

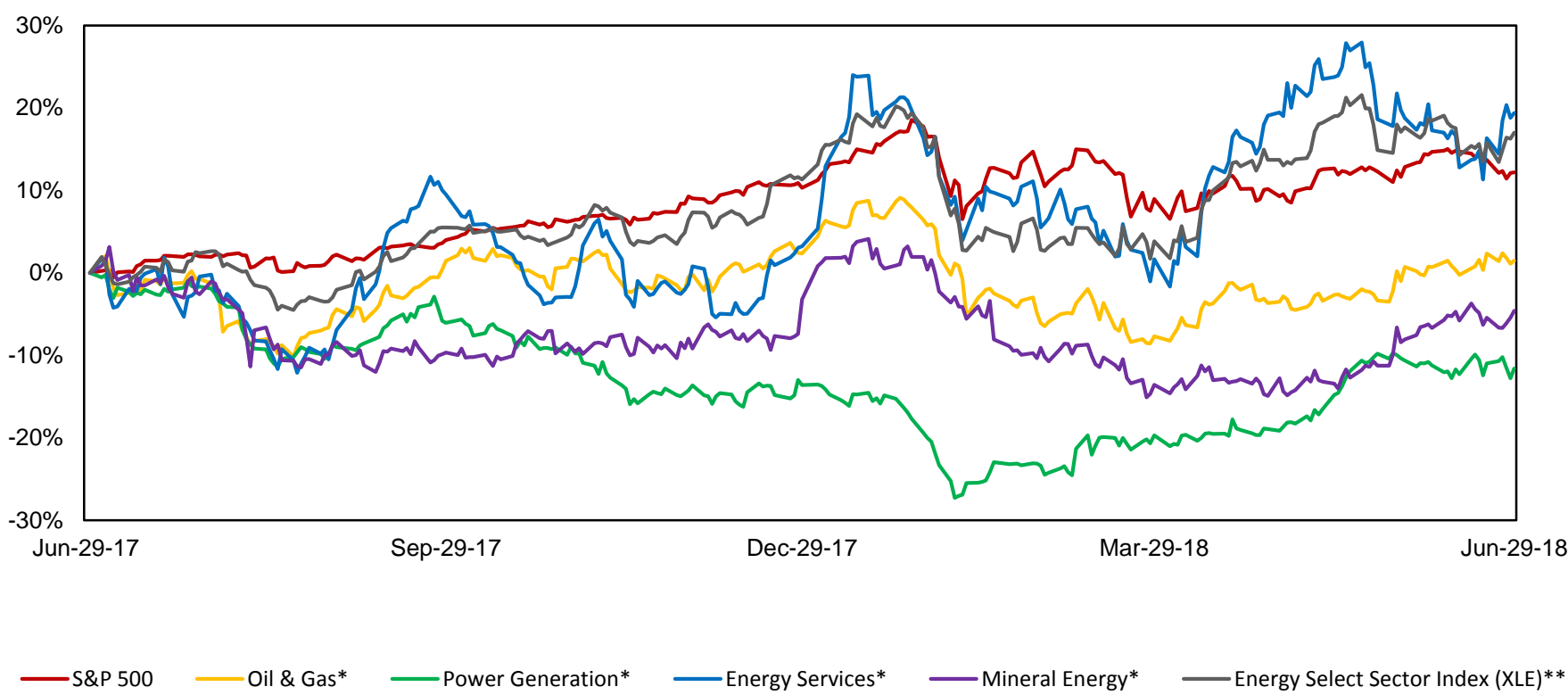


NOBLE CAPITAL MARKETS NEWSLETTER
ENERGY
QUARTERLY REVIEW Q2 2018



ENERGY SECTOR NEWSLETTER

ENERGY SECTOR LTM EQUITY PERFORMANCE



* Noble Proprietary Sector (index composed of companies in the comparable table)
** Energy Select Sector SPDR ETF (refer to disclosure section for more information)

Source: Capital IQ

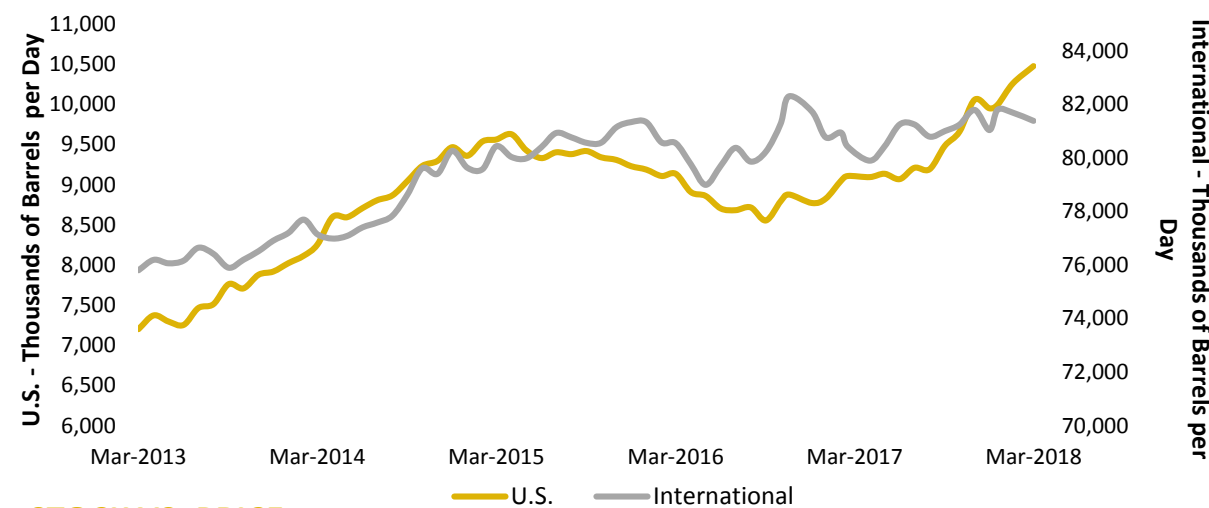
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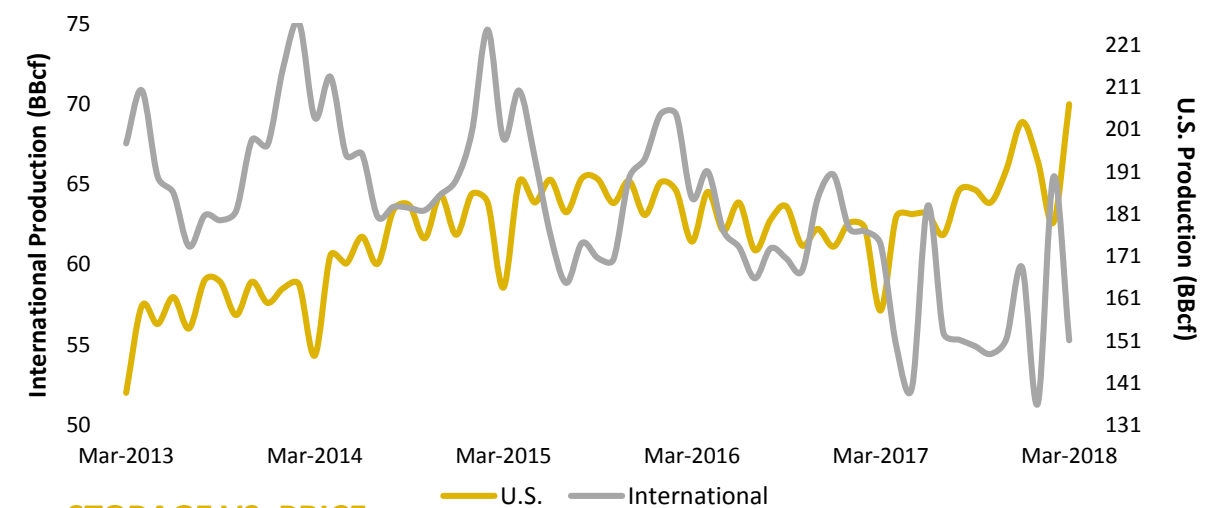


