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## 2016 oil and gas industry survey

Optimism emerges in the aftermath of a long downturn

Deloitte Center for Energy Solutions

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Note: Data response totals are subject to rounding error. Those questions allowing multiple responses will not add up to 100%.

## About the study

Deloitte, together with the research firm Harrison Group, a YouGov Company, has completed the 2016 US oil and gas industry survey (the "2016 study" or "study"). The study uncovers the outlook of oil and gas professionals across all sectors of the industry for the near term and the next few years. The findings cover survey respondents' expectations for the rest of 2016 and 2017 for:

- US and global economic growth
- Oil and gas commodity prices
- Impacts to revenue

High school or less

College/university

Graduate degree

school

Technical/vocational

- Capital expenditures
- Cost containment initiatives
- Challenges and opportunities ahead
- Corporate consolidations

#### Figure 1. Oil and gas industry professionals we talked to

2016

6%

8%

49%

37%

and gas industry professionals we talked to

20-minute online interviews with 251 oil and gas industry professionals completed June/July 2016

Industry experience	2016
5-10 years	37%
11-15 years	14%
16-20 years	11%
21-25 years	7%
26-30 years	8%
31+ years	24%
Average years' experience	19.3

Respondent	profile
------------	---------

2016	
61%	
32%	
32%	
33%	
10%	

Number of employees	2016
Less than 250	24%
From 250-1,300	24%
From 1,300-7,500	27%
More than 7,500	25%

The study was conducted in June and July 2016. It reflects the opinions of oil and gas professionals experiencing a prolonged industry contraction initiated by low commodity prices. It is based on 251 twenty-minute interviews with industry professionals, who have experience ranging from five to over thirty one years, and from all four oil and gas industry subsectors: upstream, oilfield equipment and services, midstream, and downstream.

Across the value chain, and across all demographics, one common theme stood out: Cautious optimism is building.

## Introduction

The findings of the Deloitte US oil and gas industry survey frame the narrative of an industry navigating through a challenging business environment significantly impacted by low commodity prices. As the oil and gas industry enters a third year of this price downturn, cautious optimism best describes the sentiment for an industry recovery in 2017 and beyond. Most professionals expect oil prices to return to at least \$60-80 per barrel by 2017, a level at which respondents indicate investment activity could recover. Until then, they indicated cost containment initiatives remain the main priority.

Renewed confidence for an industry recovery was primarily evident in expectations of rising prices but also for a return to increasing capital expenditures and headcount. Wariness about geopolitical and regulatory influences was a common concern, but the growing liquefied natural gas (LNG) sector and newly privatized Mexican energy sector were thought to offer some positive opportunities.

### The big picture—Current and future outlook for the oil and gas industry

The oil and gas industry's success has always been centered on geology and engineering. Over the last two years, however, above ground risks have outweighed below ground risks, primarily affecting oil prices and production. The oil price collapse began in June 2014. It escalated by the end of that year when OPEC, led by Saudi Arabia, elected to reverse its historical swing producer policy, and it attempted to recapture market share by maintaining production levels after world crude oil demand growth faltered. Oil inventories rose dramatically and non-OPEC production declines in some countries did little to curb excess supply.

Natural gas production had been growing for several years before unconventional oil supply growth took off in the United States. This occurred as new technology unlocked heretofore uneconomical and difficult to access shale gas resources. At the same time, LNG developments around the world unlocked stranded gas in places like Australia, Papua New Guinea, and Qatar, to develop more natural gas than the US and global markets could readily absorb in the near term. With both oil and gas in their current state of oversupply, rising US and global demand will be needed to support a price recovery over the next years. Sustained global economic growth will be key.

## Can US and global economies support oil and gas demand growth?

#### The rest of 2016 and 2017

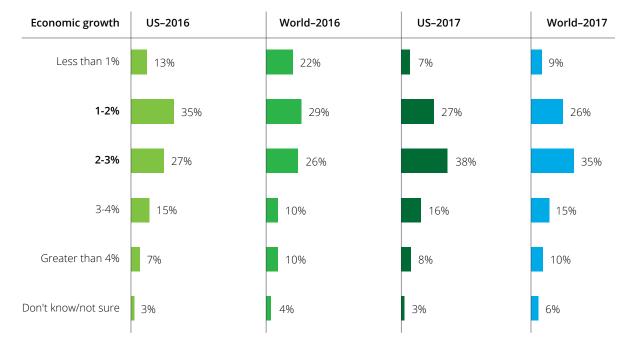
A majority of survey respondents believe real gross domestic product (GDP) growth for the United States (35 percent) and the rest of the world (29 percent) will be only one to two percent until the end of 2016. The outlook for slower economic growth in this range for the United States and the world may be the result of projecting recent past growth rates on to future growth rates. A somewhat smaller, more optimistic group anticipates US (27 percent) and world (26 percent) real GDP growth to be in the two to three percent range.



Over the last few years, US and world real GDP growth rates have slowed, dampening expectations for a return to long term real GDP trajectory norms. Since the third quarter of 2014, US real GDP growth fell from an annualized growth rate of five percent to a near zero rate of .08 percent in the first quarter of 2016. In tandem, world real GDP growth has slowed to around 2.4 percent since 2012, much less than the benchmark three percent growth rate commonly forecasted by global economic research entities such as the International Monetary Fund (IMF).<sup>1</sup>

After declining for the last 18 months, economic growth for the United States began accelerating in the second quarter of 2016 to a 1.2 percent annualized

growth rate. The outlook for 2017 improves as some respondents shifted their expectations upward from a one to two percent to a two to three percent growth rate.<sup>2</sup> Those anticipating two to three percent real GDP growth for the United States (38 percent) and the world (35 percent) are in line with average projection rates published by the US Federal Reserve and the IMF. The Federal Reserve projects US real GDP growth to be about two percent to the end of 2016 and 2017.<sup>3</sup> The IMF projects world real GDP growth to be 2.5 percent for 2016 and 2.9 percent for 2017.<sup>4</sup> Clearly, a majority believes that real GDP growth correlates closely with the recent past for 2016, but for 2017, more respondents agree with published forecasts in being somewhat more optimistic.

