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FEATURES

Keep Investing In Infrastructure



Source: Privcap

William Brilliant, Global Infrastructure Partners; Logan Burt, Morgan Stanley; Brad Thielemann, EnCap Investments; and Nate Walton, Ares Management; speak at Privcap Game Change 2018 in Houston.

TERRANCE HARRIS

HART ENERGY

OUSTON—With renewable energy and the growth of electric vehicles set to affect the oil market, there are some legitimate concerns about what the future looks like in terms of investing in the industry.

No one can say for sure what the changes will be in 10 years, but a group of panelists during Privcap'sGame Change conference on Dec. 5 said investing in oil and the infrastructure into the next decade remains safe.

It's beyond 2030 when the impact of the change in energy consumption will be felt.

"The next 10 years I don't think people have that big of a concern the demand destruction," said Nate Walton, who is partner and co-head of North America Private Equity Ares Management and the son of NBA legend Bill Walton. "If you look at most global forecasts whether it's BP, Shell or any of the consulting firms 2030 is generally when the curve starts

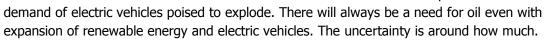
HARTENERGY 2

INVEST From Page 1

to bend.

"The only question is, does that curve start to bend in 2030, 2035, 2040 and at what velocity? But over the next 10 years, if you are an investor, you have to forecast that with limited data. So you will see every year people trying to extrapolate electric vehicle penetration and then make 10 to 20 year assumptions because that will eventually affect the long-term demand."

But nonetheless there is concern about what the future looks like as investors consider their options with the



"I think the big questions around oil demand is what is going to happen to the transportation fleet and what impact does that have on the consumption of oil," said William Brilliant, who is a partner at Global Infrastructure Partners. "That's a risk to the demand side. I think the support for oil demand is increasing standards of living and just and demographic trends around the world, largely centered off growth in Asia.

"As for where do we see the demand for oil in 10 years, I won't give a number but I will say that everything we see suggests that you still have a growing oil market for the next decade. When you look at those counter balancing forces you see more on the growth and demand side



than you do on demand destruction."

For now, however, the business of investing in infrastructure even in a volatile oil market is still good. Brilliant, along with the rest of four-member panel, seemed to agree that this is pretty compelling time to invest in the oil industry.

"There are robust opportunities. Certainly the price of oil is volatile," Brilliant said two days before OPEC cut the world's oil supply by 1.2 million barrels per day. "The underlying fundamentals are you've got a change, a shift in terms of supply and being balanced over time."

What was interesting is that the panel cautioned against bargain basement shopping during this time of volatility and uncertainty. They all agreed that assets worth having are not being given away for cheap.

That much was learned in the previous oil downturn.

Honorees For Women In Energy Luncheon

The editors of *Oil and Gas Investor* are pleased to announce the 25

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Influential Women In Energy honorees. These outstanding professionals will be recognized at the second annual **Women In Energy Luncheon** February 12, 2019, at the Hilton Americas, Houston.

The 2019 Pinnacle Award will be presented to **Dr. M. Katherine Banks, Texas A&M University's Vice Chancellor of Engineering and National Laboratories**. Presented by Schlumberger, the Pinnacle Award recognizes

Banks for her dedication to future engineers. Banks leads one of the largest engineering schools in the country, with more than 16,900 students and 500



faculty. She serves as Dean of Engineering, University Distinguished Professor and holder of the Harold J. Haynes Dean's Chair in Engineering.

Banks is also the director of the Texas A&M Engineering Experiment Station (TEES) where she has overseen research administration for 4,800 research projects and \$208 million in sponsored research. Her dedication has helped position Texas A&M engineering students at the forefront of today's industry. — HART ENERGY

HARTENERGY 3

FRAC SPREAD

Kansas Ethane, I've A Feeling We're Not In Single Digits Anymore

JOSEPH MARKMAN | HART ENERGY

The ethane price spread between the Mont Belvieu, Texas, and Conway, Kan., hubs has narrowed to just over a nickel last week from nearly 23 cents per gallon (gal) in early June.

