Oil and Gas Investor

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It's a bull market for energy IPOs.

ENERGY IPOs

The disruptive change of tight formation oil and gas has created an insatiable need for capital as young, entrepreneurial and operationally skilled management teams seek funding in the public capital markets.

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Going public? For management teams in the upstream and midstream sectors of oil and gas, the answer is a table-pounding yes! That is one reason the pace of energy initial public offerings (IPOs) over the past year has exhibited more heat than a major league fastball.

There have been 22 IPOs in the energy upstream and midstream sectors (as of press time) in the past 12 months, generating more than $12 billion in public market capital, according to Houston-based PLS Inc. Another dozen IPOs are on deck.

Although energy has been overshadowed by a hot IPO market in general—2013 saw more than $54.9 billion in IPOs, up from $21.8 billion in the financially stressed year of 2009—the blistering pace of energy IPOs illustrates an inflection in the market for financing the evolution of oil and gas development in the tight formation era.

"When industry became focused on the unconventional business, first in gas, then in oil, it was a fundamental change in paradigm," recalled Richard Aube, managing director for Pine Brook, which has approximately $5 billion in assets under management and closed a $2.43 billion fund in February 2014.

"Prior to that paradigm shift, the industry had been a net source of cash. You produced your barrels, or your Mcfs, and cash came back every year and you had to figure out how to deploy it. The industry was long on capital and short on opportunity, which allowed managements to develop their assets and then trade them to larger companies."

Then came horizontal drilling and multistage hydraulic fracturing, which upended the traditional energy model.

"The industry flipped to a net user of cash, so companies became long on opportunity and short on capital," Aube said.

Wall Street likes sand. Three of the Top 10 performing IPOs involve oil services companies that mine and market the sand used in hydraulic fracturing. Otherwise, the public markets appear to favor midstream companies, though two upstream companies, Diamondback Energy and Bonanza Creek, have witnessed stellar appreciation since going public.

Disruptive change

Multiple factors are stimulating the sharp run in energy IPOs. Oil prices have been high, and mostly stable, since 2011. In the upstream sector, several young entrepreneurial management teams have come of age with the technological acumen and operational expertise to extract tight formation hydrocarbons, more often than not in stacked plays such as the Permian Basin or Appalachia.

Finally, an expanding inventory of tight formation development wells stretching into the tens of thousands requires an enormous reservoir of investment capital, as does the midstream infrastructure buildout needed to transfer newly produced hydrocarbons to markets around the country and, ultimately, the globe.

Although the post-2005 disruptive change that ushered in the tight formation energy era swamped the natural gas market, it also provided skilled management teams an opportunity to create value well above traditional industry metrics, making a new generation of oil and gas

Top 10 Performing IPOs

	Sector	IPO Year	Appreciation June 2014
Emerge Energy Services LP	Services	2013	541%
Diamondback Energy Inc.	Upstream	2012	349%
Oiltanking Partners LP	Midstream	2011	323%
EQT Midstream Partners LP	Midstream	2012	309%
Tesoro Logistics LP	Midstream	2011	246%
Bonanza Creek Energy Inc.	Upstream	2011	222%
U.S. Silica Holdings Inc.	Services	2012	216%
Hi-Crush Partners LP	Services	2012	211%
Phillips 66 Partners LP	Midstream	2013	183%
MPLX LP	Midstream	2012	164%

Source: PLS Inc.

Horizontal drilling and multistage hydraulic fracturing upended the traditional energy model. "The industry flipped to a net user of cash, so companies became long on opportunity and short on capital," said Richard Aube, managing director, Pine Brook. Facing page: Energy IPOs over the past year have charged ahead.

companies attractive to investors when management teams ventured into the public capital markets.

"Why are we seeing more public offerings today?" Apollo Global Management LLC senior partner Greg Beard asked rhetorically. "I believe the answer is an economic one. The value the public market is willing to put on these fast-growing companies appears to be higher today than what the mergers and acquisitions market is willing to pay."

Beard heads the natural resources division at Apollo, which as of March 31, 2014, had more than $159 billion of assets under management to invest in a variety of asset classes, including energy private equity and credit. Beard said companies are being valued between $25,000 and $50,000 an acre in stacked plays like the Permian Basin, values much higher than the assets would sell for in a straight property transaction.

Similar examples are found in Appalachia, where equity markets were valuing land leased at an average $8,200 per acre at $46,000 an acre on an enterprise value basis for a pure play company like Rice Energy Inc., which went public in January 2014, and at $39,000 per acre for Antero Resources Corp., which IPOed in October 2013.

The reason for those valuations is clear, according to Tony Weber, managing partner and COO for Irving, Texas-based NGP Energy Capital Management.

"One thing that has changed over the last five years is the technology of long-reach horizontal drilling and hydraulic fracturing," he said. "You could look historically at 30,000 acres and say that is awfully small to be a public entity. But if you now have multiple producing horizons within that acreage, you are in effect doubling, tripling and, in some cases, quadrupling your land position."

NGP, which together with its affiliates has managed more than $13 billion in cumulative capital focused on the energy industry since 1988, has shepherded an impressive crop of upstream management teams into the public markets over the last six months including Rice Energy Inc., RSP Permian Inc. and Parsley Energy Inc. All have one thing in common.