ENERGY – FUNDAMENTAL DATA

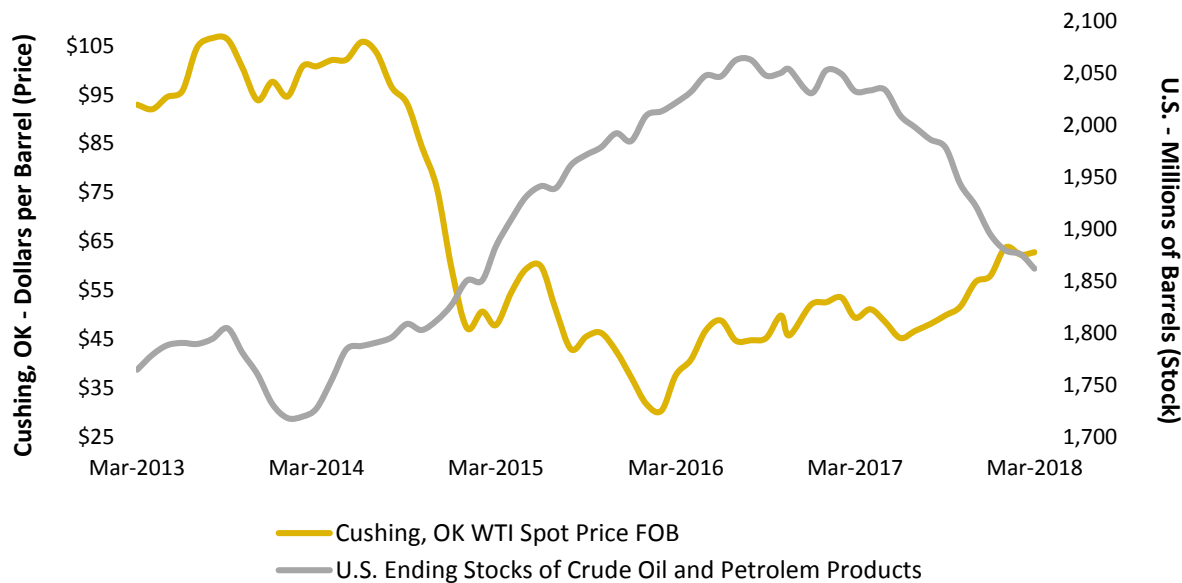
CRUDE OIL PRODUCTION



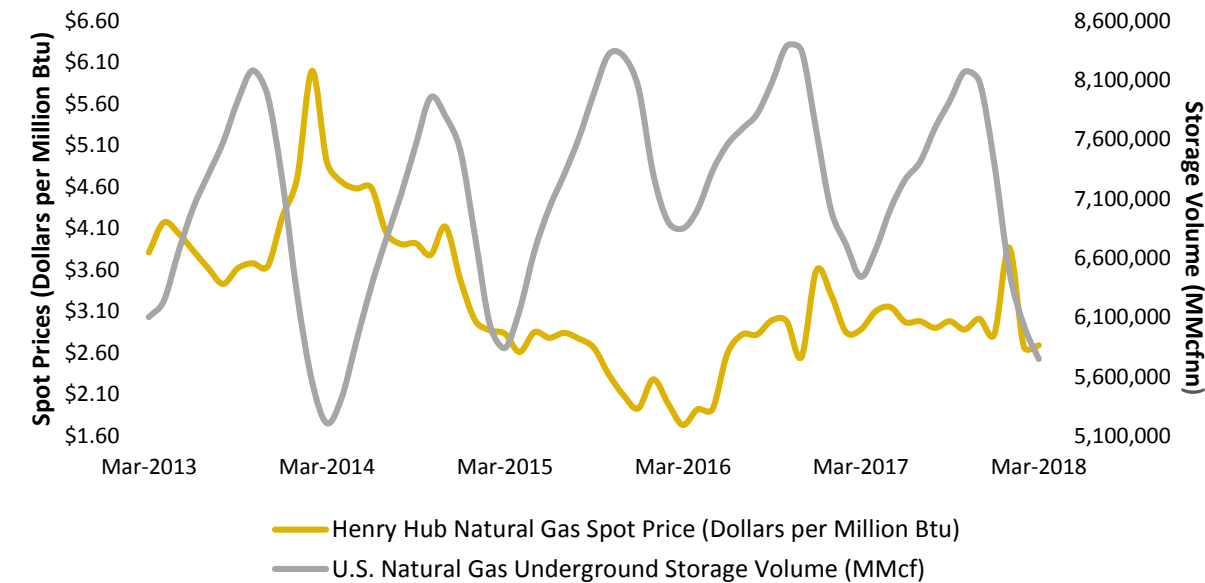
NATURAL GAS PRODUCTION



STOCK VS. PRICE



STORAGE VS. PRICE





ENERGY INDUSTRY OUTLOOK

INDEPENDENT EXPLORATION AND PRODUCTION

During the second quarter, the spot price of WTI crude oil increased 14.3% to finish the quarter at \$74.13 per barrel, while the Henry Hub natural gas spot price increased 5.3% to finish at \$2.96 per million cubic feet. Year-to-date, the spot price of WTI crude oil is up 22.6%, while the Henry Hub natural gas spot price is down 19.8%. Exploration and production stocks (as measured by the XLE) increased 12.7% in the second quarter of 2018. This was, in part, due to the market catching up to the rise in oil prices during the first quarter with investors coming to the realization that oil prices could remain strong in the short-term due to supply transportation constraints in the Permian Basin limiting supplies to U.S. Gulf Coast refining and export centers, robust global demand and a cooperative effort by OPEC and several other nations to limit supply growth. With respect to natural gas producers, the relatively low price of natural gas has stimulated industrial demand although we think the outlook for producers remains tempered.

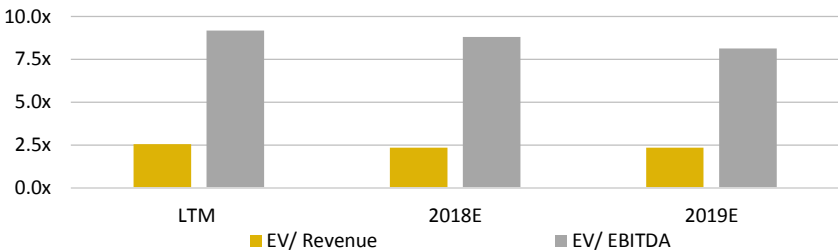
The XLE outperformed the broader S&P Index, which rose 2.9%, during the same time period. The XLE rose 9.5% in April, 3.0% in May and declined 0.1% in June. Crude oil prices were supported by President Trump’s decision to withdraw the US from the Iran nuclear accord despite OPEC announcing plans at its June meeting to increase supplies - albeit at a lower rate than expected. Additionally, lower output from Venezuela and continuing production disruptions in Libya are supportive of crude prices.

Crude oil futures average \$65.43 per barrel in 2019, \$61.53 per barrel in 2020 and \$58.72 per barrel in 2021. Natural gas futures average \$2.78 per million cubic feet in 2019, \$2.67 per million cubic feet in 2020 and \$2.62 per million cubic feet in 2021.

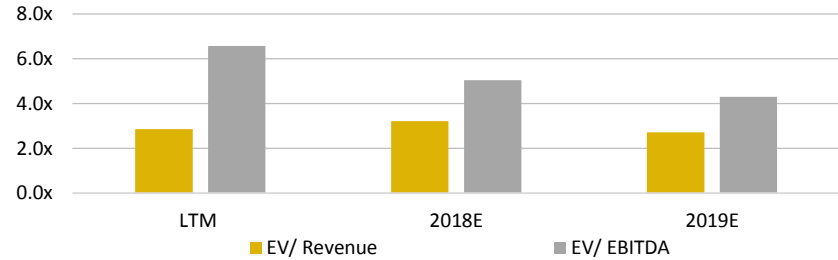
The U.S. Energy Information Administration projects U.S. crude oil production will average 10.8 million barrels per day in 2018 and 11.8 million barrels per day in 2019. Production averaged 9.4 million barrels per day in 2017. U.S. dry natural gas production is expected to average 81.2 billion cubic feet per day in 2018 and 83 billion cubic feet per day in 2019. Production averaged 73.6 billion cubic feet per day in 2017.

We think the short-term supply/demand outlook is supported by firm crude oil demand driven by favorable global economic conditions and continued cooperation by OPEC. Additionally, continued geopolitical uncertainty is supportive of crude oil prices. However, longer-term, increasing supplies from the U.S. and a potential slowdown in economic activity could result in lower prices. With respect to natural gas, we think supplies from unconventional sources will remain adequate to prevent sharp increases in price despite increasing demand for export, additional natural gas-fired plant capacity and industrial demand.

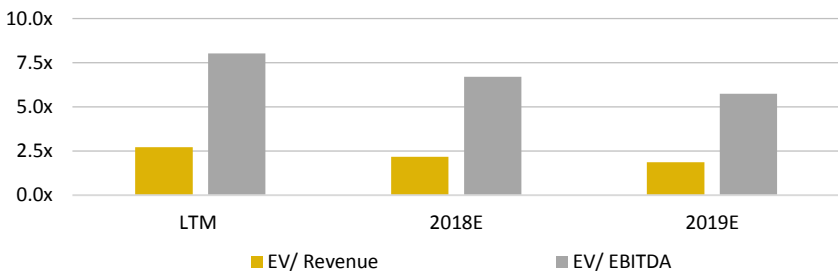
OIL AND GAS MULTIPLES



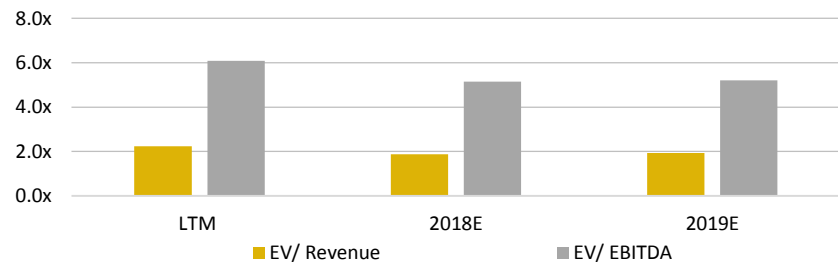
POWER GENERATION MULTIPLES



ENERGY SERVICES MULTIPLES



MINERAL ENERGY MULTIPLES



Source: Capital IQ as of 06/29/2018



OIL & GAS

COMPARABLE TABLES

Exploration and Production Index

	TICKER	CHANGE IN STOCK PRICE		SHARE PRICE	% OF 52 WEEK HIGH	MARKET CAP (\$M)	TOTAL DEBT (\$M)	ENT. VALUE (\$M)	LTM		EV / REVENUE			EV / EBITDA			EBITDA MARGIN
		3-MONTH	12-MONTH						REVENUES (\$M)	EBITDA (\$M)	LTM	2018E	2019E	LTM	2018E	2019E	
Lilis Energy, Inc.	AMEX:LLEX	31%	13%	\$5.20	83%	313	151	526	32	(33)	NM	6.1x	3.7x	NM	11.3x	5.8x	NM
Approach Resources, Inc.	NasdaqGS:AREX	(7%)	(22%)	\$2.44	58%	223	375	598	108	47	5.5x	4.9x	4.6x	12.8x	8.8x	8.2x	43%
BNK Petroleum Inc.	TSX:BKX	(13%)	208%	\$0.40	58%	94	27	118	15	6	7.7x	NM	NM	NM	NM	NM	36%
Torchlight Energy Resources, Inc.	NasdaqCM:TRCH	5%	(16%)	\$1.36	75%	95	15	108	1	(4)	NM	NM	NM	NM	NM	NM	NM
Jericho Oil Corporation	TSXV:JCO	(22%)	55%	\$0.58	42%	74	-	69	-	(3)	NM	NM	NM	NM	NM	NM	NM
Journey Energy Inc.	TSX:JOY	8%	(6%)	\$1.31	57%	50	90	135	76	26	1.8x	1.1x	1.0x	5.3x	3.3x	2.8x	34%