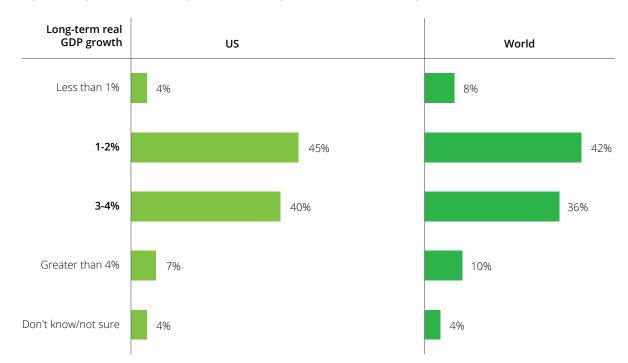


#### Figure 2. 2016 is expected to conclude with 1-2% real GDP growth

## Beyond 2017—Long-term economic growth for the United States and the world

Longer-term economic growth projections, however, are a bit less optimistic for a majority of the industry professionals surveyed. The percentage of respondents anticipating one to two percent US real GDP growth rose from 27 percent for 2017 to 45 percent for the years beyond. The US Federal Reserve also projects long-term real economic growth in the range of 1.6-2.4 percent, similar to this cohort.<sup>5</sup> For world real GDP growth, those seeing a range of one to two percent, jumped from 26 percent for 2017 to 42 percent for subsequent years. In contrast, the IMF is more optimistic, projecting the years beyond 2017 to sustain slightly above three percent real GDP growth.<sup>6</sup>

At the other end of the spectrum, respondents expecting long-term economic growth in the more robust three to four percent range for the United States and the world includes 40 percent and 36 percent of respondents respectively.

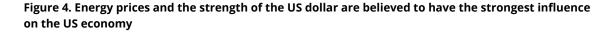


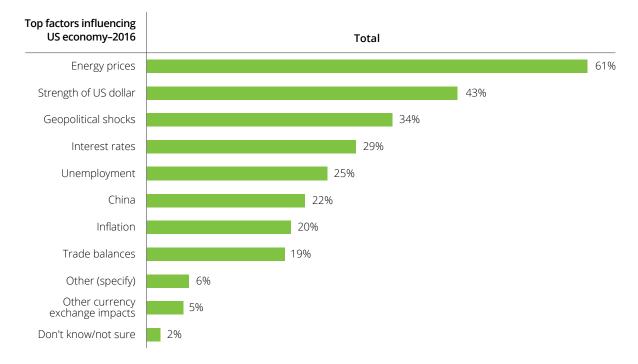
#### Figure 3. Expectations for long-term real GDP growth close to current growth rates

Expanding economic activity for the United States would be positive for the oil and gas sector's recovery.

#### Oil and gas price recovery

Energy prices dominated the list of factors influencing the economy, followed by the strength of the dollar. Historically, low oil and gas prices stimulated aggregate demand in the United States, helping to stabilize and accelerate a faltering economy. Recently, contraction of the oil and gas sector has weighed on the US economy more so than the stimulative effects of low commodity prices, as a result of activity cutbacks and employment contraction right through the oil and gas supply chain. Survey respondents cited the strength of the dollar as the second most influential factor on the US economy. Since July 2014, the US dollar has strengthened against the trade-weighted broad index, coinciding with the initial oil price collapse, and it remains higher in the second half of 2016 than it did during the 2008 recession. Oil is traded in US dollars, making it vulnerable to changes in its relative value, but other sectors of the economy, with products or services competing in the global marketplace, have been hardhit as well.



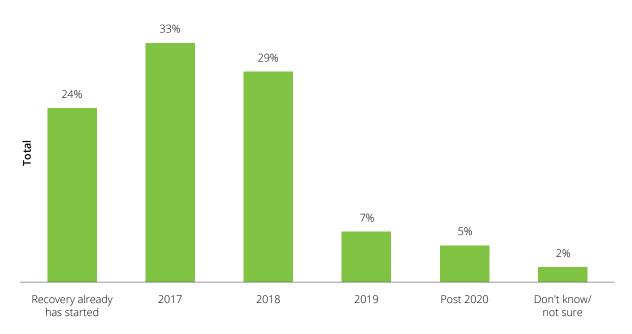


## Cautious optimism returns

#### An industry recovery

When oil prices began deteriorating in June 2014, upstream producers initially delayed drastic costcutting measures normally associated with past oil price downturns, such as reducing personnel and down cycling drilling activities, likely because oil prices tend to be volatile and storage levels corresponded to historically high oil prices. However, after OPEC met in December of 2014 and announced that cutting production in response to falling demand would no longer be the group's policy, prices collapsed. Few expected the downturn to be still ongoing by mid-2016. The study found optimism, however cautious, has returned for an industry recovery, tied directly to oil prices, expected to return to a level high enough to restore profitability and growth by next year.

The majority of respondents (33 percent) anticipate the recovery will begin in 2017, while two, somewhat smaller groups believe the recovery has already begun (24 percent) or will begin in 2018 (29 percent). In total, 86 percent of professionals believe the oil and gas industry is close to a restart sometime in the next two years.



#### Figure 5. The next two years will bring rising prices and an industry recovery say most respondents

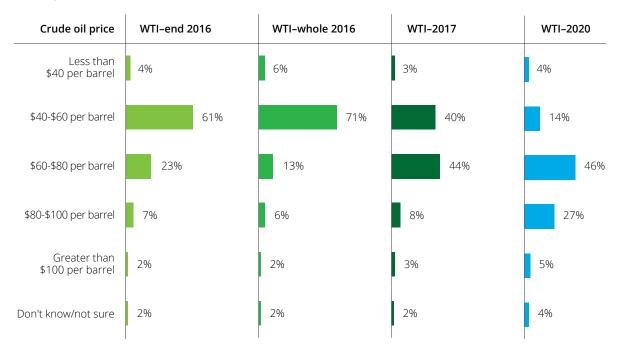
When will prices and industry start to recover?

## Oil and gas prices are headed up

#### West Texas Intermediate (WTI) prices

A price of \$60 per barrel is an important boundary line in most people's view, in order to be able to revive oil and gas exploration and production activity in the United States. It is possible to reach a \$40-60 per barrel range as an average price for all of 2016, say 71 percent of professionals, or at least by the end of the year (61 percent). Otherwise, a higher price bandwidth of \$60-80 is attainable by 2017 (44 percent) or by 2020 (46 percent).