"It's all about execution, it's not about discovering new reserves," Weber said. "The firms we back have the technical capability to drill and complete the wells on your roster. You must have very competent drilling engineers, completion engineers and geologists. To have the option of a potential public exit, it's also important to have a more fulsome team, including accounting, finance, land and everything else that goes with it."

In fact, skilled management teams have become as much a differentiating factor as rock quality, the traditional differentiator in oil and gas, according to Apollo's Greg Beard.

"I believe the performance of the asset will be driven by the strength of the management team," Beard said. "Some assets are worth more to some owner operators than they are worth to others. If you are able to keep your drilling costs low and you are able to have higher estimated ultimate recoveries [EURs] and production rates than competitors, then a property is worth more in your hands than it might be in someone else's hands."

Skilled management teams have also led to a new wrinkle in upstream energy IPOs, which involves the ascendancy of pure play companies, a marked change from the past, when investors sought basin diversification. The hottest upstream names over the past 12 months in fact have been basin specialists—often specialists within a specific part of a basin.

NGP's Tony Weber spotlighted the specialized pure play nature of recent upstream IPOs.

"These are firms that are very focused," he said. "They focus on only one or two basins and they execute very well. They don't have a big diversified asset base, but rather have a very focused execution strategy. Those teams all have top-notch drilling and completions capability, and land capability. That's what is in vogue.

"The more recent phenomenon is that those businesses are built to last. They are not built to flip. So whether we exit them through an IPO, or exit them by selling the company, or recapitalizing their balance sheet in order to pay out a dividend, fundamentally the management teams have been constructed in a way that we are very comfortable holding for a long time."

Upstream pure play opportunities allow investors to assemble portfolios, Lego-like, to fit individual investment preferences.

"That pure play nature has been very interesting to a broader group of people," Pine Brook's Rich Aube said. "A lot of what has driven the interest in these companies has been investors who are looking for a specific type of investment opportunity, and that pure play nature gives them that. If you were to think about it as a portfolio manager, you can build your portfolio of assets within oil and gas. You don't need to own a diversified oil and gas company to get that exposure. I think that trend is likely to continue, at least when I think of some of the companies in backlog. There are more pure play-oriented businesses—we own several—that are looking to take advantage of that investment interest in a pure play."

A multiyear opportunity

Despite high oil prices, or equity markets at, or near, all-time highs, the disruptive technology transforming oil and gas still leaves running room, thanks to the paradigm shift in oil and gas in the tight formation era. Stuart Zimmer, managing partner at Zimmer Partners LP, a New York-based hedge fund specializing in energy, views the energy landscape as early in the evolutionary cycle.

Apollo Global Management senior partner Greg Beard, top, said companies are being valued at between $25,000 and $50,000 an acre in stacked plays like the Permian Basin. Above,Tony Weber, managing partner and COO of NGP Energy Capital Management, said companies with multiple producing horizons within their acreage are in effect doubling, tripling and, in some cases, quadrupling land positions.

Facing page: Skilled management teams have become as much a differentiating factor as rock quality as the market looks for hidden gems. Minerals and gems were photographed at the Houston Museum of Natural Science.

Pure play E&P and midstream IPOs have turned in some of the highest rates of return for investors. Overall, the upstream and midstream sectors have launched more than 22 IPOs in the past 12 months (as of press time).

"It's a multiyear investable opportunity set," Zimmer said. "The disruptive technology of horizontal shale drilling is creating so much in the way of hydrocarbons. You can see the Bakken from space because they are flaring so much gas and there is not enough infrastructure to get hydrocarbons from where they are found to where they need to be used. There are years of projects left to do, and you will continue to see a meaningful amount of IPOs on the upstream and the midstream side."

Zimmer has a portfolio in excess of $3.5 billion invested in the energy space and is an active participant in midstream and upstream IPOs. Getting in early and focusing on net asset value has provided stellar returns in midstream, including, Zimmer said, Western Refining Logistics LP, EQM Midstream Partners LP, and PBF Logistics LP, and in upstream firms such as Rice Energy Inc., Diamondback Energy Inc. and Parsley Energy Inc., which went public in May 2014.

Zimmer, who is often acquainted with the management teams and is well-schooled in the razzle-dazzle technology individual companies use to create value, is representative of the modern sophisticated investor that energy is attracting, individuals who are comfortable discussing the potential of discrete horizons in the stacked play Permian on a county-by-county basis, or describing the dynamics stimulating the midstream infrastructure buildout unfolding