Mean	5.0x	4.0x	3.1x	9.0x	7.8x	5.6x	38%
Median	5.5x	4.9x	3.7x	9.0x	8.8x	5.8x	36%

Midstream Index

	TICKER	CHANGE IN STOCK PRICE		SHARE PRICE	% OF 52 WEEK HIGH	MARKET CAP (\$M)	TOTAL DEBT (\$M)	ENT. VALUE (\$M)	LTM		EV / REVENUE			EV / EBITDA			EBITDA MARGIN
		3-MONTH	12-MONTH						REVENUES (\$M)	EBITDA (\$M)	LTM	2018E	2019E	LTM	2018E	2019E	
PBF Logistics LP	NYSE:PBFX	14%	9%	\$21.00	94%	882	539	1,570	258	173	6.1x	5.5x	4.8x	9.1x	9.7x	8.1x	67%
American Midstream Partners, LP	NYSE:AMID	(6%)	(20%)	\$10.20	67%	539	1,220	1,988	694	23	2.9x	2.7x	2.5x	NM	8.9x	8.9x	3%
Dorian LPG Ltd.	NYSE:LPG	2%	(6%)	\$7.64	87%	422	759	1,078	52	69	NM	6.1x	5.4x	NM	NM	NM	NM
USD Partners LP	NYSE:USDP	4%	(1%)	\$10.75	90%	286	202	482	111	52	4.4x	3.9x	4.1x	9.3x	8.0x	8.2x	47%
Sanchez Midstream Partners LP	AMEX:SNMP	14%	(1%)	\$11.80	89%	180	183	706	80	32	8.9x	8.2x	8.3x	NM	8.9x	8.1x	40%
Southcross Energy Partners, L.P.	NYSE:SXE	(5%)	(49%)	\$1.55	47%	124	523	653	667	57	1.0x	NM	NM	11.4x	8.9x	NM	9%

Mean	4.6x	5.3x	5.0x	9.9x	8.9x	8.3x	33%
Median	4.4x	5.5x	4.8x	9.3x	8.9x	8.1x	40%

Source: Capital IQ as of 06/29/2018



OIL & GAS

COMPARABLE TABLES

Refining and Marketing Index

	TICKER	CHANGE IN STOCK PRICE		SHARE PRICE	% OF 52 WEEK HIGH	MARKET CAP (\$M)	TOTAL DEBT (\$M)	ENT. VALUE (\$M)	LTM		EV / REVENUE			EV / EBITDA			EBITDA MARGIN
		3-MONTH	12-MONTH						REVENUES (\$M)	EBITDA (\$M)	LTM	2018E	2019E	LTM	2018E	2019E	
Sprague Resources LP	NYSE:SRLP	6%	(10%)	\$25.40	88%	577	692	1,264	3,268	112	0.4x	0.4x	0.3x	11.3x	9.9x	9.3x	3%
Clean Energy Fuels Corp.	NasdaqGS:CLNE	124%	43%	\$3.69	91%	563	266	677	355	15	1.9x	1.9x	1.9x	NM	12.2x	12.8x	4%
Par Pacific Holdings, Inc.	NYSE:PARR	1%	(2%)	\$17.38	79%	797	393	1,124	2,603	133	0.4x	0.4x	0.4x	8.5x	7.8x	6.7x	5%
Trecora Resources	NYSE:TREC	9%	32%	\$14.85	98%	361	107	466	261	29	1.8x	1.7x	1.7x	NM	11.1x	9.7x	11%
Calumet Specialty Products	NasdaqGS:CLMT	6%	77%	\$7.45	75%	574	2,099	2,540	3,628	231	0.7x	0.9x	0.9x	11.0x	10.4x	9.3x	6%

Mean	1.0x	1.1x	1.0x	10.2x	10.3x	9.6x	6%
Median	0.7x	0.9x	0.9x	11.0x	10.4x	9.3x	5%

Retail and Commerce

	TICKER	CHANGE IN STOCK PRICE		SHARE PRICE	% OF 52 WEEK HIGH	MARKET CAP (\$M)	TOTAL DEBT (\$M)	ENT. VALUE (\$M)	LTM		EV / REVENUE			EV / EBITDA			EBITDA MARGIN
		3-MONTH	12-MONTH						REVENUES (\$M)	EBITDA (\$M)	LTM	2018E	2019E	LTM	2018E	2019E	
Superior Plus Corp.	TSX:SPB	1%	11%	\$9.66	72%	1,380	806	2,148	2,004	255	1.1x	0.8x	0.8x	8.4x	6.7x	6.3x	13%
NGL Energy Partners LP	NYSE:NGL	14%	(7%)	\$12.50	71%	1,520	2,686	4,507	17,282	312	0.3x	0.2x	0.2x	NM	9.0x	8.6x	2%
CrossAmerica Partners LP	NYSE:CAPL	(18%)	(33%)	\$16.88	57%	579	537	1,113	2,094	84	0.5x	0.5x	0.4x	NM	9.0x	7.9x	4%
Star Group, L.P.	NYSE:SGU	5%	(9%)	\$9.80	86%	529	186	679	1,528	95	0.4x	0.5x	NM	7.1x	5.1x	NM	6%
Global Partners LP	NYSE:GLP	11%	(3%)	\$17.05	92%	574	1,360	1,923	9,453	275	0.2x	0.2x	0.2x	7.0x	9.5x	9.4x	3%

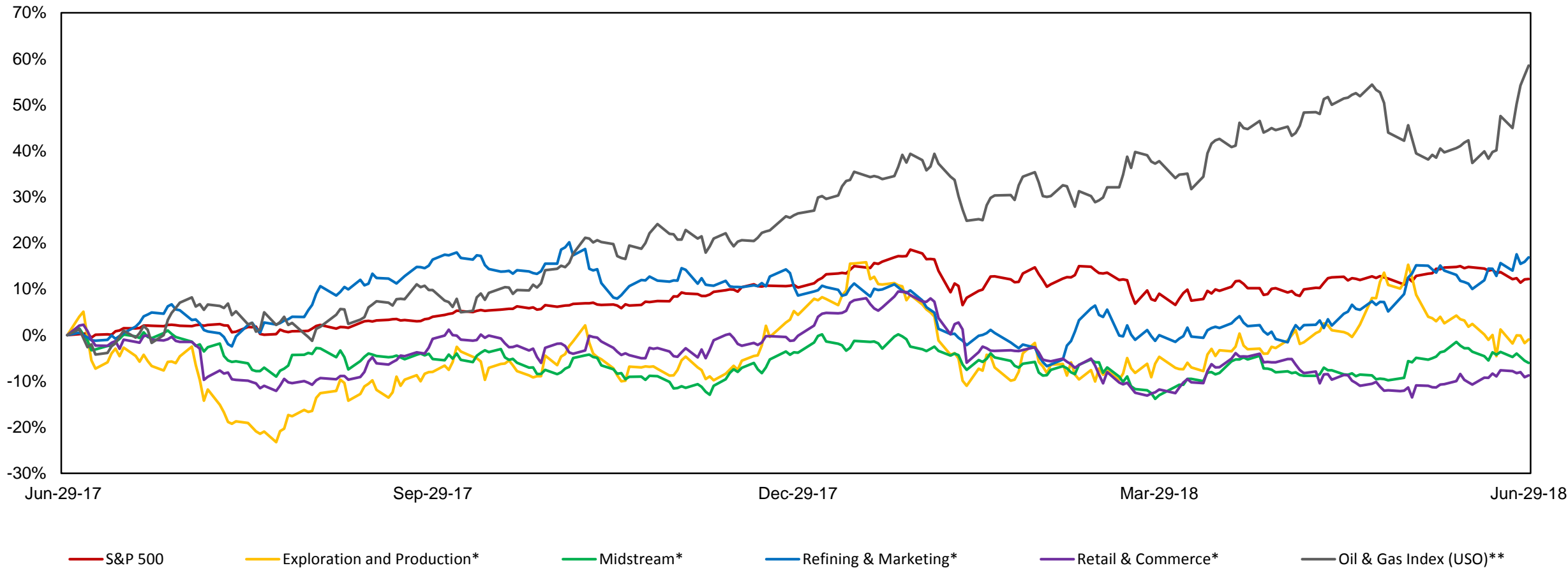
Mean	0.5x	0.4x	0.4x	7.5x	7.8x	8.1x	6%
Median	0.4x	0.5x	0.3x	7.1x	9.0x	8.2x	4%

Source: Capital IQ as of 06/29/2018



OIL & GAS LTM EQUITY PERFORMANCE

(NOBLE INDEX SELECTION)



* Noble Proprietary Sector (index composed of companies in the comparable table)
** SPDR S&P Oil & Gas Exploration & Production ETF (refer to disclosure section for more information)