Since its six-week tumble from almost 51 cents/gal in mid-September to 31.5 cents/gal in late October, the Mont

Change from Start of Week -41.05% 18.74% 24.64% 21.06% 1.54% 5.11%	Mont Belvieu 30.38 29.28 1.10 71.15 40.45 30.70 79.28 45.80 33.48 87.60 43.99 43.61 106.65 48.98 57.67	7.609 32.469 8.249
24.64% 21.06%	29.28 1.10 71.15 40.45 30.70 79.28 45.80 33.48 87.60 43.99 43.61 106.65 48.98 57.67	7.609 32.469 8.249
24.64% 21.06%	1.10 71.15 40.45 30.70 79.28 45.80 33.48 87.60 43.99 43.61 106.65 48.98 57.67	7.609 32.469 8.249
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J.11/0	26.88	3.009
	16.13	
19.04%	10.75	13.589
-1.99%	4.42	-3.029
20.37%	24.86	13.129
u (Basket Value)		
7.57%	1.67	-3.65%
5.70%	2.47	1.309
8.12%	0.86	9.359
9.35%	0.55	2.28
7.0070	1.38	6.569
-0.22%	1.00	2.049
6 9	6 8.12% 9 9.35%	6 8.12% 0.86 9 9.35% 0.55

Price, Shrink of 42-gal NGL barrel based on following: Ethane, 36.5%; Propane, 31.8%; Normal Butane, 11.2%; Isobutane, 6.2%; Pentane+, 14.3%, Fuel, frac, transport costs not included. Conway gas based on Midwest region, Mont Belvieu based on Houston region. Shrink is defined as Btus that are removed from natural gas through the gathering and processing operation.

Belvieu ethane price has held fairly steady. The average during that six-week span is 31.14 cents/gal, while the past week's price is 30.38 cents/gal, down 3.65% from last week.

But Conway's price, which suffered a six-week string in the single digits during the summer, averaged 25.3 cents/gal in the past week, its highest level since the tracking week ending June 25, 2014, or nearly 54 months. As recently as 10 weeks ago, the Conway ethane price languished at less than 11 cents/gal. It has soared 135.3% since

then and 27.2% in the last two weeks alone during its six-week upward trajectory.

Despite the price improvement, Conway's ethane margin is still in the negative, although it improved to -3.4 cents/gal in the past



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week. Mont Belvieu's margin continued to slump, averaging just over 1 cent/gal.

In a promising development for NGL on Dec. 11, an administrative law judge with the Pennsylvania Utilities Commission tossed a petition by residents of Delaware and Chester counties requesting an emergency shutdown of Sunoco's Mariner East pipelines. The suit was the latest in an ongoing effort to upend the Mariner East project, which consists of Mariner East 1, Mariner East 2 and Mariner East 2X. Mariner East 2 is scheduled to go into service before the end of the year.

Judge Elizabeth Barnes ruled that the

petitioners failed to show the likelihood of a fatality as a result of an accidental leak on the Mariner East projects, indeed even admitting that the chance of such a fatality was small. Sunoco, however, was able to convince Barnes that it would be financially hurt if the pipelines were shut down.

While the emergency shutdown request was rejected, a formal complaint to permanently shut down the lines remains before the judge. Whether it will go forward is uncertain as a result of the ruling on the emergency petition.

Midstream's Next-Gen Technology

OKLAHOMA CITY—As instances of stress corrosion cracking persist, the established Electromagnetic Acoustic Transducers (EMAT) system is still the preferred pipeline inspection technology.



The EMAT essentially generates an ultrasonic pulse into the test subject indicating, or not, an occurrence of cracks or coating disbondment. Although the crack and coating detection technology has been around since the early 2000s, companies like The Williams Cos. Inc. (NYSE: WMB) are still seeing the system emerge and transcend.

"EMAT technology is not new technology, however what's really changing right now is the wide acceptance and application to pipeline infrastructure and being able to use the highest and best technology to find those things that are hidden and difficult to locate before they rear their head and become an incident," Amy Shank, director of pipeline safety and asset integrity at Williams, said on a midstream panel at Hart Energy's DUG Midcontinent conference and

TO READ MORE ONLINE exhibition in November.

Shank said that through the EMAT system Williams has been able to tackle stress corrosion cracking, cut costs, optimize usage and safety of personnel, and assess the productivity of its 33,000 miles of pipeline across all its hubs in the U.S. -MARY HOLCOMB | HART ENERGY

Setting Sales: Companies That Push Out Exports



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As 2018 draws to a close, the U.S. is exporting an ever-larger percentage of its crude oil, natural gas and petroleum product output. More infrastructure—docks, terminals, liquefaction plants, gas storage, rail sidings, etc.—are needed to handle the tankers and pipelines used to transport these swelling volumes.

Midstream Business profiles here some of the key exporter players, five traders and five operators, whose business spans the globe. International trade takes a large chunk of their market.

According to data from the website Trading Economics, in 2017, the value of exported mineral fuels, oils and distillation products topped \$200 billion—\$201.65 billion, to be exact.

-ERIN PEDIGO | HART ENERGY

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