Energy IPOs, 2011-2014

Company	Ticker	Shares	Price	Date	Proceeds x $1MM	Close June 5, 2014	Post IPO Change
Upstream							
Sandridge Mississippian Trust I	SDT	15,000,000	$21.00	4/7/2011	$315	$6.26	-70%
VOC Energy Trust	VOC	11,085,000	$21.00	5/5/2011	$232.80	$15.22	-28%
Kosmos Energy Ltd.	KOS	33,000,000	$18.00	5/11/2011	$594	$10.15	-44%
Lone Pine Resources Inc.	LPRIQ	15,000,000	$13.00	5/29/2011	$195	$0.04	-100%
Sandridge Permian Trust	PER	30,000,000	$18.00	8/11/2011	$540	$12.23	-32%
Enduro Royalty Trust	NDRO	13,200,000	$22.00	11/3/2011	$290.40	$12.72	-42%
LRR Energy LP	LRE	9,408,000	$19.00	11/11/2011	$178.70	$17.03	-10%
Chesapeake Granite Wash Trust	CHKR	20,000,000	$19.00	11/14/2011	$380	$10.54	-45%
Memorial Production Partners LP	MEMP	9,000,000	$19.00	12/9/2011	$171	$22.43	18%
Sanchez Energy Corp.	SN	10,000,000	$22.00	12/14/2011	$220	$34.35	56%
Mid-Con Energy Partners LP	MCEP	5,400,000	$18.00	12/15/2011	$97.20	$21.14	17%
Laredo Petroleum Inc.	LPI	17,500,000	$17.00	12/15/2011	$297.50	$27.96	64%
Bonanza Creek Energy Inc.	BCEI	10,000,000	$17.00	12/15/2011	$170	$54.68	222%
Matador Resources Co.	MTDR	13,333,300	$12.00	2/1/12	$160	$25.55	113%
Whiting USA Trust II	WHZ	16,000,000	$20.00	3/22/12	$320	$11.71	-41%
SandRidge Mississippian Trust II	SDR	26,000,000	$21.00	4/17/12	$546	$7.68	-63%
Midstates Petroleum Co. Inc.	MPO	24,000,000	$13.00	2/19/12	$312	$5.77	-56%
Pacific Coast Oil Trust	ROYT	18,500,000	$20.00	5/2/12	$370	$13.29	-34%
Diamondback Energy Inc.	FANG	12,500,000	$17.50	10/12/12	$218.80	$78.54	349%
Linn Co. LLC	LNCO	30,250,000	$36.50	10/11/12	$1,104.10	$28.44	-22%
New Source Energy Partners LP	NSLP	4,000,000	$20.00	2/7/13	$80	$22.89	14%
Jones Energy Inc.	JONE	12,500,000	$15.00	7/23/13	$187.50	$17.94	20%
Athlon Energy Inc.	ATHL	15,789,400	$20.00	8/1/13	$315.80	$44.16	121%
Antero Resources Corp.	AR	35,725,000	$44.00	10/9/13	$1,571.90	$64.06	46%
EP Energy Corp.	EPE	35,200,000	$20.00	1/6/14	$704	$20.34	2%
RSP Permian Inc.	RSPP	20,000,000	$19.50	1/16/14	$390	$27.68	42%
Rice Energy Inc.	RICE	44,000,000	$21.00	1/23/14	$924	$33.20	58%
Parsley Energy Inc.	PE	50,000,000	$18.50	5/23/2014	$925	$24.83	34%
Midstream							
Kinder Morgan Inc.	KMI	95,466,600	$30.00	2/11/2011	$2,864	$34.05	14%
Golar LNG Partners LP	GMLP	12,000,000	$22.50	4/8/2011	$270	$33.40	48%
Tesoro Logistics LP	TLLP	13,000,000	$21.00	4/20/2011	$273	$72.57	246%
Oiltanking Partners LP	OILT	10,000,000	$21.50	7/14/2011	$215	$90.96	323%
American Midstream Partners LP	AMID	3,750,000	$21.00	7/27/2011	$78.80	$29.14	39%
Rose Rock Midstream LP	RRMS	7,000,000	$20.00	12/9/2011	$140	$45.55	128%
Crestwood Midstream Partners	NRGM	16,000,000	$17.00	12/16/2011	$272	n/a	
Gaslog Ltd.	GLOG	23,500,000	$14.00	3/30/2012	$329	$24.13	72%
EQT Midstream Partners LP	EQM	12,500,000	$21.00	6/26/12	$262.50	$85.99	309%
Summit Midstream Partners LP	SMLP	12,500,000	$20.00	9/27/12	$250	$45.10	126%
MPLX LP	MPLX	17,300,000	$22.00	10/25/2012	$380.60	$58.00	164%
Western Gas Equity Partners LP	WGP	17,181,000	$22.00	12/06/2012	$378	$52.59	139%
KNOT Offshore Partners LP	KNOP	7,450,000	$21.00	4/10/2013	$156.50	$27.49	31%
Tallgrass Energy Energy Partners LP	TEP	13,050,000	$21.50	5/13/13	$280.60	$38.10	77%
Phillips 66 Partners LP	PSXP	16,424,999	$23.00	7/22/13	$377.80	$65.06	183%

across multiple domestic basins.

"The assets are the most important thing," Zimmer said. "But even good assets can be poorly operated by the wrong guy. When you have smart people with good assets, it tends to be very value-creative. When we initially bought Diamondback at $17.50, we thought the stock would be worth in the high $20s. But they continue to generate so much value out of their position and their transactions, that they've pushed that price target into the $80s—and it continues to climb."

Zimmer is not concerned with the potential for unexpected changes in commodity prices.

"We don't have expectations that oil is going to move dramatically in either direction and, if that is the case, stocks like Parsley, Diamondback and Athlon would be very exciting investments with meaningful upside," he said.

An insatiable need for capital

The tight formation development cycle evolves through predictable phases from discovery and delineation, through optimization, and finally to resource harvest. The first phase may require up to 100 horizontal wells at $10 million to $13 million each to define a potential play. It may take the industry another 500 to 1,000 wells at $7 million to $9 million each to refine the recipe to exploit a given formation. Both phases require high upfront capital commitments, and individual companies invariably outspend cash flow.