Source: Capital IQ as of 06/29/2018



OIL & GAS LTM GLOBAL M&A ACTIVITY

Date	Buyer	Seller	Transaction Value (\$M)	EV/Revenue	EV/EBITDA
05/10/2018	Shell Midstream Partners, L.P.	Amberjack Pipeline Company LLC	1,220.0	9.6x	8.4x
05/01/2018	Cheniere Energy, Inc.	Cheniere Energy Partners LP Holdings, LLC	334.7	-	27.4x
04/29/2018	Exxon Mobil Corporation	PT. Federal Karyatama	436.0	-	-
04/16/2018	Vermilion Energy Inc.	Spartan Energy Corp.	1,111.2	6.4x	3.7x
04/05/2018	IOCL Singapore Pte. Ltd.	Shell Exploration and Production Oman Limited	329.0	-	-
03/29/2018	Partners Group Holding AG; The OPSEU Pension Trust	Superior Pipeline Company, L.L.C.	300.0	-	-
03/26/2018	Tallgrass Equity, LLC	Tallgrass Energy Partners, LP	3,273.2	6.9x	6.4x
02/17/2018	Vista Oil & Gas, S.A.B. de C.V.	Apco Oil & Gas International Inc.	349.0	-	-
02/12/2018	Suncor Energy Inc.	Syncrude Canada Ltd.	730.0	-	-
02/08/2018	Wolf Midstream Inc.	Access Pipeline Inc.	1,038.9	-	-
02/07/2018	Tallgrass Equity, LLC	Tallgrass Development, LP	644.8	-	-
01/20/2018	Oil and Natural Gas Corporation Limited	Hindustan Petroleum Corporation Limited	9,248.2	6.8x	0.5x
01/17/2018	Y.H.K. Investment Limited Partnership	Equital Ltd.	4,358.3	6.8x	5.5x
12/21/2017	Euronav NV	Euronav MI II Inc.	1,858.4	8.7x	4.8x
12/15/2017	CNX Gas Company LLC	CONE Gathering LLC	305.0	-	-
12/12/2017	Laramie River DevCo LP; Greenfield Midstream, LLC	Saddle Butte Rockies Midstream, LLC	638.5	-	-
11/09/2017	BlackRock, Inc.; Navigator Energy Services, LLC	Glass Mountain Pipeline LLC	600.0	-	-
11/03/2017	api anonima petroli italiana S.p.A.	TotalErg S.p.A.	440.0	-	-
10/27/2017	Transneft Baltic, LLC	OJSC Ust-Luga Oil	655.5	-	6.4x
10/24/2017	Aker BP ASA	Hess Norge AS	2,000.0	-	4.5x
10/19/2017	Macquarie Infrastructure and Real Assets Limited	Oiltanking Odjell Terminal Singapore Pte. Ltd.	300.0	-	-
10/16/2017	OOO NOVATEK-Yurkharovneftegas	Severneft-Urengoy, LLC	227.9	-	-
10/06/2017	Infraestructura Energética Nova, S.A.B. de C.V.	Ductos Energéticos del Norte, S. de R.L. de C.V.	547.0	-	-
09/28/2017	Beach Energy Limited	Lattice Energy Limited	1,174.0	-	-
09/20/2017	Apmh Invest A/S	Maersk Tankers A/S	1,171.0	-	-
08/29/2017	Zenith Energy U.S. Logistics Holdings, LLC	Arc Logistics Partners LP	659.42	10.4x	6.2x
08/21/2017	TOTAL S.A.	Total E&P Danmark A/S	7,414.73	-	-
08/16/2017	Alta Mesa Resources, Inc.	Alta Mesa Holdings LP and Kingfisher Midstream, LLC	3,999.5	-	-
08/14/2017	Andeavor Logistics LP	Western Refining Logistics, LP	1,853.3	14.4x	0.8x
07/06/2017	Paramount Resources Ltd.	Paramount Resources Ltd.	793.77	7.9x	4.9x
			Mean	8.7x	6.6x
			Median	7.9x	5.2x

Source: Capital IQ as of 06/29/2018



POWER GENERATION

COMPARABLE TABLES

Renewable and Cleantech Index

	TICKER	CHANGE IN STOCK PRICE		SHARE PRICE	% OF 52 WEEK HIGH	MARKET CAP (\$M)	TOTAL DEBT (\$M)	ENT. VALUE (\$M)	LTM		EV / REVENUE			EV / EBITDA			EBITDA MARGIN
		3-MONTH	12-MONTH						REVENUES (\$M)	EBITDA (\$M)	LTM	2018E	2019E	LTM	2018E	2019E	
Renewable Energy Group, Inc.	NasdaqGS:REGI	39%	40%	\$17.85	97%	666	333	928	2,046	232	0.5x	0.4x	0.4x	4.0x	8.4x	7.4x	11%
Pacific Ethanol, Inc.	NasdaqCM:PEIX	(13%)	(58%)	\$2.60	35%	114	246	328	1,646	20	0.2x	0.2x	0.2x	NM	6.7x	4.4x	1%
Aemetis, Inc.	NasdaqGM:AMTX	(11%)	11%	\$1.51	48%	31	165	193	162	(5)	1.2x	1.1x	1.0x	NM	NM	NM	NM
Synthesis Energy Systems, Inc.	NasdaqCM:SES	22%	(36%)	\$3.28	60%	36	5	32	1	(7)	NM	NM	NM	NM	NM	NM	NM
Gevo, Inc.	NasdaqCM:GEVO	(59%)	(74%)	\$3.80	15%	18	14	24	30	(14)	0.8x	0.9x	0.0x	NM	NM	NM	NM

Mean	0.7x	0.7x	0.4x	4.0x	7.5x	5.9x	6%
Median	0.6x	0.7x	0.3x	4.0x	7.5x	5.9x	6%

Utilities and Independent Power Producers Index

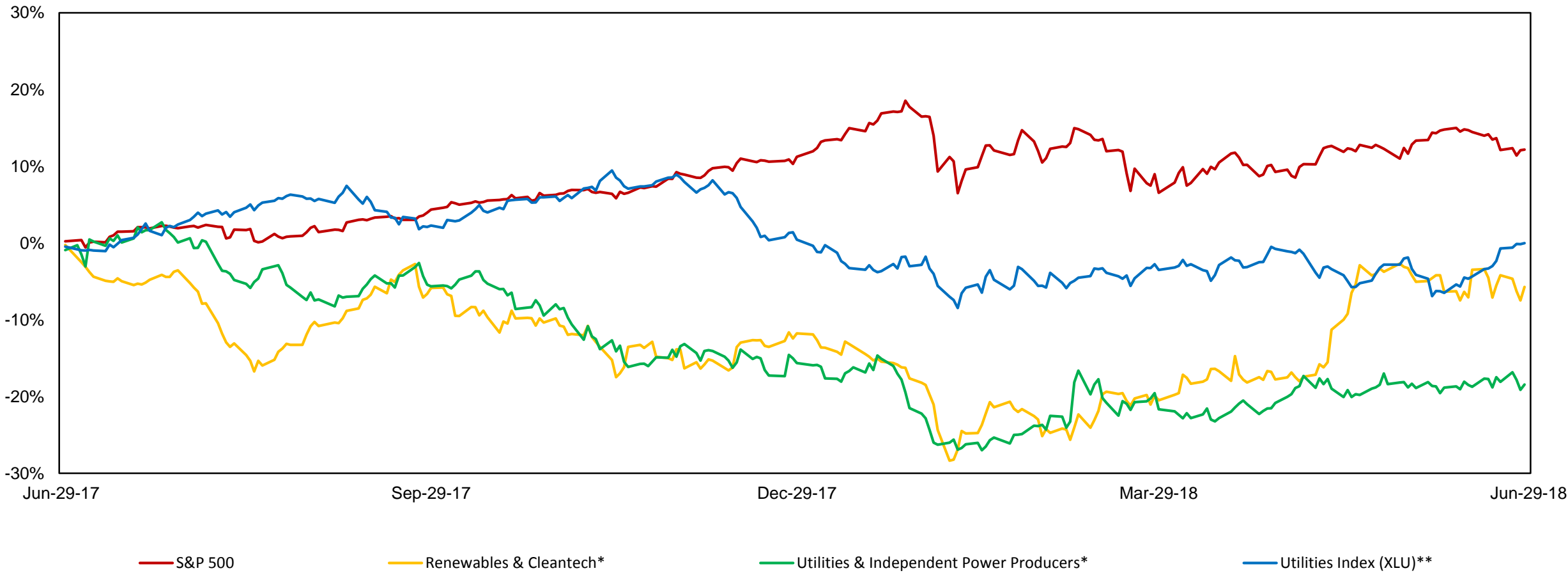
	TICKER	CHANGE IN STOCK PRICE		SHARE PRICE	% OF 52 WEEK HIGH	MARKET CAP (\$M)	TOTAL DEBT (\$M)	ENT. VALUE (\$M)	LTM		EV / REVENUE			EV / EBITDA			EBITDA MARGIN
		3-MONTH	12-MONTH						REVENUES (\$M)	EBITDA (\$M)		LTM	2018E	2019E	LTM	2018E	2019E
Atlantic Power Corporation	TSX:ATP	5%	(8%)	\$2.20	67%	248	781	1,132	413	202	2.7x	3.5x	3.4x	5.6x	6.5x	6.4x	49%
RGC Resources, Inc.	NasdaqGM:RGCO	15%	4%	\$29.18	92%	233	55	283	64	18	4.4x	4.3x	4.2x	NM	NM	NM	28%
Spark Energy, Inc.	NasdaqGS:SPKE	(18%)	(51%)	\$9.75	46%	128	124	383	886	55	0.4x	0.4x	0.4x	7.0x	3.6x	3.3x	6%
Genie Energy Ltd.	NYSE:GNE	(1%)	(35%)	\$4.96	64%	130	3	98	280	10	0.3x	NM	NM	9.7x	0.0x	0.0x	4%
Maxim Power Corp.	TSX:MXG	29%	18%	\$2.47	87%	106	-	31	-	(9)	NM	3.0x	2.3x	NM	NM	NM	NM
Etrion Corporation	TSX:ETX	(1%)	3%	\$0.21	62%	69	206	250	20	5	12.8x	12.3x	10.2x	NM	NM	NM	24%