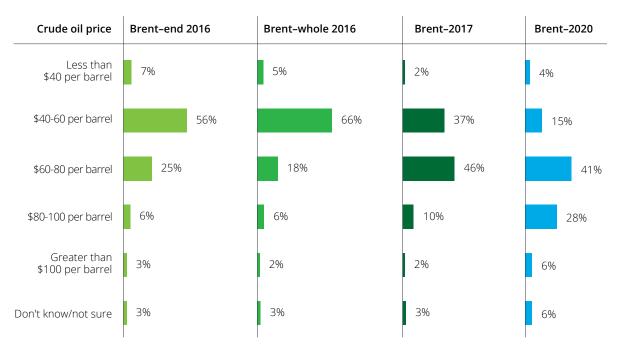
## Figure 6. WTI seen to be in the \$40-60 per barrel range in 2016 but expected to rise during the next year and beyond



#### **Brent prices**

Brent prices for crude oil track closely with WTI; so, it is no surprise the findings of the survey are similar to WTI prices. The survey found slightly less optimism that Brent prices would reach \$40-60 by the end of this year, or by 2017 and beyond. For both WTI and Brent, a majority believe a range of \$40-60 is possible in 2016 and \$60-80 by 2017. A large majority do not foresee crude oil prices returning to \$80-100 for WTI and Brent over the next three years; but, after 2020, more than a quarter think it is possible.

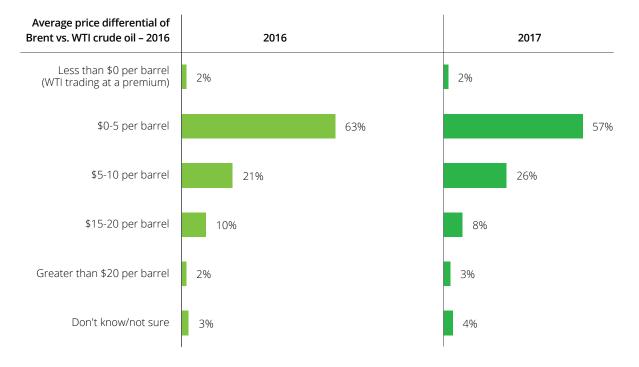
#### Figure 7. Brent could settle in the \$40-60 per barrel range in 2016 but potentially rise to \$60-80 in 2017



#### The difference between the two

The historical price differential between WTI and Brent has closed significantly since January 2016. Crude oil has become more fungible, since the 40-year US export ban was lifted in December 2015. Although less than a year has passed, the spread averages around \$0.30 under Brent including movements between plus and minus \$1. Oil and gas professionals were largely in agreement that the WTI-Brent price differential for 2016 and 2017 would be between \$0-5, a continuation of 2016's trend.

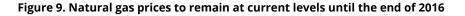
#### Figure 8. Differentials between Brent and WTI thought likely to stay under \$5

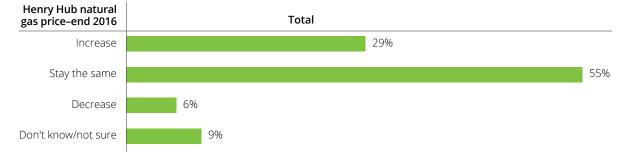


#### **Natural gas prices**

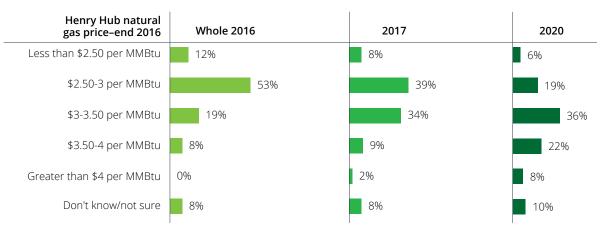
Oil prices began to collapse in June 2014; however, natural gas prices had already begun to fall three years earlier. Shale gas drilling technology had brought to market an abundant supply and depressing prices. Yet, as producers realign portfolios in this oil price downturn, a renewed focus on natural gas is emerging. A shift to more environmentally friendly fuel to generate electricity, increasing use of alternative transportation fuels such as compressed natural gas, and, most importantly, an expanding LNG industry is laying the foundation for the future of natural gas production.

Over half of the respondents expect Henry Hub prices for natural gas to remain unchanged to the end of 2016, and a slightly smaller group expects the same price levels as a yearly average. For 2017 through 2020, a majority think that prices would be range-bound between \$1 and \$2.50-3.50 per million British thermal units (MMBtu).





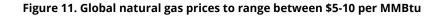
#### Figure 10. Natural gas prices expected to be \$3-3.50 per MMBtu through 2020

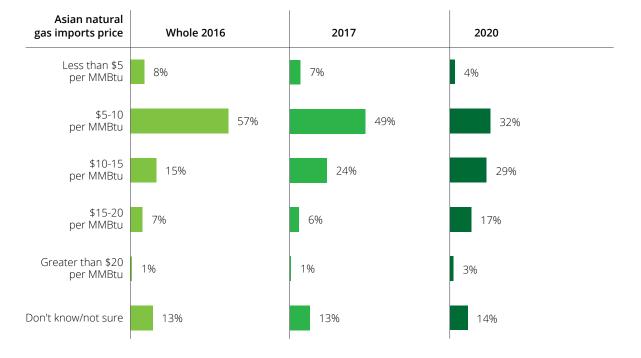


#### **International prices**

Survey participants expect Asian natural gas prices to be much higher than Henry Hub by the end of 2016

and through the next several years. A majority expect international prices to range from \$5-10 per MMBtu. But, an increasingly optimistic view is for prices to be in the \$10-15 per MMBtu range by 2017 to 2020.