As the cycle evolves to the resource harvest

Company	Ticker	Shares	Price	Date	Proceeds x $1MM	Close June 5, 2014	Post IPO Change
Midstream (cont.)							
Marlin Midstream Partners LP	FISH	6,875,000	$20.00	7/26/13	$137.50	$20.13	1%
World Point Terminals LP	WPT	8,750,000	$20.00	8/8/13	$175	$19.75	-1%
QEP Midstream Partners LP	QEPM	20,000,000	$21.00	8/8/13	$420	$24.40	16%
Western Refining Logistics LP	WNRL	13,750,000	$22.00	10/9/13	$302.50	$33.10	50%
Plains GP Holdings LP	PAGP	128,000,000	$22.00	10/15/2013	$2,816	$28.67	30%
Sprague Resources LP	SRLP	8,500,000	$18.00	10/24/2013	$153	$26.48	47%
Arc Logistics Partners LP	ARCX	6,000,000	$19.00	11/5/13	$114	$25.60	35%
Midcoast Energy Partners LP	MEP	18,500,000	$18.00	11/6/13	$333	$21.79	21%
Dynagas LNG Partners LP	DLNG	12,500,000	$18.00	11/13/2013	$225	$23.66	31%
Valero Energy Partners LP	VLP	17,250,000	$23.00	12/11/2013	$345	$45.00	96%
Cheniere Energy Partners Holdings LLC	CQH	36,000,000	$20.00	12/13/2013	$720	$25.87	29%
Enable Midstream Partners LP	ENBL	25,000,000	$20.00	4/11/2014	$500	$24.77	24%
Gaslog Partners LP	GLOP	8,400,000	$21.00	5/8/2014	$176.40	$28.89	38%
Dorian LPG Ltd.	LPG	7,105,263	$19.00	5/8/2014	$135	$20.66	9%
PBF Logistics LP	PBFX	13,750,000	$23.00	5/9/2014	$316.25	$28.54	24%
Oil Service							
Compressco Partners LP	GSJK	2,670,000	$20.00	6/15/2011	$53.40	$24.81	24%
C&J Energy Services Inc.	CJES	11,500,000	$29.00	7/29/2011	$333.50	$30.35	5%
Pacific Drilling SA	PACD	6,000,000	$8.25	11/11/2011	$49.50	$9.95	21%
U.S. Silica Holdings Inc.	SLCA	11,764,700	$17.00	2/1/2012	$200	$53.75	216%
MRC Global Inc.	MRC	22,727,300	$21.00	4/11/12	$477.30	$28.90	38%
Forum Energy Technologies Inc.	FET	22,727,273	$21.00	4/12/2012	$378.90	$33.59	60%
Hi-Crush Partners LP	HCLP	11,250,000	$17.00	8/16/2012	$191.30	$52.92	211%
Seadrill Partners LLC	SDLP	8,750,000	$22.00	10/18/2012	$192.50	$33.70	53%
USA Compression Partners LP	USAC	11,000,000	$18.00	1/14/13	$198	$25.35	41%
Emerge Energy Services LP	EMES	7,500,000	$17.00	5/9/2013	$127.50	$109.02	541%
Frank's International NV	FI	30,000,000	$22.00	8/8/13	$660	$24.27	10%
Cypress Energy Partners LP	CELP	3,750,000	$20.00	1/15/2014	$75	$23.30	17%
CHC Group Ltd.	HELI	31,000,000	$10.00	1/17/2014	$310	$7.38	-26%
North Atlantic Drilling Ltd.	NADL	13,513,514	$9.25	1/29/2014	$125	$10.77	16%
Superior Drilling Products Inc.	SDPI	6,750,000	$4.00	5/23/2014	$27	$6.05	51%
Refining & Marketing							
CVR Partners LP	UAN	19,200,000	$16.00	4/8/2011	$307.20	$18.62	16%
NGL Energy Partners LP	NGL	3,500,000	$21.00	5/12/2011	$73.50	$40.92	95%
Northern Tier Energy LP	NTI	16,250,000	$14.00	7/25/12	$227.50	$27.82	99%
Susser Petroleum Partners LP	SUSP	9,500,000	$20.50	9/20/2012	$194.80	$46.94	129%
Lehigh Gas Partners LP	LGP	6,000,000	$20.00	10/25/2012	$120	$26.90	35%
Alon USA Partners LP	ALDW	10,000,000	$16.00	11/19/2012	$160	$18.33	15%
PBF Energy Inc.	PBF	20,500,000	$26.00	12/12/2012	$533	$30.66	18%
CVR Refining LP	CVRR	24,000,000	$25.00	1/16/13	$600	$26.89	8%

Source: PLS Inc.

Upstream IPOs are in favor midway into 2014.

phase, companies generate free cash flow after mastering the engineering and operational challenges and create value as operators drill through well inventories that can be measured in the tens of thousands at $5 million to $6 million each. Industrywide, it doesn't take long to boost the domestic capital requirements to fully drill out the tight formation plays above a trillion dollars over a decade or more.

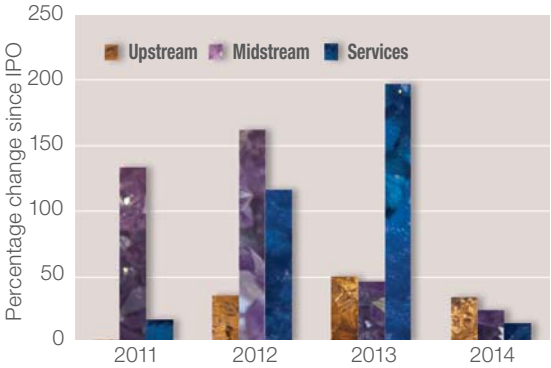
Consequently, the recent run of upstream energy IPOs is one indication that the transition to the resource harvest phase in the domestic tight formation cycle is underway, with an attendant voracious demand for capital to fund the drillout. The high potential rate of return for large investments is attracting new capital to the energy markets, such as large buyout firms like Apollo Global Management LLC.