Mean	4.1x	4.7x	4.1x	7.4x	3.4x	3.2x	22%
Median	2.7x	3.5x	3.4x	7.0x	3.6x	3.3x	24%

Source: Capital IQ as of 06/29/2018



POWER GENERATION LTM GLOBAL M&A ACTIVITY



Source: Capital IQ as of 03/29/2018

POWER GENERATION LTM GLOBAL M&A ACTIVITY

Date	Buyer	Seller	Transaction Value (\$M)	EV/Revenue	EV/EBITDA
06/29/2018	CJSC INTER RAO Capital; OAO Praktika	Public Joint Stock Company Inter RAO UES	390.0	2.4x	0.2x
05/31/2018	Sembcorp Industries Ltd	UK Power Reserve Limited	451.9	-	4.3x
04/20/2018	Kazanci Holding AS	Aksa Enerji Üretim A.S.	300.0	15.8x	2.6x
04/02/2018	Atlas Renewable Energy	Vega Solar 6, S.A.P.I. de C.V.	1,300.0	-	-
03/23/2018	Elia System Operator SA	Eurogrid International CVBA/SCRL	1,221.5	-	-
03/20/2018	Sterlite Power Transmission Ltd	Goa-Tamnar Transmission Project Limited	229.9	-	-
03/08/2018	Greencoat Capital LLP; Greencoat UK Wind PLC	Brockaghboy Windfarm Ltd.	225.4	-	-
02/27/2018	ContourGlobal plc	Acciona Termosolar S.A.U.	1,210.7	9.0x	6.7x
02/22/2018	CVC Capital Partners Limited; Corporación Financiera Alba	Gas Natural SDG, S.A.	4,701.6	10.3x	1.7x
02/07/2018	TerraForm Power, Inc.	Saeta Yield, S.A.	3,222.1	9.7x	7.3x
12/21/2017	Generadora Metropolitana SpA	Sociedad Eléctrica Santiago SpA	341.1	9.2x	5.3x
12/15/2017	BP p.l.c.	Lightsource Renewable Energy Ltd.	200.0	-	-
12/06/2017	Datang International Power Generation Co., Ltd.	Datang Heilongjiang Power Generation Co., Ltd.	2,519.2	-	-
11/23/2017	Alinta Energy	Loy Yang B Power Station Pty. Ltd.	914.9	-	-
11/01/2017	Algonquin Power & Utilities Corp.	Atlantica Yield plc	622.6	11.9x	8.3x
10/30/2017	Vistra Energy Corp.	Dynegy Inc.	11,088.2	10.4x	2.1x
10/24/2017	Public Sector Pension Investment Board;	Equis Energy Pte. Ltd.	5,000.0	-	-
10/10/2017	Cosan S.A. Indústria e Comércio	Companhia de Gás de São Paulo - COMGÁS	336.9	4.9x	1.3x
10/03/2017	China Three Gorges S.A.	EDP - Energias de Portugal, S.A.	244.5	10.1x	2.0x
09/27/2017	Superior Plus LP	Canwest Propane Ltd.	352.1	-	-
09/26/2017	Fortum Participation Limited	Uniper SE	12,899.2	13.1x	0.1x
09/26/2017	Changzhou Haozhen Venture Capital Investment Center	Changzhou Ranchen Photovoltaic Investment Co.	279.7	-	-
08/28/2017	Enel Chile S.A.	Enel Generación Chile S.A.	2,672.4	9.0x	3.4x
08/22/2017	Greencoat Capital LLP; Greencoat UK Wind PLC	Corriegarth Wind Energy Limited	232.4	-	-
08/18/2017	Canada Pension Plan Investment Board; Access Industries, Inc	Calpine Corporation	17,337.7	11.0x	2.2x
08/09/2017	Hudson Technologies Inc.	Airgas Refrigerants, Inc.	220.0	-	1.6x
08/04/2017	Saeta Yield, S.A.	Lestenergia - Exploração De Parques Eólicos, S.A.	218.7	-	-
08/03/2017	Philippines Energy Markets B.V.	Energy Development Corporation	1,282.3	9.2x	5.5x
07/24/2017	Universities Superannuation Scheme Limited	Kemble Water Holdings Limited	215.3	-	-
07/10/2017	Every, Inc.	Great Plains Energy Incorporated	16,385.2	8.8x	3.6x
		Mean		9.6x	3.4x
		Median		9.7x	2.6x

Source: Capital IQ as of 03/29/2018



ENERGY SERVICES

COMPARABLE TABLES

Oilfield Services Index

	TICKER	CHANGE IN STOCK PRICE		SHARE PRICE	% OF 52 WEEK HIGH	MARKET CAP (\$M)	TOTAL DEBT (\$M)	ENT. VALUE (\$M)	LTM		EV / REVENUE			EV / EBITDA			EBITDA MARGIN
		3-MONTH	12-MONTH						REVENUES (\$M)	EBITDA (\$M)	LTM	2018E	2019E	LTM	2018E	2019E	
Key Energy Services, Inc.	NYSE:KEG	39%	(15%)	\$16.24	80%	329	245	523	460	8	1.1x	0.9x	0.8x	NM	NM	5.9x	NM
ION Geophysical Corporation	NYSE:IO	(10%)	459%	\$24.30	75%	338	118	406	199	55	2.0x	1.8x	1.6x	7.4x	4.8x	3.7x	28%
Hi-Crush Partners LP	NYSE:HCLP	11%	8%	\$11.80	79%	1,043	196	1,229	737	190	1.7x	1.3x	1.4x	6.5x	4.3x	5.0x	26%
Tidewater Inc.	NYSE:TDW	1%	21%	\$28.93	80%	755	448	761	355	(55)	2.1x	1.8x	NM	NM	NM	10.1x	NM
Emerge Energy Services LP	NYSE:EMES	16%	(21%)	\$7.13	68%	221	209	422	396	54	1.1x	0.8x	0.8x	7.8x	4.3x	3.9x	14%
Newpark Resources, Inc.	NYSE:NR	34%	44%	\$10.85	93%	969	187	1,096	816	78	1.3x	1.2x	1.0x	NM	10.0x	7.3x	10%
Hornbeck Offshore Services, Inc.	NYSE:HOS	36%	40%	\$3.96	81%	148	1,082	1,060	189	14	5.6x	4.8x	4.0x	NM	NM	NM	7%

Mean	2.1x	1.8x	1.6x	7.2x	5.8x	6.0x	17%
Median	1.7x	1.3x	1.2x	7.4x	4.6x	5.5x	14%

Drillers Index

	TICKER	CHANGE IN STOCK PRICE		SHARE PRICE	% OF 52 WEEK HIGH	MARKET CAP (\$M)	TOTAL DEBT (\$M)	ENT. VALUE (\$M)	LTM		EV / REVENUE			EV / EBITDA			EBITDA MARGIN
		3-MONTH	12-MONTH						REVENUES (\$M)	EBITDA (\$M)	LTM	2018E	2019E	LTM	2018E	2019E	
Ensign Energy Services Inc.	TSX:ESI	(5%)	(16%)	\$4.46	57%	701	597	1,253	782	157	1.6x	1.1x	1.0x	8.0x	5.3x	4.5x	20%
Pioneer Energy Services Corp.	NYSE:PES	117%	200%	\$5.85	92%	453	462	847	495	63	1.7x	1.4x	1.3x	NM	8.7x	6.9x	13%
Independence Contract Drilling, Inc.	NYSE:ICD	9%	10%	\$4.12	75%	158	54	209	95	11	2.2x	1.9x	1.5x	NM	8.8x	5.4x	11%
Xtreme Drilling Corp.	TSX:XDC	(2%)	1%	\$1.62	67%	121	14	129	55	1	2.3x	1.3x	1.2x	NM	8.4x	5.8x	NM
Western Energy Services Corp.	TSX:WRG	0%	(41%)	\$0.81	45%	75	177	248	182	24	1.4x	1.0x	0.9x	10.5x	5.8x	4.6x	13%
Pacific Drilling S.A.	OTCPK:PACD.Q	(64%)	(88%)	\$0.20	11%	4	3,044	2,784	296	(34)	9.4x	7.7x	5.9x	NM	NM	NM	NM