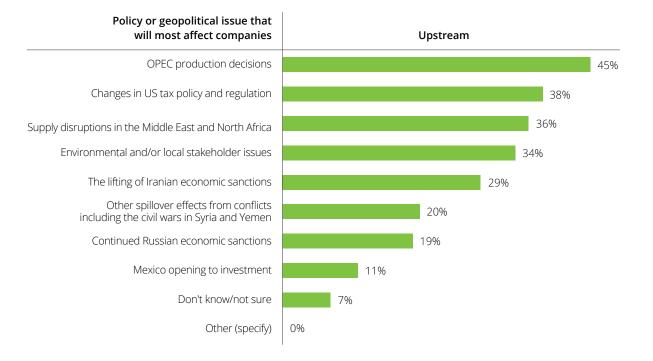


## The upstream sector—Hardest hit but ready to return

#### Impacts of a difficult business environment

OPEC's ongoing influence on crude oil prices remains the most important concern for 45 percent of professionals. Another 38 percent cite changes in US tax policy and regulation. This question is more broad-based than previous years' surveys that focused on specific kinds of regulation directed toward shale drilling, for example. However, it is possible professionals expect profound energy policy changes to be enacted depending on the outcome of the US presidential elections in November 2016.

## Figure 12. OPEC production decisions are believed to have the most impact on the upstream sector, but US tax and policy decisions are next, outranking several prominent international issues



#### **Responding to the challenges**

Beginning in 2015, the oil and gas sector reacted to the oil price collapse with more intensity when it became apparent the downturn could be much more long-lived

after OPEC's production announcement in November 2014. For the rest of 2016 and 2017, the industry lists its potential strategic plans in order of priority based on the survey results (Figure 13).

## Figure 13. The upstream sector continues to focus on production and cost reduction and less on accessing new markets



Maintaining or increasing production levels fills in revenue gaps for producers as prices fall—one reason for slow US total production decline rates and extraordinarily high US and global oil in storage levels. Producers have only recently cut production in response to financial stress. US crude oil production is expected, by survey respondents, to be eight to nine million barrels per day (mmbd) for 2016 (38 percent) and 2017 (35 percent), but the biggest shift was for those anticipating higher production levels of more than 10 mmbd in 2017, going from three percent of survey respondents to 14 percent.

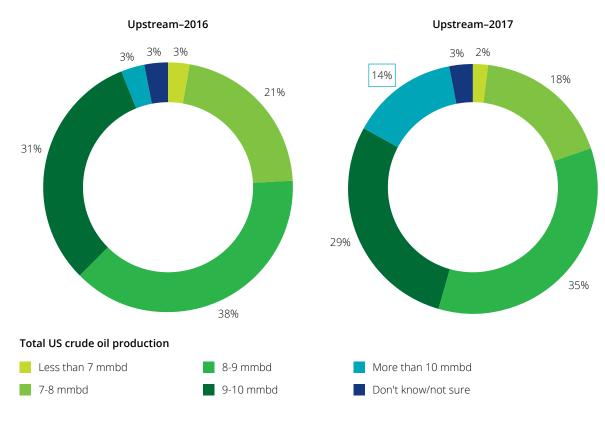
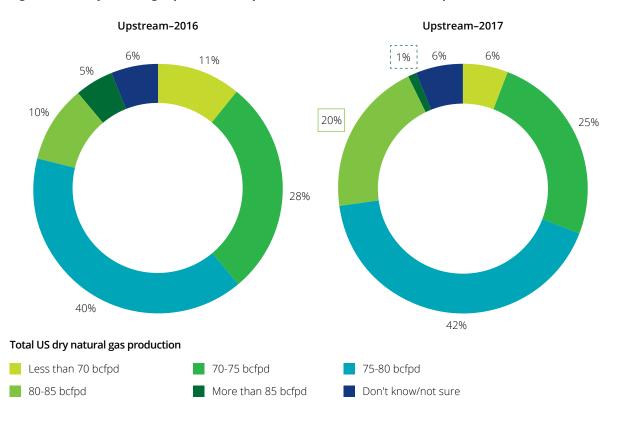
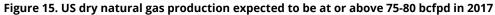


Figure 14. Expectations for US crude oil production are 8-9 mmbd through 2017

Expectations for US dry natural gas production in 2016 are similar to 2017. One notable finding is the percent of professionals expecting US dry natural

gas production to be 80-85 billion cubic feet per day (bcfpd) doubles for 2017. This would be a very large year-on-year production increase.



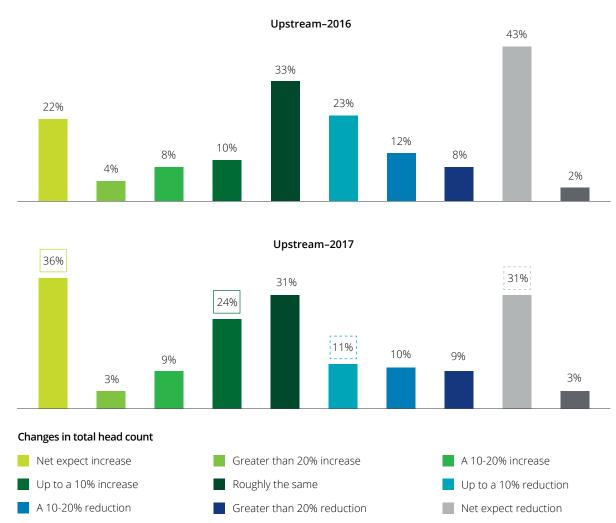


#### Cost containment initiatives—Reducing or streamlining general and administrative (G&A) expense

Don't know/not sure

Headcount reduction has been an inevitable outcome of this commodity price collapse as it has for several previous industry contractions. Those 31 percent of respondents listing reducing or streamlining G&A as a top priority (Figure 13) correspond with the 43 percent of respondents expecting more personnel reductions for the rest of 2016 (Figure 16). But, next year, much fewer (31 percent) believe there will be ongoing layoffs. In fact, 36 percent expect hiring will restart in 2017.