High potential rates of return are attracting new capital to the energy markets, increasing competition.

"When you have the big private-equity firms active in the business, I believe it is really a recognition that the fundamentals of the business are attractive and the opportunity is potentially huge," Apollo's Greg Beard said, noting that the North American industry will spend more than $400 billion in 2014, with the asset divestiture markets running about $1 billion weekly on average.

"Given the size of the market and given the context of the shift that is happening, I believe the marketplace is really not over-capitalized," Beard said.

IPO Performance By Sector



Source: PLS Inc., Hart Energy

Kyle Kafka, managing director at Houston-based EnCap Investments LP, said the expansion in capital availability reflects a diverse and dynamic market. The Houston-based private-equity firm has invested more than $10 billion in 200 energy companies since 1988 and realized investments on 160 firms.

"You're seeing significant interest from the larger, more generalist firms," he said. "Those firms are full of smart people, and they recognize that the energy industry currently represents a great opportunity to generate strong risk-adjusted returns, so they've dedicated capital to the space. Where we play and where the larger buyout firms play is often a slightly different portion of a company's evolution. We're still largely backing management teams from a cold start to accumulate assets and build them to a certain level."

Kafka continued: "Typically, the larger buyout firms are making investments in a going concern and providing growth capital to a business that is already established. In a lot of instances, they prefer to play in a slightly different portion of a company's evolution. There is not as much overlap as you might think."

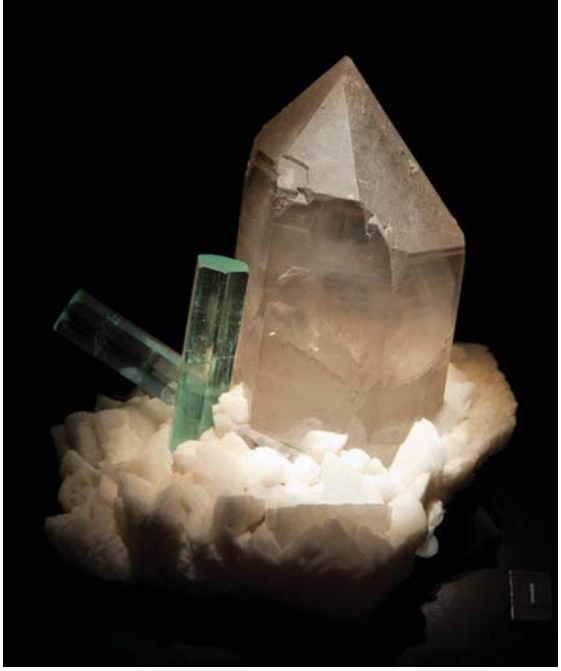
NGP's Tony Weber acknowledged the perennial funding gap in North America as the industry turns to tight formation development. That gap requires outside funding.

"From 2006 to 2013, private equity accounted for 10% to 12% of the industry's capital funding needs," Weber said. "Could that number go up to 15% or 20%? It probably could. In sum, we will need an 'all of the above' answer for capital sources to fund our industry going forward, whether it is capex or the mergers and acquisitions market. We need capital from industry participants; we need it from foreign joint venture partners; and we need it from the debt and equity markets."

Diversity in capital sources provides the catalyst to move the industry forward as the tight formation cycle unfolds in basins across North America.

"If you are a seasoned management team that is looking for a half billion to one billion dollars from a sponsor, there is certainly a place to go and get that," Weber said. "However, if you are a management team that is between 30 and 35 years old, and you've had one or two experiences with your previous employers and want to be in two or three counties in West Texas, there is also a place to go for that capital."

Weber noted that NGP is comfortable visiting the coffee shops in places like Midland and Tulsa, providing financing in sub-$50 million capital commitments to young, technologically savvy, entrepreneurial management teams, which are often the focus of today's energy IPO trend.



Top-quality asset portfolios and management teams have allure.

Runners take your mark

There were no properties, revenues, or legacy assets in hand in August 2010 when former Encore Acquisition Co. and Encore Energy Partners CFO Bob Reeves assembled the four-member team that became Athlon Energy Inc. But the start-up had a specific operating strategy when the team began soliciting backing from private equity: focus on rate of return.

"For us it always starts with acquisitions," Reeves, Athlon's chief executive, told attendees at the 2014 DUG Permian Conference in Fort Worth in May.

"Then we're trying to develop that acquisition. We're trying to drill at a lower cost while maximizing estimated ultimate recovery and drive up the rate of return. We try to be low-cost operators by installing the proper infrastructure, whether saltwater disposal systems or gathering lines, and reducing that lease operating expense [LOE] and keeping the balance sheet safe and sound through hedging and prudent capital management."

Athlon is the initial member of the class of upstream energy IPOs that electrified the upstream IPO market after August 2013. The company illustrates what investors value when it comes to raising money in the public capital markets.