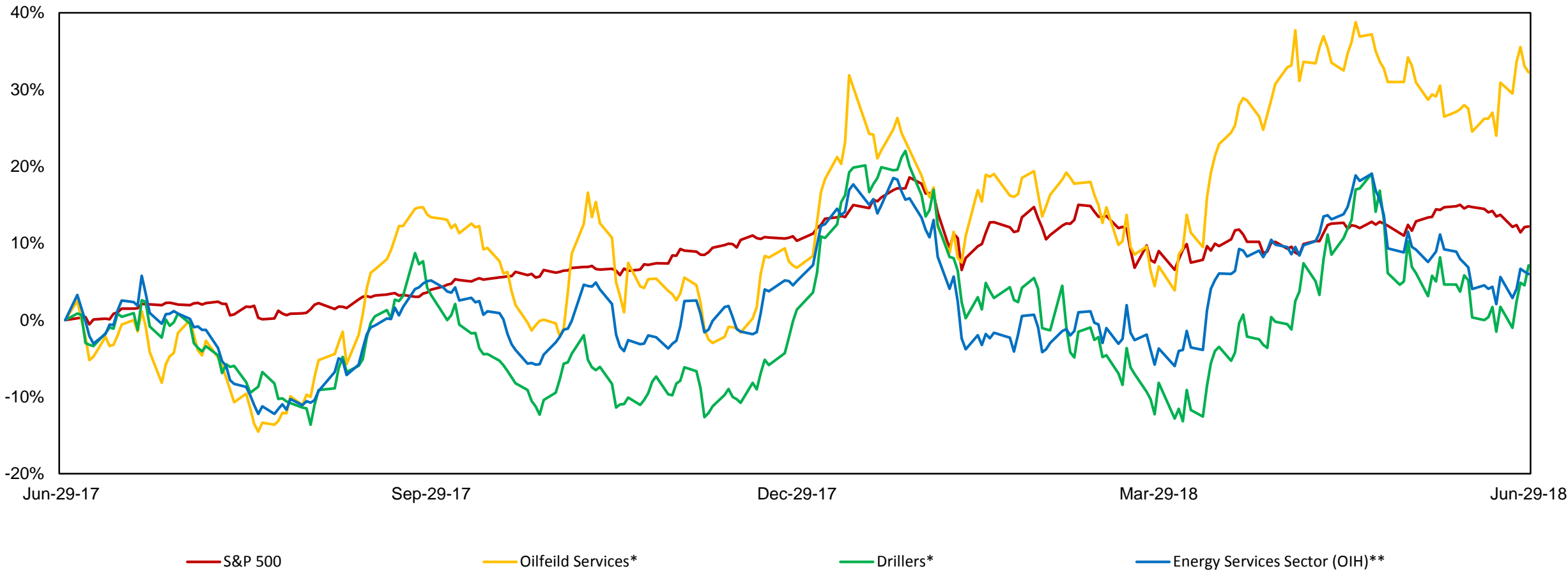
Mean	3.1x	2.4x	2.0x	9.2x	7.4x	5.4x	14%
Median	2.0x	1.4x	1.2x	9.2x	8.4x	5.4x	13%

Source: Capital IQ as of 06/29/2018



ENERGY SERVICES LTM EQUITY PERFORMANCE

(NOBLE INDEX SELECTION)



* Noble Proprietary Sector (index composed of companies in the comparable table)
** SPDR S&P Oil & Gas Equipment & Services ETF (refer to disclosure section for more information)

Source: Capital IQ as of 03/29/2018



ENERGY SERVICES LTM GLOBAL M&A ACTIVITY

Date	Buyer	Seller	Transaction Value (\$M)	EV/Revenue	EV/EBITDA
12/12/2017	Oil States International, Inc.	GEODynamics, Inc.	521.8	-	-
12/05/2017	Hemen Holding Ltd.	Northern Drilling Ltd.	177.5	-	-
11/27/2017	Zhuhai Jutal Offshore Oil Services Company	Penglai Jutal Offshore Engineering Heavy Industries	86.7	-	-
11/21/2017	Q'Max America Inc.	Anchor Drilling Fluids USA, Inc.	83.8	-	-
11/16/2017	National Energy Services Reunited Corp.	National Petroleum Services Company K.S.C.C.	136.2	-	2.7x
11/12/2017	National Energy Services Reunited Corp.	Gulf Energy LLC	181.0	4.2x	1.4x
11/12/2017	National Energy Services Reunited Corp.	National Petroleum Services Company K.S.C.C.	443.9	-	2.5x
11/09/2017	Guangxi Liugong Machinery Co., Ltd.	Shanghai Jintai Engineering Machinery Co., Ltd.	82.3	-	1.9x
10/25/2017	C&J Energy Services, Inc.	O-Tex Pumping, LLC	245.4	-	-
10/09/2017	WorleyParsons Limited	AFW UK Oil & Gas Limited	299.3	3.9x	0.2x
10/02/2017	Global Infrastructure Partners	Medallion Gathering & Processing, LLC	1,825.0	-	-
09/28/2017	Haimo Technologies Group Corp.	Xi'an Sitan instruments CO.,LTD	68.6	-	3.5x
09/05/2017	Patterson-UTI Energy, Inc.	Multi-Shot, LLC	215.3	-	-
08/30/2017	Pioneer Investment, Inc.	Spectrum Tracer Services, LLC	93.3	-	-
08/28/2017	Forum Energy Technologies, Inc.	Global Tubing, LLC	237.0	-	-
08/15/2017	Transocean Ltd.	Songa Offshore SE	3,288.1	7.3x	4.3x
08/14/2017	Nabors Industries Ltd.	Tesco Corporation	224.9	-	1.0x
08/08/2017	Public Joint Stock Company Rosneft Oil Company	Burenie Servis Tekhnologii LLC	150.5	-	-
07/18/2017	Select Energy Services, Inc.	Rockwater Energy Solutions, Inc.	515.8	-	-
06/19/2017	Enerflex Energy Systems Inc.	Mesa Compression, LLC	106.0	-	4.1x
06/12/2017	The Weir Group PLC	KOP Surface Products Pte Ltd	114.0	-	-
05/30/2017	Ensco plc	Atwood Oceanics, Inc.	2,194.9	4.7x	2.5x
05/19/2017	Wilh. Wilhelmsen Holding ASA	Norsea Group AS	65.1	-	-
05/19/2017	Total Energy Services Inc.	Savanna Energy Services Corp.	114.4	16.6x	1.8x
04/24/2017	KMG Chemicals, Inc.	Flowchem Ltd.	495.0	11.5x	-
03/31/2017	Scomi Energy Services Bhd	Scomi Argentina Sociedad Anonima	91.1	-	-
03/22/2017	Trican Well Service Ltd.	Canyon Services Group Inc.	472.3	-	2.6x
03/20/2017	Rockwater Energy Solutions, Inc.	Crescent Services, LLC	207.0	-	-
03/13/2017	John Wood Group PLC	Amec Foster Wheeler plc	4,477.5	10.6x	0.6x
02/14/2017	Liberty Oilfield Services Inc.	Titan Frac Services LLC	65.0	-	-
			Mean	8.4x	2.2x
			Median	7.3x	2.5x

Source: Capital IQ



MINERAL ENERGY

COMPARABLE TABLES

Mineral Energy Index

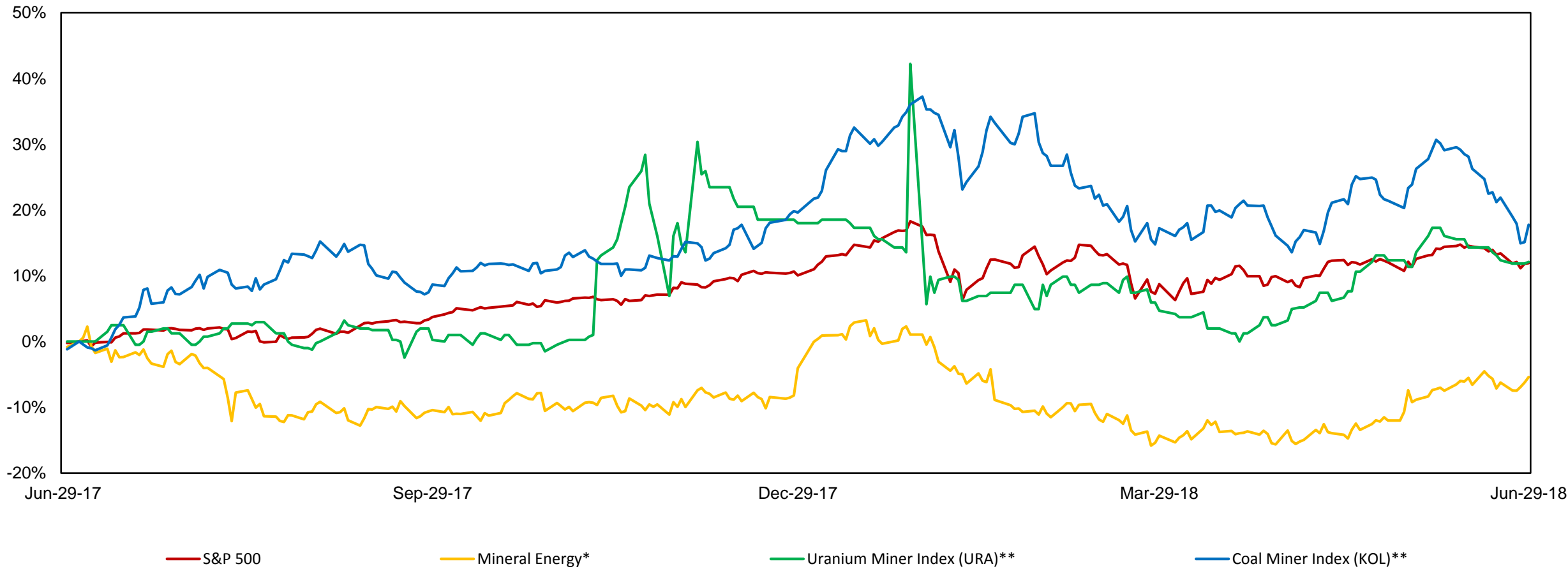
	TICKER	CHANGE IN STOCK PRICE		SHARE PRICE	% OF 52 WEEK HIGH	MARKET CAP (\$M)	TOTAL DEBT (\$M)	ENT. VALUE (\$M)	LTM		EV / REVENUE			EV / EBITDA			EBITDA MARGIN	
		3-MONTH	12-MONTH						REVENUES (\$M)	EBITDA (\$M)	LTM	2018E	2019E	LTM	2018E	2019E		
Contura Energy, Inc.	OTCPK:CNTE	9%	(2%)	\$72.70	91%	720	372	1,020	1,645	242	0.6x	0.5x	0.5x	4.2x	3.4x	2.6x	15%	
Foresight Energy LP	NYSE:FELP	16%	(18%)	\$4.10	82%	594	1,503	2,078	955	266	2.2x	2.2x	2.1x	7.8x	7.1x	7.1x	28%	
Cloud Peak Energy Inc.	NYSE:CLD	20%	(4%)	\$3.49	61%	264	412	549	882	89	0.6x	0.6x	0.6x	6.2x	5.0x	6.0x	10%	
Corsa Coal Corp.	TSXV:CSO	(38%)	(25%)	\$0.87	38%	82	34	143	292	79	0.5x	0.5x	0.5x	1.8x	2.9x	2.5x	27%	
Energy Fuels Inc.	AMEX:UUUU	31%	42%	\$2.27	96%	177	26	200	29	(17)	7.0x	4.5x	4.2x	NM	NM	7.8x	NM	
Ur-Energy Inc.	TSX:URE	13%	11%	\$0.68	69%	99	18	108	43	10	2.5x	2.8x	3.6x	10.5x	7.4x	NN	24%	
											Mean	2.2x	1.9x	1.9x	6.1x	5.1x	5.2x	21%
											Median	1.4x	1.4x	1.3x	6.2x	5.0x	6.0x	24%