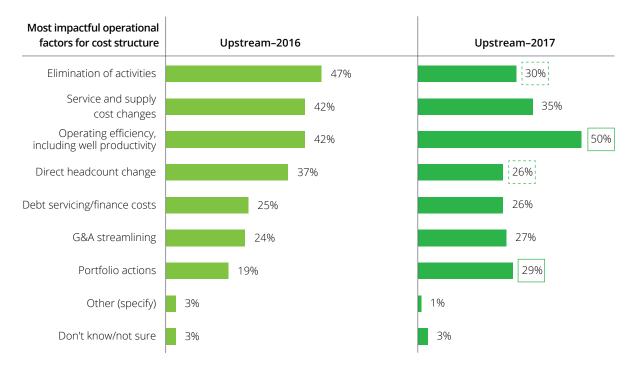
#### Figure 16. Workforce reduction seen to continue through 2016 but new hiring thought to begin next year



## What is the impact of short-term and sustainable cost containment initiatives?

Short-term cost containment strategies have been heavily exploited over the last two years, but their use tends to be symptomatic of a crisis unlike long term cost containment initiatives. During industry expansions, the focus on growth and long-term cost initiatives tend to be a response to demand-related rising costs. But, during this industry contraction, both short-term and sustainable cost initiatives continue to be employed as all levers are being pulled to drive down costs. The most remarkable findings from this section of survey questions show a shift in expectation about the impact of short- and long-term cost containment initiatives from 2016 to 2017. Long-term cost containment initiatives, a hallmark of the oil and gas industry expansion prior to the downturn, are considered the most impactful, as shown by an increase from 42 percent of respondents to 50 percent for 2017. Short-term cost containment initiatives are seen as less impactful in 2017—an indication that limits have been reached or there is an expectation of recovery.

### Figure 17. Next year should bring a change in cost containment strategies with a focus more on long term operating efficiencies and less on short term measures such as eliminating activities and headcount reduction



#### Short-term versus sustained cost reduction efforts

Short-term cost containment initiatives make up from 20-40 percent of all cost reduction efforts

say 32 percent of professionals (Figure 18). But, an overwhelming majority (64 percent) see improving operating efficiencies as having the most impact.

#### Figure 18. Improving operating efficiencies thought to show the most potential for sustainable cost reduction

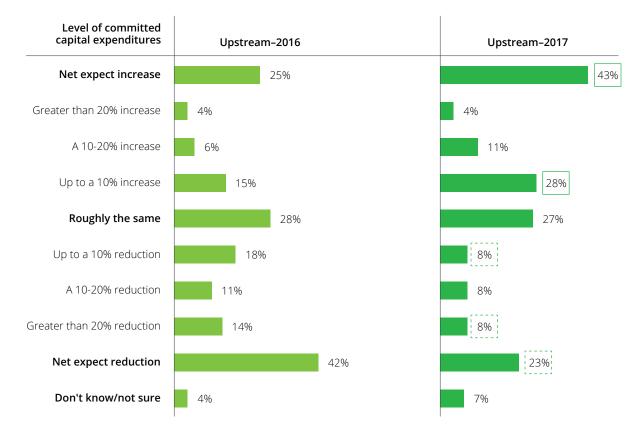
Percent of cost reductions that are short-term or cyclical	Upstream	Strategies with most potential for sustained cost reductions	Upstream
Less than 20%	19%	Improving operating efficiency, including well productivity	64%
20-40%	32%	Re-negotiation of service or supply contracts	47%
40-60%	23%	Divestiture of assets or acreage	39%
60-80%	15%	Insourcing service or equipment supply capacity	29%
Greater than 80%	7%	Insourcing infrastructure	26%
Have not achieved any cost reductions	0%	Don't know/not sure	3%
Don't know/not sure	4%	Other (specify)	2%

## The future of the industry requires capital spending

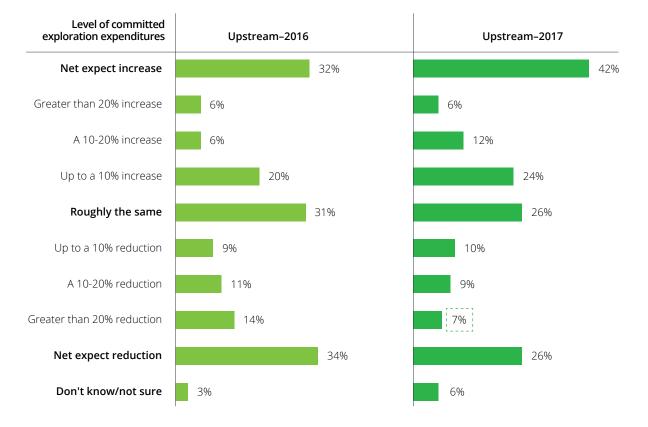
#### Capital spending, in general

Capital spending decisions have been substantially curtailed during the last 18 months, especially for exploration activities. Budgets were directed toward more immediate needs, and external funding sources became less available. For 2016, most (42 percent) expect capital expenditure to continue declining; but, in 2017, the outlook changes as 43 percent of respondents anticipate capital expenditure to rise in 2017—optimism for a recovery next year is returning.

#### Figure 19. Capital expenditures seen to recover next year



Capital expenditures committed to exploration activities will rise in 2017, according to 42 percent more evidence for an optimistic outlook for the industry's longer-term recovery.



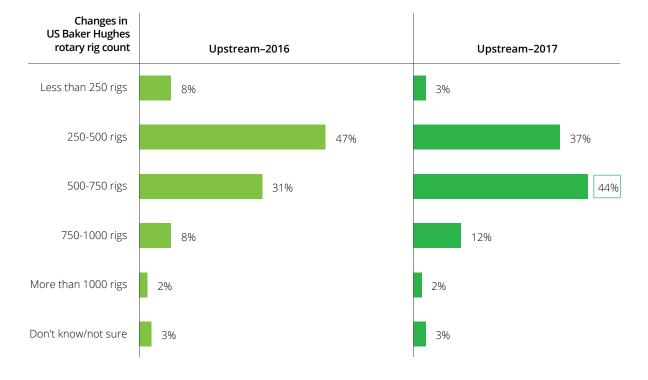
#### Figure 20. Exploration capital to rise as well, a sign of long-term optimism about the industry's future

# Industry activity as measured by the rotary rig count

#### The Baker Hughes rig count

The Baker Hughes rig count distills a large amount of oil and gas industry activity data into one number and has

traditionally been a kind of "canary in the coal mine" for the health of the industry. Respondents (44 percent) expect a modest increase in US rigs to the 500-750 range in 2017.