In late 2010, the team landed $200 million in funding from Apollo Global Management and acquired 18,000 acres prospective for the commingled Wolfberry play in the northern Midland Basin. To get started in a well-established basin with long-lived reserves, Athlon employed the novel approach of acquiring deeper rights beneath existing shallow production. The young management team was aware of the initial horizontal Wolfcamp Shale tests in the southern Midland Basin and was looking to get ahead of the play.

The Wolfberry came to life over the past decade when operators began drilling vertically through the Spraberry and Dean formations into the Wolfcamp Shale, fracture stimulating multiple geological targets and commingling production. Athlon took the process a step farther, extending vertical wellbores deeper with a three-rig program that tested underlying forma-

Kyle Kafka, managing director at EnCap Investments LP, said the expansion in capital availability reflects "significant interest from the larger, more generalist firms."

tions such as the Atoka and Mississippi Lime.

Drilling and completion expertise were essential as the company sought to capture acreage through production.

"In 2011, I had a $22 million funding gap and I only had $10 million in liquidity," Reeves told Hart DUG Permian attendees. "We were living paycheck to paycheck and going back to our banks every three months. If we did not drill properly, our borrowing base did not go up and we did not have enough funds to cover what we had committed."

Athlon approached a mature play with a fresh set of eyes, demonstrating operational expertise as it switched to larger casing and higher volume slickwater fracs. The company tailored its completion recipe to each individual well, but generally employed larger proppant volume, additional stages and more perforation clusters—knowledge that later proved valuable when transitioning to horizontal drilling.

The focus on completion engineering improved rate of return for the young, privately held management team, and Athlon became a top performer when measured by 90-day average production versus neighboring peers in the Permian Basin counties in which it operated.

That execution success prompted Apollo Global Management to double down with an additional $200 million in capital, enabling Athlon to acquire another 35,000 net acres on the east side of the Midland Basin in 2011

The most instructive metric identifying positive trend lines in IPOs is trailing 12-month totals, according to Sean Levine, senior capital markets analyst at PLS Inc.

ADDING IT UP: $28 BILLION IN ENERGY IPOs—AND CLIMBING

Public capital markets are funding upstream start-ups as execution stories, often in the form of IPOs as the oil and gas industry enters the resource harvest phase of the tight formation lifecycle.

From January 2011 through midyear 2014, upstream IPOs generated $11.8 billion, roughly 41% of energy sector IPO proceeds. Significantly, more than 41% of that funding, dollar-wise, occurred in the last 12 months.

That's one reason the most instructive metric identifying positive trend lines in IPOs is trailing 12-month totals, according to Sean Levine, senior capital markets analyst at Houston-based PLS Inc., an energy property brokerage and publishing firm.

"For upstream, we're at four IPOs to date in 2014," Levine said. "But the move in upstream really started in the second half of 2013. If you look year on year, 2013 saw $2.5 billion in upstream IPOs. It is $2.9 billion already year-to-date in 2014.

"However, if you look at the trailing 12 months, upstream IPOs have generated $5 billion. The preceding trailing 12 months, second-half 2012 through first-half 2013, saw only $1.4 billion, so activity has more than tripled in the upstream IPO market."

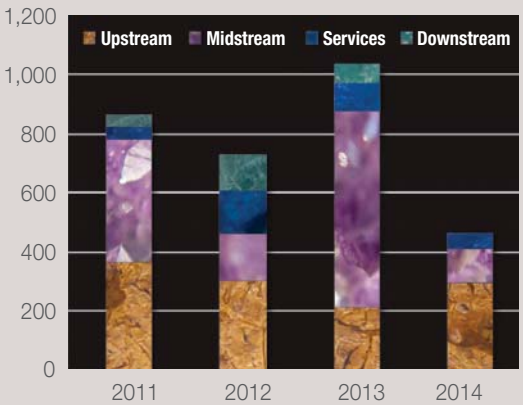
Levine said public capital markets have been receptive to energy IPOs in comparison to other industrial sectors. "The number of energy IPOs is pretty middle of the pack—fifth out of 10 over the past 12 months—but the positive is you are a lot more likely to price within the expected range. Eighty-two percent of energy IPOs priced within or above range and 30% priced upside, which is more than any other sector."

The amount of capital raised in energy IPOs—more than $28 billion since January 2011, according to PLS—speaks to the enormous capital requirements energy faces not only in drilling and completing tens of thousands of new unconventional wells, but also for transporting hydrocarbons from where they are found to where they are needed.

When it comes to energy, the midstream sector has been the shining star in the IPO market, both in terms of the number of IPOs since 2011 and in the proceeds raised via the public capital markets. The $13.4 billion generated via 30 midstream IPOs since January 2011 represents 47% of the $28.6 billion raised in the public capital markets by oil and gas companies, according to PLS. The two largest midstream IPOs, Plains GP Holdings LP and Kinder Morgan Inc., both general partners of multibasin midstream infrastructure, represent 42% of the total dollar volume in the midstream sector since January 2011.

Financing oil and gas infrastructure development has been the untold story of the rev-

Energy IPOs By Sector



Source: PLS Inc., Hart Energy

The midstream sector has dominated the energy IPO universe since 2011 as the oil and gas industry seeks to build out infrastructure connecting rising tight formation production to markets. However, the upstream has made a consistent run since 2011 and dominated the space dollar-wise in first-half 2014.

and increase its vertical drilling program to six rigs split between both sides of the Midland Basin.