Source: Capital IQ as of 06/29/2018



MINERAL ENERGY LTM EQUITY PERFORMANCE

(NOBLE INDEX SELECTION)



* Noble Proprietary Sector (index composed of companies in the comparable table)
** VanEck Vectors Coal ETF (refer to disclosure section for more information)

Source: Capital IQ as of 03/29/2018



MINERAL ENERGY

LTM GLOBAL M&A ACTIVITY

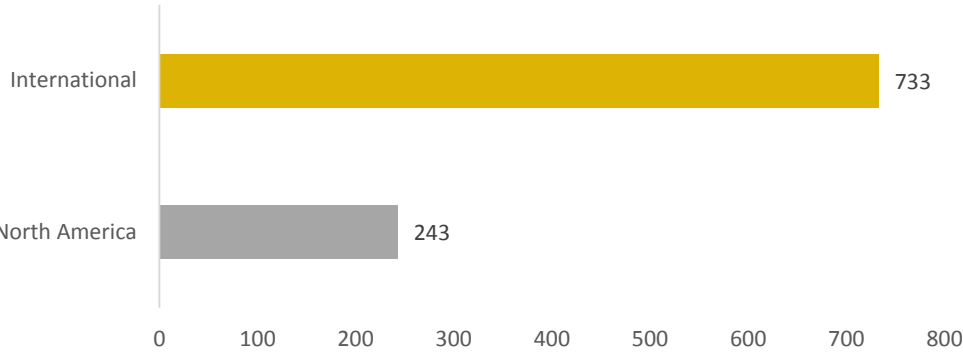
Date	Buyer	Seller	Transaction Value (\$M)	EV/Revenue	EV/EBITDA
05/07/2018	Azarga Uranium Corp.	URZ Energy Corp.	13.4	-	-
02/14/2018	Global X Management Company LLC	Mega Uranium Ltd. (TSX:MGA)	0.0	-	-
02/08/2018	enCore Energy Corp.	Metamin US Inc.	0.2	-	-
11/24/2017	Senator Minerals Inc.	Keefe Lake Projects Inc.	2.6	-	-
10/10/2017	Not Disclosed	PT Bayan Resources Tbk (IDX:BYAN)	85.0	2.8x	1.2x
09/25/2017	PT. Indika Energy Tbk	PT. KIDECO JAYA AGUNG	677.5	-	-
08/23/2017	Atrum Coal Limited	Elan Coal Ltd	7.0	-	-
			Mean	2.8x	1.2x
			Median	2.8x	1.2x

Source: Capital IQ as of 03/29/2018

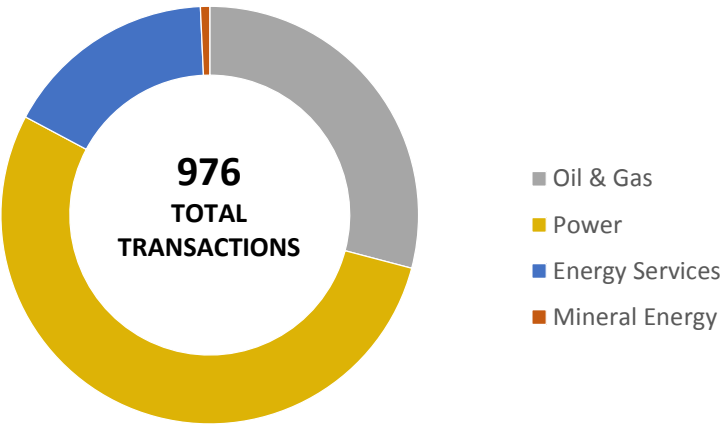


LTM ENERGY INDUSTRY M&A SUMMARY

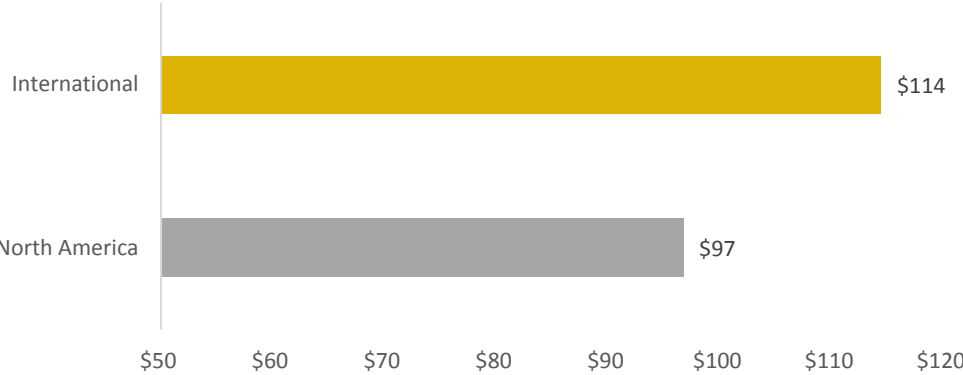
NORTH AMERICA VS INTERNATIONAL
TOTAL TRANSACTIONS *(Number of transactions)*



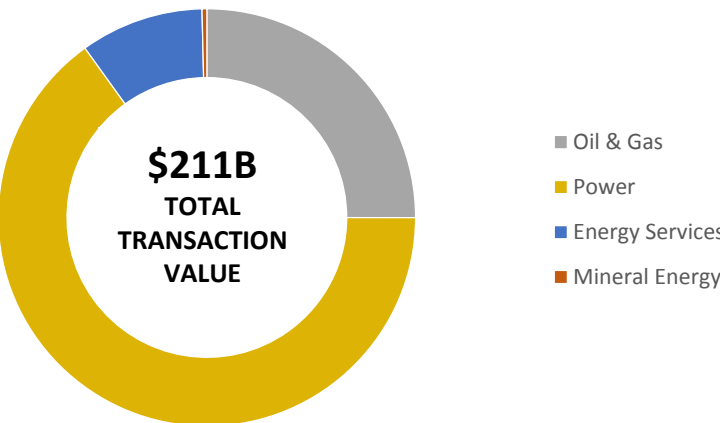
DEAL VALUE PER SECTOR
(Number of transactions)



NORTH AMERICA VS INTERNATIONAL
TOTAL TRANSACTIONS *(Values in \$B)*



TOTAL TRANSACTION VALUE
(Values in \$B)



Source: Capital IQ as of 03/29/2018



NOBLE QUARTERLY HIGHLIGHTS

Painted Pony Energy, Ltd. (TSX:PONY)

Industry: Energy – Exploration and Production

Painted Pony Energy Ltd. is a growth-oriented Canadian based natural gas and natural gas liquid E&P company headquartered in Calgary, Alberta. The Company is focused on production from the Montney resource play in northeastern British Columbia, Canada. The Montney formation has an estimated volume over 250 billion cubic feet of original gas-in-place per sq. mile and has working interest rights in 201,009 acres of the property.

1st Quarter News Highlights:

- Painted Pony increased their adjusted funds flow from operation by 87% from \$24.8 M in Q1 of last year to a record \$46.4 M in 2018 with approximately \$16 M less capital invested.
- Production increased to a record 69% to 364 Mmcfe/d which is equivalent to 60,704 boe/d.



Blackbird Energy Inc. (TSXV:BBI)

Industry: Energy – Exploration and Production

Blackbird Energy Inc. is an exploration, development and production company focusing on oil and natural gas in Western Canada. The company's main property is the Pipestone/ Elsworth Montney Project. This project is a 133 gross section, contiguous land block located near Grande Prairie, Alberta.

1st Quarter News Highlights:

- Blackbird's production during the quarter produced 5.6 mmcf/d of natural gas, 863 bbls/d of condensate and 80 bbls/d of NGLs for total production in the quarter equaling 1,876 boe/d.
- Capital expenditures went up 298% for the quarter resulting around 17,000% increase in Petroleum and Natural Gas revenues for Q1.



Crew Energy Inc. (TSE:CR)

Industry: Energy – Exploration and Production

Crew Energy is a oil and natural gas producer based out of Calgary with resources primarily focused in northeast British Columbia. The Company focuses on growth through exploration and development mainly in their vast Montney resource (280,000 net acres).