#### Figure 21. US rig count to recover next year

## The downturn moves to the midstream sector

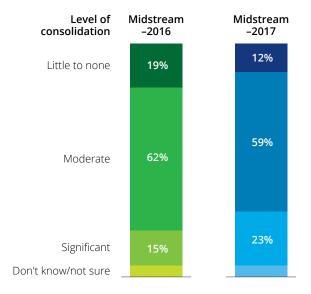
## Master Limited Partnership (MLP) consolidation and rollups

Contraction in the upstream sector has begun to wear on the midstream sector, which was once thought to be somewhat immune from commodity price volatility because much of its revenue is derived from fee-based contracts. However, these contracts are at risk of being renegotiated or challenged in bankruptcy court, given the financial stress of upstream producers. MLP-driven asset-acquisition activity has slowed considerably as MLPs have shifted from "grow" to "maintain" mode. Consolidation could be on the way, taking many forms: 1) Upstream contraction created midstream overcapacity, making consolidation by financially strong MLPs incentivized to grow less costly than organic growth, 2) The corporation could roll up the MLP into its corporate structure to lower the cost of capital for the C-corporation and lower costs through scale and scope, and 3) MLPs could acquire their general partner to eliminate incentive distribution rights and lower the cost of capital.

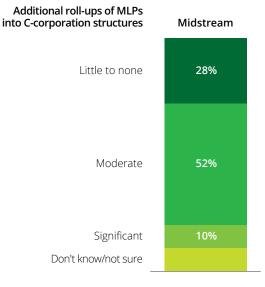
A majority of respondents expect a moderate level of consolidation in both 2016 (62 percent) and 2017 (59 percent), but when asked about whether the midstream sector would consolidate significantly in 2017, affirmative responses increased from 15 percent to 23 percent. However, MLP rollups into C-corporation structures were seen as unlikely (28 percent) or moderate (52 percent).

Lowering costs and costs of capital, the impetus behind consolidation and rollups, is the biggest challenge facing midstream companies, 52 percent of professionals surveyed asserted.

## Figure 22. The midstream sector expects only a moderate amount of consolidation



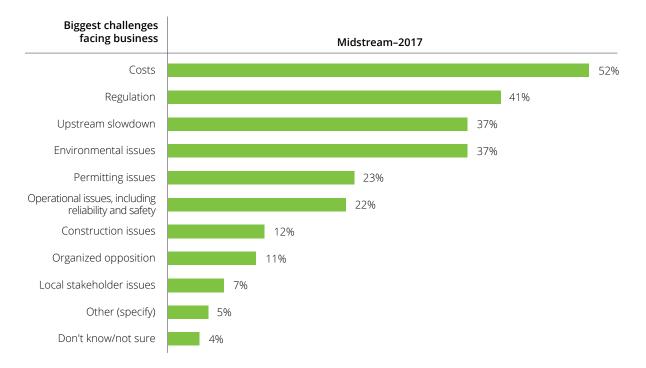
## Figure 23. Roll-ups of MLPs into parent corporations expected to also be moderate



## Midstream finds its own set of challenges and opportunities

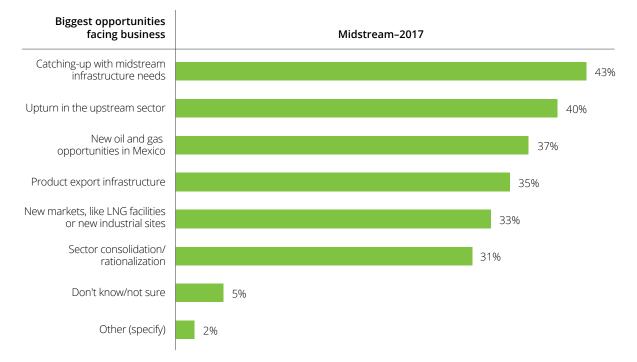
## Costs and regulation at the top of the list, not the upstream slowdown

#### Figure 24. Cost reduction and regulation are seen as midstream's biggest challenges by most professionals



Challenges also offer opportunities, and the foremost opportunity for this sector is rebuilding infrastructure needs, according to the survey findings, followed by meeting pent-up demand for the upstream sector after it recovers. Next on the list of opportunities, in the near-term, is making inroads to a newly privatized Mexican oil and gas market. The Mexican government passed landmark legislation in December 2013, ending 75 years of dominance by state-owned Petroleos Mexicanos (PEMEX). It will likely allow private midstream companies to directly transport and store oil and gas (and derived products), set up refineries, and process and sell petrochemical products within Mexico. In doing so, Mexico may be less reliant on imports of natural gas and refined products.

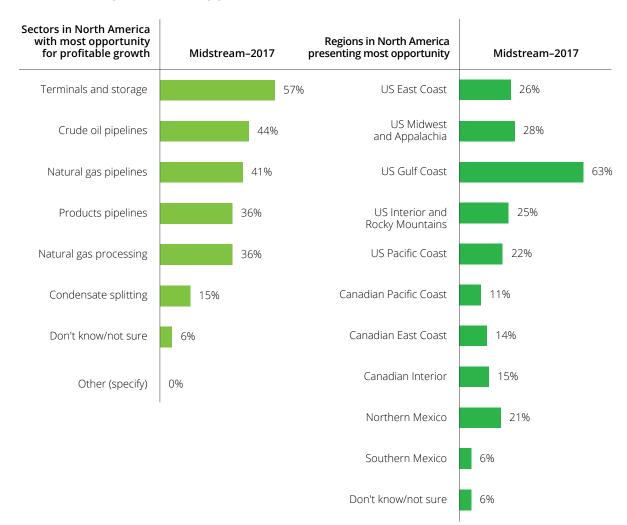
#### Figure 25. Infrastructure building is seen as the biggest area of midstream opportunity



While rebuilding and expanding midstream infrastructure was predicted to be the most profitable opportunity, a more specific target was to expand terminals and storage, as well as new pipeline capacity, in strategic areas.

The burgeoning LNG industry, a topline focus for many major integrated oil companies, will need

additional terminals and storage (57 percent) to expand its US footprint. New entrants into the crude oil export business will also need additional crude oil pipelines (44 percent). A growing business focus on exporting both oil and gas positions the US Gulf Coast (63 percent) for further expansion as a major shipping hub for the oil and gas industry.