When Athlon went to the public equity markets in August 2013, it fit the profile of what investors found attractive in the new tight formation era. Technical expertise: check. Pure play acreage in a stacked formation play: check. Operational expertise as evidenced by out-performance versus peers in a repeatable play: check. Successful acquisitions: check. Running room with the transition to horizontal delineation and development: check.

Athlon priced on the public equity markets on August 1, 2013. But even the best-laid plans can use a timely assist. On July 31, 2013, Pioneer Natural Resources Co. released results from its DL Hunt C#2H well outlining a 24-hour initial production (IP) rate of 1,712 barrels of oil equivalent per day (boe/d), the first successful Wolfcamp A horizontal test on the west side of the Midland Basin. That same day Energen Resources Corp. announced results for the Lavaca 38#101H horizontal test of the Wolfcamp A in Glasscock County on the east side of the Midland Basin with a 24-hour IP of 851 boe/d.

Energen's stock rose 10% following the announcement; Pioneers' rose 13%. Both wells were in the same general West Texas zip code as Athlon's acreage. The horizontal Wolfcamp had come to the northern Midland Basin.

"We did our IPO the next day," Reeves said. "The price of our shares was set on August 1.

CEO Bob Reeves assembled the four-member team that became Athlon Energy Inc., the initial member of the class of upstream energy IPOs electrifying the market since August 2013.

olution in oil and gas. On a trailing 12-month basis, midstream IPOs generated $7.2 billion in proceeds as of mid-May 2014 compared to $1.7 billion during the preceding trailing 12-month period.

"The popularity of master limited partnerships as an investment vehicle is evident, post financial crisis," Levine said. "With MLPs you get yield on distributions, but you can also get an increase on the share price and that's been a big part of what has helped midstream. There is also the authentic need. Parts of the country that don't have well-developed infrastructure have a need. That idea is percolating through the whole midstream segment and helps everywhere."

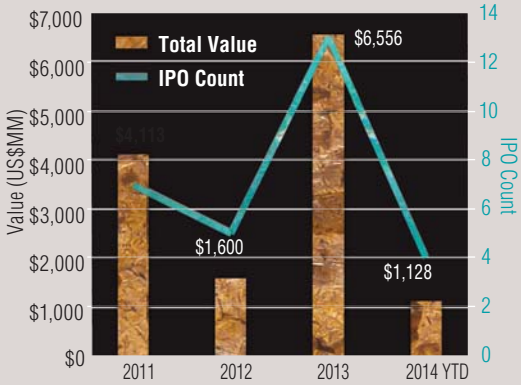
The midstream IPO market has evolved away from gas pipeline infrastructure to oil pipelines, rail and truck terminals and processing over the last four years as the basis differential for natural gas collapsed from a flood of production in the horizontal shale plays.

Energy IPOs also fit within a larger narrative. Initially, domestic oil and gas operators relied on financial backing from foreign partners in the form of joint ventures during the land grab, acreage capture and early optimization efforts in the tight formation development cycle from 2006 to 2011. Between 2006 and 2013, U.S. oil and gas firms attracted an announced $46 billion in joint venture capital for the Marcellus and Eagle Ford shale plays and for development in the Permian Basin and Midcontinent.

More recently, oil and gas operators accessed the capital markets in the form of high-yield debt, or resorted to selling legacy assets and spinning off midstream assets to bridge the funding gap between oil and gas development and actual cash flow. Estimates vary, but domestic capital spending exceeds $165 billion annually even without another billion dollars weekly, on average, in mergers and acquisitions.

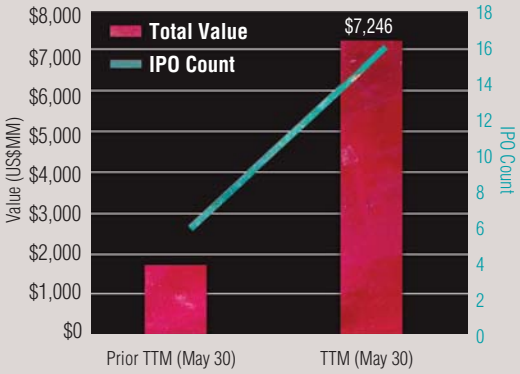
Raising the capital to fully build out tight formation oil and gas development and the infrastructure to get it to market is evolving. For example, upstream energy IPOs peaked at $3.68 billion in 2011 when the main driver involved the debut of energy trusts, which packaged production for investors and provided badly needed capital to pursue land acquisition and acreage capture for established oil and gas firms. Examples include the SandRidge Energy Inc. Mississippian I and II trusts, and Chesapeake Energy Corp.'s Granite Wash Trust. Energy trusts accounted for 45% of the $6.74 billion raised in the public equity markets in 2011-2012.

Midstream IPOs



Midstream IPOs had a banner year in 2013 with 13 issues generating $6.5 billion in capital in the public capital markets. However, over the last trailing 12 months through June 1, 2014, there were 16 deals total generating $7.2 billion in proceeds.

Midstream Trailing 12-Month IPO Count And Value



Source: PLS Inc.

The run can continue, as long as the public capital markets find oil and gas equities compelling.

We set at $20 per share. That was the high end of our filing range. The next day our stock traded up 38%, and the transaction was 10 times oversubscribed. That was just institutional and not retail."