1st Quarter News Highlights:

- Crew Energy's production growth increased by 12% in Q1 of 2018 when compared to Q1 of 2017; the Company is producing 25,939 boe/d resulting from the completion of mines in northeast British Columbia.
- The Company is actively deploying capital focusing on the robust wells at West Septimus and Lloydminster with net capital expenditures totaling \$23.9 million for the quarter.



Source: Company Press Releases

$$R + (e^2 + p^2) = \text{TF}$$

NOBLE CAPITAL MARKETS

NOBLE CAPITAL MARKETS

NOBLE CAPITAL MARKETS is a research-driven investment and merchant bank focused on small cap, emerging growth companies in the healthcare, technology, ENERGY and natural resources sectors. That's what we are. Who we are is what makes us different.

Our people are talented, dedicated, experienced professionals who come together with a common cause; advising on long-term client solutions by employing innovative, collaborative and responsive strategies. We're passionate and personable. We approach things from our clients' perspective.

We know that developing lasting relationships is reliant upon putting our clients' interests before ours. We understand the impact of our services. Insightful advisory and effective capital procurement can change lives. Empowering our clients to create employment, engineer technological and medical breakthroughs, producing products and services that lay the foundation for the future. For more than 30 years these have been our guiding principles. While much has changed over the three decades since we began, these core values and our reputation have not. Our clients must know what to expect from us. Then we can strive to exceed expectations.

A SIMPLE FORMULA OUR VALUE PROPOSITION.

It starts with research With a fundamental belief that information guides the management process, NOBLE understands that there is no short-path to success. With this as a solid foundation, apply experience and execution delivered by people with passion. This is our formula to add value to your creation.

Research + Experience & Execution + People with Passion = Value

FULL-SERVICE INVESTMENT BANK

- Established 1984.
- Private firm, employee owned.
- Built on commitment to provide value and support for our clients.

FOCUSED INSTITUTIONAL SALES AND TRADING

- Seasoned sales and sales trading team.
- Long standing relationships with premier growth- focused investors.

INVESTMENT BANKING COMMITMENT

- Proven track record.
- Senior level attention to every client and transaction.
- Ability to deliver complete "mind share" of NOBLE on all transactions.

RESEARCH DRIVEN CAPITAL MARKETS PLATFORM

- Experience team of Research Analysts covering approximately 100 companies.
- Focus on Technology, Media, Healthcare and Natural Resources.
- Strong Institutional Sponsorship.

$$R + (e^2 + p^2) = \gamma f$$

INVESTMENT BANKING

Our investment banking team, together with our well-recognized equity research analysts and the equity capital markets group, provide our clients with fundamental capital markets advisory and support - prior, during and most importantly, after a transaction. NOBLE's investment banking team works closely with the management and Board of our corporate clients in order to fully understand operational and financial objectives. With this knowledge our banking team will develop an efficient and effective advisory program which offers a variety of services including:

EQUITY CAPITAL MARKETS

- Secondary and Follow-on Offerings
- Registered Direct Offerings
- Initial Public Offerings
- At the market Offerings (ATM's)
- PIPEs/Private Sale Offerings

DEBT CAPITAL MARKETS

- Senior Debt
- Mezzanine
- Convertible Debt
- Bridge Financings

ADVISORY SERVICES

- Merger & Acquisitions
- Fairness Opinions
- Valuation Services

SELECT NATURAL RESOURCES TRANSACTIONS



ORCHLIGHT
ENERGY
(TRCH)

Advisory

Corporate Advisory



March 2018



SIERRA
METALS

\$55,000,000

At-The-Market Offering (ATM) Agent



October 2017




MARLIN
GOLD MINING LTD.
(MLN)

Advisory

Corporate Advisory




February 2017



SES
SYNTHESIS ENERGY SYSTEMS
(SYMx)

Advisory

Corporate Advisory



January 2017



AVINO SILVER & GOLD MINES LTD.
(ASM)

\$800,000

Private Placement of Registered Securities
Sole Placement Agent



March 2016



PETROSHARE
(PRHR)

\$4,600,000

Initial Public Offering (IPO)
Lead Underwriter



November 2015

$$R + (e^2 + p^2) = \gamma f$$

VALUATION SERVICES

NOBLE's Valuation and Advisory Services team specializes in providing business and intangible asset valuations, fairness opinions, financial and strategic analysis, and transaction support services covering a broad spectrum of industries and situations from early stage, middle market and Fortune 500 companies and capital market constituents. NOBLE's team is made up of professionals with numerous accreditations and bring excellence in accounting, taxation, and financial due diligence to provide companies with valuation advice for a multitude of purposes.

Valuation – NOBLE's professionals have significant experience in the valuation of privately owned and public businesses across a wide range of industries. We perform an extensive analysis of the business as well as evaluate industry trends and various other factors in order to inform our clients as to the likely range of value they can expect. Our services are characterized by intellectual and analytical rigor and our conclusions are backed by thorough documentation.

Chief Accounting Officers, Corporate Controllers, CFOs, and Corporate Boards rely on Noble's experienced valuation professionals to produce sophisticated, supportable, and timely valuations to assist in complying with financial reporting requirements, including:

- Purchase price allocation and fresh start accounting
- Goodwill and long-lived asset impairment testing
- Tangible asset valuation
- Fair Value measurement of financial assets & liabilities

Opinions - Whether our clients are looking to fulfill their fiduciary duties, mitigate risk or determine corporate value, we are there throughout the transaction process to offer objective advice based on rigorous analysis. We work on behalf of boards of directors, investors, trustees and other corporate leaders to advise and provide opinions on a wide range of transactions.

We have advised Corporate Boards, special transaction committees, independent trustees, management and other fiduciaries of middle market public and private companies on the financial aspects of a transaction. Our independent advice withstands scrutiny from shareholders, bondholders, the SEC, IRS, or counterparties to a transaction

MERCHANT BANKING

Our Principal Investment focus is primarily on private and small-cap public (\$10mill to \$50mill market caps) companies in industries within NOBLE's research verticals. Investments are made directly by NOBLE and its affiliates and may also involve syndicate participants. We work to identify those companies with game-changing or superior products and technologies that have management teams with proven track-records of success. NOBLE structures investments to meet a company's capital needs whether its growth capital, liquidity or debt repayment. Capital commitment ranges from \$200k to \$2million principal and \$2million above with syndicate.

The scope of our Merchant Banking activities includes:

- Targeting domestic companies within our areas of focus and expertise
- Analyzing a company's opportunities and assessing its risks within their respective industry
- Structuring, negotiating and executing the transaction
- Work in assessing the appropriate time and manner in which to harvest the investment

NOBLE's Merchant Banking Team works continuously with our portfolio companies to assist the management team and Board of Directors to create value and grow their businesses to facilitate long-term shareholder value. Through our extensive sector research coverage, institutional investor non-deal road shows, equity conferences and market making, we blend a powerful mix of capital markets acumen to procure success.

$$R + (e^2 + p^2) = \text{TF}$$

INVESTMENT BANKING TEAM

Richard Giles, Managing Director

rgiles@noblefcm.com - 617.692.9346

- Joined NOBLE in 2010 as Head of the Technology, Media & Telecommunications Investment Banking Group
- 25 years of investment banking experience.
- Executed more than 100 M&A and capital raising transactions totaling \$10+ billion
- Former head of Stifel Nicolaus' Technology Group.
- Former head of A.G. Edwards' Emerging Growth Group and member of Investment Committee for A.G. Edwards Capital
- A.B. Harvard College; M.B.A., Harvard Business School

Francisco Penafiel, Managing Director

fpenafiel@noblefcm.com - 561.994.5740

- Executed M&A and capital raising transactions totaling over \$1 billion dollars in value
- 7 years of sell side equity research experience, covering enterprise & infrastructure software, business services, media, communications, and banks
- 6 years of portfolio managing experience
- Manage the business development efforts in LATAM for NOBLE
- Engineering, IT & Statistics, Escuela Superior Politecnica (Guayaquil, Ecuador); M.S. Economics, Florida Atlantic University

Juan Arvelo, Director

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- More than 18 years of corporate finance and capital markets experience, with a special focus on M&A, restructuring and capital raising transactions.
- Previous Director at Enkeros Investments and Activa Capital Markets
- Former CFO of LS Energia
- Main focus in the QSR, financial institutions and energy sectors
- Managed corporate finance and recoveries division at PricewaterhouseCoopers (PwC)
- B.S. Economics UCAB; M.S. Finance IESA; MBA Babson College

Joseph Hain - Director

jhain@noblecapitalmarkets.com - 561.999.2265

- Prior experience holding senior positions at Robotti & Company, Wynston Hill Capital, SternAegis Ventures, WestPark Capital, and Tejas Securities
- Experience working with institutional, retail and HNW clients
- B.S. SUNY Albany with concentration in Biology, Chemistry, and Physics
- Holds various FINRA licenses

John Connery, Analyst

jconnery@noblecapitalmarkets.com - 561.998.5478

- Joined Noble Capital Markets as an Investment Banking Analyst in 2016
- Worked previously as a private equity analyst for the family office of Marc Bell
- B.S. Investment Management, Lynn University

Brittnee Fatigate, Analyst

bfatigate@noblecapitalmarkets.com - 561-999-2264

- Joined Noble Capital Markets in January 2017
- Has completed multiple M&A and capital raising assignments, accounting for nearly \$150 million+ of transaction value
- Held previous position as an accounting assistant at a privately held manufacturing company
- B.S. Finance, Florida Atlantic University

$$R + (e^2 + p^2) = \pi$$

SALES & TRADING

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