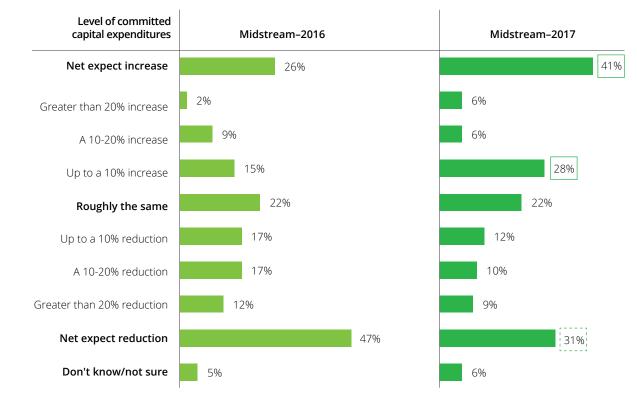
### Figure 26. The US Gulf Coast is expected to be an area of focus for midstream companies expanding their terminals, storage, and crude oil pipelines

#### Capital expenditures—The big spend

As the midstream sector looks for opportunities in 2017, capital expenditures are expected to increase. Optimism is most clearly seen in the results related to rising

capital expenditures. For 2016, only 26 percent saw a net increase in capital expenditures, but that cohort's expectation rises to 41 percent for 2017, with 28 percent of that group expecting a modest 10 percent uptick.

#### Figure 27. The midstream sector expects to increase capital expenditures—a sign of returning confidence



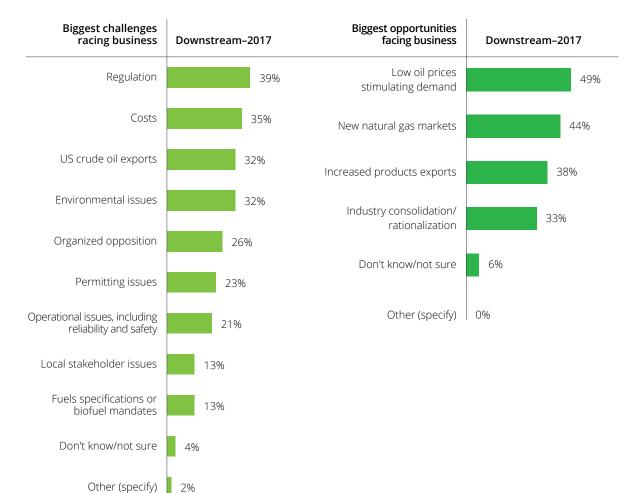
## Downstream—Refining and marketing

#### **Challenges and opportunities**

The refining and marketing segment of the downstream sector is a highly regulated, capital

intensive segment; and, unsurprisingly, the survey found regulation and cost at the top the list for the biggest challenges facing these businesses.

## Figure 28. Even though regulation and rising costs are ever-present concerns, low oil prices are expected to stimulate demand for refined products, and new natural gas markets offer expansion opportunities

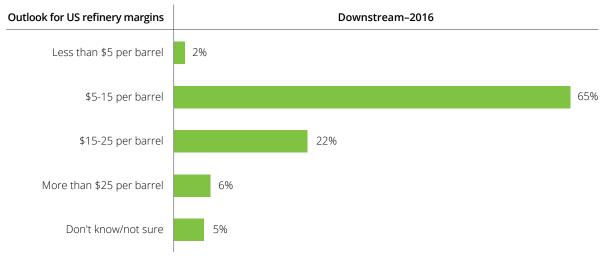


#### Downstream profitability

Refinery margins in the United States, estimated by the 3:2:1 crack spread, have narrowed by 50 percent, from an average of about \$20 per barrel in 2015 to an

average of about \$11.16 per barrel through May 2016. Yet, professionals estimate that an average of \$13.24 per barrel will close out 2016.

## Figure 29. Refinery margins during the first half of the year were somewhat under the anticipated 2016 average of \$13.24 per barrel and are expected to stay under \$15 per barrel

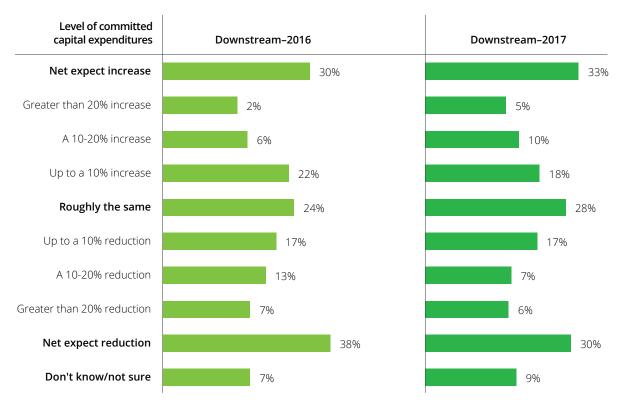


Average expected margin 2016: \$13.24 per barrel 2016 average (as of May 2016): \$11.16 per barrel\*

\* Source: Howard Weil's May 25, 2016 weekly refining indicators report

Refinery margins vary widely across the United States; the average 2015 margin in the US Gulf Coast and US West Coast was \$15 and \$25 per barrel respectively. The \$10 price difference may explain the wide variance in outlooks from respondents. Capital expenditures will likely increase from 2016 to 2017, according to 33 percent of professionals, but, by no more than 10 percent year over year. Slightly fewer, 30 percent, expect a net reduction next year. There seems to be an even divide between expectations for capital expenditures increasing, decreasing, or staying the same, which indicates a degree of uncertainty for the downstream sector.

#### Capital expenditures—Higher levels next year



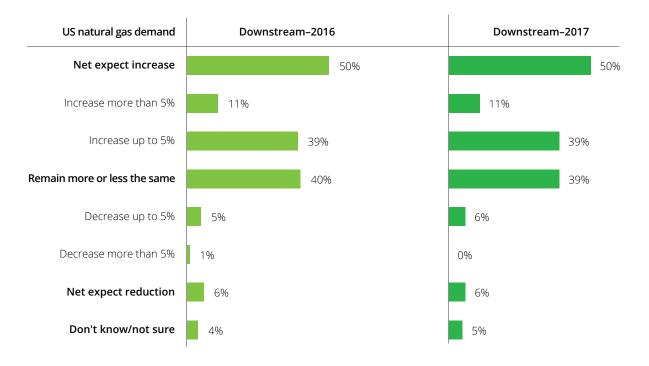
#### Figure 30. Capital expenditures are expected to increase next year; industry confidence will be put to work

#### Demand for natural gas and refined products

Expectations about oil and gas demand for the rest of 2016 and 2017 are somewhat positive; the findings

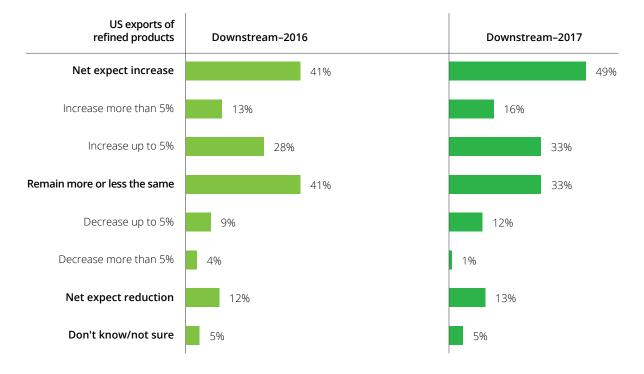
indicate most expect natural gas demand to increase or at least remain about the same.