Athlon raised more than $360 million in the offering. Over the next nine months, the pace of upstream energy IPOs quickened, with Antero Resources Corp. and Rice Energy Inc. in the Appalachian Basin and two more Permian IPOs—RSP Permian Inc., and Parsley Energy Inc.—following in 2014. The upstream sector assumed the IPO leadership mantle from the yield-oriented midstream sector, which had dominated the public capital markets in 2011 and 2012.

"People forget how difficult an environment it was for upstream E&Ps over the last five years," Reeves said. "It wasn't that simple to go out and raise these IPOs as a C-corp. It was an extremely challenging environment. Only three of 11 IPOs priced at the midpoint or better—just three—and the average pricing was 12% below the midpoint."

The IPO followed a series of 2013 inflection points for Athlon. Vertical drilling operational expertise began generating substantial cash flow and more liquidity as rates of return increased to 45% in the western Midland Basin and to 35% in the shallower eastern Midland Basin. Additionally, the rate of return for horizontal drilling began exceeding return rates from vertical wells. Athlon has $725 million budgeted for capex in 2014 and seeks to parlay its vertical drilling expertise to horizontal Wolfcamp exploitation. The technical team has fracture stimulated more than 3,500 stages on 350 vertical wells. Will that expertise transfer to horizontal drilling? To date, the company has released data on its first five horizontal tests, which averaged rates of return of more than 85%.

Meanwhile, the company has spent $973 million on six acquisitions in 2014 and now has 134,000 net acres and an expanding Midland Basin drilling inventory.

The question arises as to whether the stellar run in IPOs over the last 12 months has been a circumstance of the market, or whether the trend has running room.

"Public markets can be fickle, but as long as public capital markets have a desire to own these equities, the run will continue," said EnCap's Kyle Kafka. "The capital requirements of the industry today are enormous. Once a private-equity-backed company has captured and 'proven' a significant resource base, an IPO can represent a very attractive way to raise capital to develop the asset."

Do's and don'ts

With an abundance of private-equity capital and other funding available to build significant businesses in oil and gas, management teams are finding the IPO approach an attractive option to build out upstream and midstream development in the tight formation era.

"Exit strategy is important," Pine Brook's Rich Aube said. "In terms of the do's,' I would say: do think about it often. Do plan for it. Do be willing to change as your business plan or as your assets dictate. Few business plans survive contact with the enemy. Do know what your company is worth, to you and to others. Finally, do create something of value and plan to do a fair deal at the end, either with a smart buyer or with the public markets with the emphasis on doing a fair deal."

Aube outlined a couple of don'ts.

"Don't let exit strategy or a monetization event drive you to make myopic decisions. Don't, with respect to an exit strategy, rely on a narrow set of outcomes or plan your business to a point. It would be a mistake for people to be thinking about starting a business today and relying on a robust public market, because that may not be there."

Richard Stoneburner, a senior advisor for Pine Brook's energy team, has looked at the

Richard Stoneburner, senior advisor for Pine Brook's energy team and former COO at Petrohawk Energy Corp., said successful investment firms and management teams are the ones that can roll with the punches.

issue from both the private-equity and the E&P management side.

"You typically have a management team that has an exit strategy in mind from the outset, but rarely does it materialize the way you envision," said Stoneburner, who was chief operating officer at Petrohawk Energy Corp. when that company sold for $15 billion to Australian mining conglomerate BHP Billiton in July 2011. Stoneburner later served as president of BHP's North American shale division. "That's just the nature of our business," he said. "Things change. You have success here, failure there. Successful investment firms and successful management teams are the ones who roll with the punches.

"When we started Petrohawk, we had a different strategy in mind than what we ended up with. But being able to navigate that strategy relative to commodity prices or relative to opportunity sets, that's where the combination of an investment company and a management team optimizes value by being able to take an approach and make changes that are appropriate throughout the lifecycle of the investment."

NGP Partners Tony Weber pointed to the uncertainty of the oil and gas cycle, coupled with volatility in the public capital markets.

"Capital markets open and close," Weber said. "And while the markets have been very receptive in recent months, they will not be open forever. You can't be single minded about simply going public—it's just one means to an end.

"It's very complex. You certainly need the proper technical expertise to build an operating company, but you must also have the land, the legal, the finance and the accounting buttoned up in order to even approach the marketplace. If you don't have all of those disciplines well-covered, you will have challenges completing an IPO and thriving as a public company. So you better be prepared from each of those perspectives well ahead of time, so that you can access the capital you need to grow your business. And that means planning. You better pick the right financial sponsor and have that exit strategy in mind years in advance, so that you have the proper financial, tax and legal structure to create those capital market options in the future. And then you better be properly staffed."

Dr. Jay Ritter, the Cordell Professor of Finance at the University of Florida's Warrington College of Business Administration, has authored several dozen articles on trends in the IPO market. He offers practical advice for management teams who are considering an IPO.

"Be careful in negotiating with investment bankers," he said. "What is best for investment bankers is not always best for the issuing company. The second point—and just about every company thinks about this: are we better off as an independent company by going public, or is the value-maximizing strategy to sell out? Some companies are in a niche where there are economies of scale or economies of scope where being part of a bigger organization can create more value selling out rather than remaining independent."

A rising number of entrepreneurial management teams, standing at the threshold of disruptive change in the tight formation oil and gas era, are finding that answer in the public equity markets. □

Dr. Jay Ritter, the Cordell Professor of Finance at the University of Florida's Warrington College of Business Administration, advises that what is best for investment bankers is not always best for the issuing company.

Energy IPOs are the jewels in investors' portfolios of late.