, and YTD developments this once boring subsector has become ground zero for shorting the energy sector. There are days when we feel that fiction overrides fact and that fear can be stoked with a few overly simplistic assumptions that can be summarized in 140 characters or less. This is our version of the FS bear case:

**Eric Nuttall** @ericnuttall · now

New sand supply = 60mm tons. all Permian. low transportation cost = no future demand for northern white. zero margins. sand stocks = 0. #bad



Historically FS has been mined in 4 Northern States with Wisconsin being the largest. Given the emergence of horizontal oil drilling incremental activity has largely been taking place in Texas, specifically in the Permian Basin. The cost to transport sand from Northern States to Texas amounts to about 66% of the overall cost of sand to a producer therefore there has been a strong economic incentive to look for sand deposits closer to where drilling activity is taking place in an attempt to reduce the burdensome transportation cost. In February the first announcement was made about the viability of in basin/regional Texas production of a high enough quality/Northern White-ish type of sand to be used in fracking wells and subsequently more permits have been applied for...amounting to 60MM tons of incremental annual supply. Now on the surface given that 2017 FS demand will be around 86MM tons this would appear to be a mildly negative development. Enter the shorts. FS names since February have been absolutely decimated with one name (Fairmount Santrol) falling by 79%:

# SPROTT ENERGY FUND

July 2017 Commentary



Source: Bloomberg

We have spent more time than we thought possible on FS including traveling on our August civic holiday down to Chicago to have dinner with the most respected FS producer in the business (and our largest FS holding). While always recognizing the possibility of being wrong, we firmly believe that the FS bear case has many, many logic flaws and that the forward earnings power of the public FS companies is being massively, overly discounted. For starters, we estimate the demand for FS will grow this year from 86MM tons to 106MM tons in 2018 to 127MM tons in 2019 (this growth scenario assumes modest increase in proppant usage per well and a -\$55/bbl oil price in 2019). This implies demand growth of 41MM tons. Historically FS companies operate at 80-90% effective utilization so that would mean to remain in balance that nameplate supply additions would need to be 48MM tons over the next 2 years (assuming 85% effective utilization) so that would equate to around 80% of the current permitted Texas supply. Now about that 60MM number. Not all FS is equal and comes in a variety of grain sizes and quality parameters with the most important requirement being crush strength. Some of the volumes being permitted (which costs a couple hundred dollars to file) is for sand that has too low of a crush strength to withstand the enormous downhole pressures in either the Midland or Delaware Basins (ie. "The Permian") however are counted in the 60MM ton number. Secondly given the nature of the sand deposits in Texas about 80% of future Texan sand supply is for a grain size called 100-mesh (generally perceived as a lower quality sand but comes at a lower cost). The problem with this is that currently only 40% of Permian demand is for 100-mesh so even if all of the 60MM tons of incremental supply were to come onto the

# SPROTT ENERGY FUND

July 2017 Commentary

market that equates to 48MM tons of incremental 100-mesh but only 12MM tons of the much higher quality and in demand 40/70. It is estimated that 2018 Permian FS demand will be around 45-50mm tons so that would mean demand for 20MM tons of 100-mesh, 20MM tons of 40/70, and 20MM tons of other coarser grades. You can quickly see how there could be a mismatch between regional demand versus regional supply of differing grades yet the market is painting all grades with the same brush/same price. Why is this important? We speculate that 100-mesh only accounts for 10%-15% of some companies overall EBITDA so even if the margin for this specific grade went to zero (and if it was zero margin for 100-mesh why would any new mine in Texas that will be 80% of this type of sand ever get financed/built?) so long as there is not mass grade substitution you cannot logically account for a 55%-77% price drop of the FS stocks. To support this view on US Silica's conference call they said "I think these kinds of thoughts that somehow pricing is going to collapse across the country or we're going to see 30%-50% degradations in margins, certainly is way over blown. I could see maybe a 5% or 10% change in margin...but not 30%, 40%, 50% that just doesn't make sense when you model it out."

Other than the above argument there remains several other challenges with the bear case 60MM ton number of new supply: wildlife protection (a near-endangered species of lizard lives in the sand dunes where much of the future production is meant to take place and in recent weeks this has become a much bigger issue than in the past), water availability (sand production uses A LOT of water and if even part of the permitted supply comes online the regional aquifer could fall by 200-300 feet), road access (a town of 5,700 people could have upwards of 10,000 heavy duty trucks driving through town EVERY DAY), labour availability (60MM tons = need for 5,200 truck drivers in an ALREADY trucker-short market given the overall pickup in field activity in Texas), and finally and maybe most importantly financing. Roughly 50% of the permitted capacity is being backed by private equity/financial entities rather than the conventional FS companies. Given the ramp in permitted supply additions, the volatility of the public FS companies (goodbye exit strategy through an IPO), and the general uncertainty around the oil price it is likely that many of the permitted projects will fail to secure the necessary financing. Some of the public FS companies are already being approached by such projects which further supports our belief that the market is being way, way too optimistic about how many future tons will come onto the market. Finally we would leave you with one remaining thought. The most sophisticated participants in the FS space are the companies that mine the stuff and the E&P's that consume it. Why would E&P's enter into long-term contracts (up to 10 years) with guaranteed margins (HCLP just signed 90% of their industry-first mine at \$35/t margins) with upfront prepayments (20% in CASH of the life of the contract) if they believed there was even a remote possibility of a potential oversupply? Case rested.