#### Figure 31. Natural gas demand will stay the course



Demand growth rates for refined products are expected to be roughly the same as natural gas for the next 18 months.

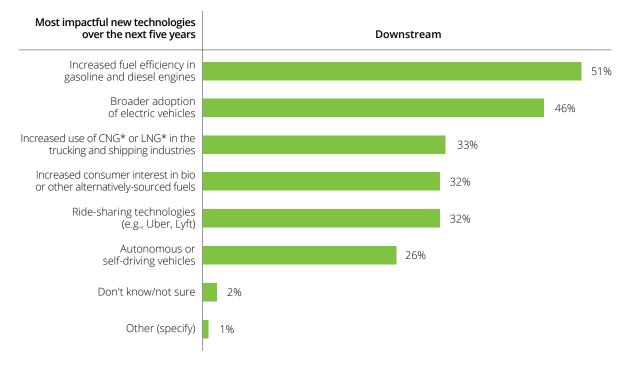
## Figure 32. The outlook for refined products exports next year is seen as positive even as US crude oil exports have offered new competition



#### Looking to the future

A much longer outlook for the future of the refining and marketing sector was posed by the survey about the impacts of new technology or combinations of technology. Most foresee increasing fuel efficiencies for engines will have the biggest impact followed by broader use of electric vehicles—two dynamic consumer shifts that could substantially affect demand for refined products.

## Figure 33. Increasing fuel efficiencies may be a countervailing force for gasoline and diesel fuel demand, but the growing list of alternative fuel vehicles is expected to have an impact on the downstream sector as well



\* Compressed Natural Gas and Liquefied Natural Gas

## Concluding thoughts

The 2016 oil and gas industry survey reveals an emerging optimism for the industry's recovery beginning next year. Expectations for the final months of 2016 mostly reflect what has already occurred this year—not uncommon—but 2017 holds more promise. The length of this downturn has been surprising; so, no unrealistically positive expectations were found, but there was certainly a thread of optimism throughout the responses.

Oil and gas professionals anticipate US and world economic growth will finish 2016 at the same one to two percent annualized growth rate but believe it will accelerate in 2017. And, with more robust economic growth, WTI and Brent prices would rise to \$60-80 per barrel next year, a level most believe could restart an oil and gas sector recovery. Even if prices could rise to a more sustainable level next year, it may not be until 2018 or beyond before the industry fully recovers. Natural gas prices could also start to rise next year to more than \$3 per MMBtu; but, 2020 prices could rise above \$3.50 per MMBtu. For Asia, natural gas prices could remain the same through 2017. Even by 2020, most still see prices about the same as 2016, but there is a divergence of opinion that prices may rise to \$10-15 per MMBtu.

While the industry waits for oil and gas prices to rise, the task at hand is to cut costs and make difficult capital expenditure decisions. The findings listed the most impactful cost containment initiatives, in order of effectiveness, for the upstream sector; yet, cutting costs was also at the top of the priority list for the other sectors as well. A renewed sense of optimism for rising prices resounded throughout the survey, but the outlook for capital expenditure was the most solid proof of emerging confidence. From upstream to downstream, most professionals expect to see an increase in capital expenditures next year. The upstream sector, which took the hardest hit in this downturn, is the most optimistic about a recovery. A sizable majority (43 percent) anticipate capital expenditures to increase as much as 10 percent next year. Midstream follows, with 41 percent looking for a maximum of a 10 percent uptick in spending. But, surprisingly, downstream, the one sector with the budget to spend, is the most cautious, with a slight majority (33 percent) expecting a top-level increase of 10 percent.

The study also highlighted areas of expected opportunities, in the aftermath of the industry downturn, as well as challenges presenting the most concern for the industry. The upstream sector was most concerned about non-industry influences—aboveground risks coming from OPEC and US governmental policies such as tax and regulatory changes. A similar theme about governmental, geopolitical, and business environment impacts were noted for the midstream and downstream sectors, but costs and operational issues were on their list of concerns as well.

Optimism always brings a renewed interest in opportunities, which tend to be more practical than dramatic. The midstream sector is looking to expand its crude oil capabilities and rebuild infrastructure, and the downstream sector is looking for more demand growth. As optimism returns, as it has, the list of opportunities should be given another look, for it shows the direction the industry will likely take in the years to come.

## Endnotes

- 1. International Monetary Fund (IMF), "IMF World Economic Outlook April 2016," http://www.imf.org/external/pubs/ft/weo/2016/01/, p.18 and World Economic Outlook Database April 2016, accessed August 8, 2016.
- 2. United States Congress Joint Economic Congress, "GDP Review: Context for 2nd Quarter 2016 GDP First Estimate of Second Quarter Data," http://www.jec.senate.gov/public/index.cfm/republicans/analysis?ID=D169FD80-ACCB-4AF5-A2A6-A09583C2D3F2, accessed August 8, 2016.
- 3. Board of Governors of the Federal Reserve, "Minutes of the Federal Open Market Committee June 14-15, 2016," http://www.federalreserve.gov/monetarypolicy/fomcminutes20160615ep.htm, accessed August 8, 2016.
- 4. IMF, "IMF World Economic Outlook April 2016."
- 5. Board of Governors of the Federal Reserve, "Minutes of the Federal Open Market Committee June 14-15, 2016."
- 6. IMF, "IMF World Economic Outlook April 2016."

## Let's talk



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