# SPROTT ENERGY FUND

July 2017 Commentary

The best investment opportunities are often when common sense and logic are being thrown out the window in favour of fear based mongering that relies on a few overly simplified assumptions. Few are willing to spend the extra time necessary to fact check consensus. We remain optimistic that over the next few quarters given continued strength in FS pricing and overall demand growth, continued public disclosure about increasing proppant loading/sand intensity on the part of E&P's, an increase in the market's belief in \$50/bbl crude, and perhaps the inability of certain projects to secure financing that our FS holdings can recoup a large part of the YTD losses.

In summary, patience continues to be tested especially in the face of record quarterly releases and very positive forward looking guidance from most of our Fund holdings. Valuations have severely compressed and stocks are trading at a fraction of their historical multiples. Implied upside is now up to 90%. The critical element to realizing this return potential is for the market to buy into what we are seeing: the oil market is undersupplied by ~ 1.0MM Bbl/d and inventories look to normalize by early 2018. Sentiment remains severely depressed and at times we feel like the only ones left bullish on the sector. We've been here before. Just as in times past, this too shall pass, and on reflection people will ask how the market could have possibly been so bearish when data properly interpreted would have been screaming of the underlying improvements that were being failed to be appreciated by the masses.

## Eric Nuttall

Senior Portfolio Manager  
Sprott Energy Fund



The Economist

Editor's picks

Thursday | August 10th 2017

Over cover this week considers the death of the internal combustion engine. It has had a good run, but as batteries improve and regulators tighten rules on emissions, the end of the road is in sight. The transition to electric cars should be welcomed, but it will be a bumpy ride

Zanny Minton Beddoes, Editor-in-Chief

Fire and fury over North Korea  
The Fed's runners and riders  
Was Google right to sack him?  
Competitive punting game of greens

**Roadkill**

Fig 1: The Internal Combustion Engine

# SPROTT ENERGY FUND

July 2017 Commentary

COMPOUNDED RETURNS (%) AS AT JULY 31, 2017<sup>1</sup>

	1 MTH	YTD	3 MTH	6 MTH	1 YR	3 YR	5 YR	10 YR	ANNUALIZED INCEPTION (04/15/04)
SPROTT ENERGY FUND, SERIES A	-8.12	-44.79	-19.83	-37.34	-31.94	-22.77	-5.15	-6.70	1.52
S&P/TSX CAPPED ENERGY TRI	3.33	-18.58	-8.81	-11.04	-3.60	-15.18	-3.55	-3.84	2.99



[www.sprott.com](http://www.sprott.com)

<sup>1</sup> All returns and fund details are a) based on Series A units; b) net of fees; c) annualized if period is greater than one year; d) as at July 31, 2017; e) 2004 annual returns are from 04/15/04 to 12/31/04. The index is 100% S&P/TSX Capped Energy TRI and is computed by Sprott Asset Management LP based on publicly available index information.

**The Fund is generally exposed to the following risks. See the prospectus of the Fund for a description of these risks: concentration risk; credit risk; currency risk; derivatives risk; exchange traded funds risk; foreign investment risk; inflation risk; interest rate risk; liquidity risk; market risk; regulatory risk; securities lending, repurchase and reverse repurchase transactions risk; series risk; short selling risk; small capitalization natural resource company risk; tax risk.**

Sprott Asset Management LP is the investment manager to the Sprott Funds (collectively, the "Funds"). Commissions, trailing commissions, management fees, performance fees (if any), other charges and expenses all may be associated with mutual fund investments. Please read the prospectus carefully before investing. The indicated rate of return for series A units of the Fund for the period ended July 31, 2017 is based on the historical annual compounded total return including changes in unit value and reinvestment of all distributions and does not take into account sales, redemption, distribution or optional charges or income taxes payable by any unitholder that would have reduced returns. Mutual funds are not guaranteed, their values change frequently and past performance may not be repeated. The information contained herein does not constitute an offer or solicitation by anyone in the United States or in any other jurisdiction in which such an offer or solicitation is not authorized or to any person to whom it is unlawful to make such an offer or solicitation. Prospective investors who are not resident in Canada should contact their financial advisor to determine whether securities of the Fund may be lawfully sold in their jurisdiction.

The opinions, estimates and projections ("information") contained within this report are solely those of Sprott Asset Management LP ("SAM") and are subject to change without notice. SAM makes every effort to ensure that the information has been derived from sources believed to be reliable and accurate. However, SAM assumes no responsibility for any losses or damages, whether direct or indirect, which arise out of the use of this information. SAM is not under any obligation to update or keep current the information contained herein. The information should not be regarded by recipients as a substitute for the exercise of their own judgment. Please contact your own personal advisor on your particular circumstances. Views expressed regarding a particular company, security, industry or market sector should not be considered an indication of trading intent of any investment funds managed by SAM. Any reference to a particular company is for illustrative purposes only and should not to be considered as investment advice or a recommendation to buy or sell nor should it be considered as an indication of how the portfolio of any investment fund managed by SAM is or will be invested. Sprott Asset Management LP and/or its affiliates may collectively beneficially own/control 1% or more of any class of the equity securities of the issuers mentioned in this report. Sprott Asset Management LP and/or its affiliates may hold short position in any class of the equity securities of the issuers mentioned in this report. During the preceding 12 months, Sprott Asset Management LP and/or its affiliates may have received remuneration other than normal course investment advisory or trade execution services from the issuers mentioned in this report.

Sprott Asset Management LP: Toll Free: 1.866.299.9906. DEALER SERVICES: RBC Investor & Treasury Services: Tel: 416.955.5885; Toll Free: 1.877.874.0899