# BDO 2017 ENERGY OUTLOOK

"American oil & gas companies have demonstrated remarkable resilience amid the continued industry downturn this past year. Spurred by OPEC actions, oil prices are steadily climbing and the sector is regaining a sense of optimism that will hopefully come to fruition in 2017 and beyond."

**Charles Dewhurst, global leader of BDO's Natural Resources practice**

# Commodity Prices Thaw, Optimism Buds in 2017

In a market oversaturated with oil, financial success was in short supply for the U.S. oil & gas industry in 2016. But recent OPEC actions have generated renewed confidence, suggesting the sector could be poised for a turnaround. According to ***BDO's 2017 Energy Outlook***, energy CFOs are anticipating the industry could make strides toward recovery in 2017.

Oil prices hit the bottom of the barrel in 2016, exerting severe financial stress on U.S. energy companies. In fact, 2016 was the toughest year for survey respondents since the downturn hit in 2014. Fifty-eight percent of energy CFOs report project terminations and delays in 2016, up slightly from 53 percent last year. Low oil prices are the most commonly cited cause of project interruptions, noted by 91 percent of respondents reporting cancellations or delays in the past year. Prices dipped to $26.21 per barrel in February—a 75 percent decline from the market's 2014 peak at $108 per barrel—and the lowest point since 2003, according to CNN Money. Other factors contributing to project interruptions in 2016 include federal and state environmental regulations (56 percent)—more than double the number reporting such interruptions last year—and lack of capital (49 percent).

On the heels of a difficult year, energy CFOs have a relatively optimistic outlook for 2017. Confidence is up that commodity prices will rise: 57 percent of CFOs predict a price increase for natural gas and 64 percent forecast an increase in oil prices. Sixty-three percent of energy CFOs believe increased oil & gas prices will drive overall industry growth in the year ahead, a slight uptick from last year (60 percent) and a remarkable resurgence from 29 percent in 2015. But what accounts for the returning sense of optimism among energy CFOs?

## ABOUT THE BDO USA NATURAL RESOURCES PRACTICE

For more than 100 years, BDO has been a valued business advisor to energy companies. The BDO Natural Resources Practice professionals have specific experience and knowledge working with clients in the upstream, midstream and downstream segments of the industry. Our Houston and Dallas practices serve as the hub of our national energy industry experience.

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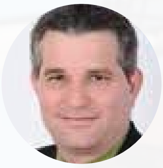


"Oil Poised to Reach $70 by 2020. The current oil prices are below the economic equilibrium price and represent a temporary situation of excess supply. The economic forces that will continue to drive oil prices up are already in action – supply reduction along with increased demand."

Chen Herzog, Partner
Chief economist, & international representative of the Natural Resources practice at BDO Israel

Although oil prices increased by 50% in 2016, the current price levels are still below the long term economic equilibrium price. BDO projects oil prices to reach $70 per barrel by 2020, about 25% above current prices.

The drop in oil prices that began in mid-2014 was a result of a combination of two main economic factors: On the one hand the acceleration of investments in new technologies for shale oil production in the US that led to an increase in world oil supply. On the other hand, the global economic slowdown reduced oil demand growth rates. The combination of the increase in supply and reduced demand resulted in oil surplus, leading to a decline in prices even below the long term economic production costs.

The major change in the oil market in recent years has been the increase in shale oil production in the US. Due to this change, the US is expected to become energy independent by 2020. Throughout the world, in the US, China, Russia and even Israel, there are large potential reserves of shale oil.

The technological developments in shale oil production have led to expectations for further rapid increase in oil supply, thus leading to a sharp drop in oil prices. This resulted in oil prices declining to levels that are not economically viable for further development of shale oil production capacity.

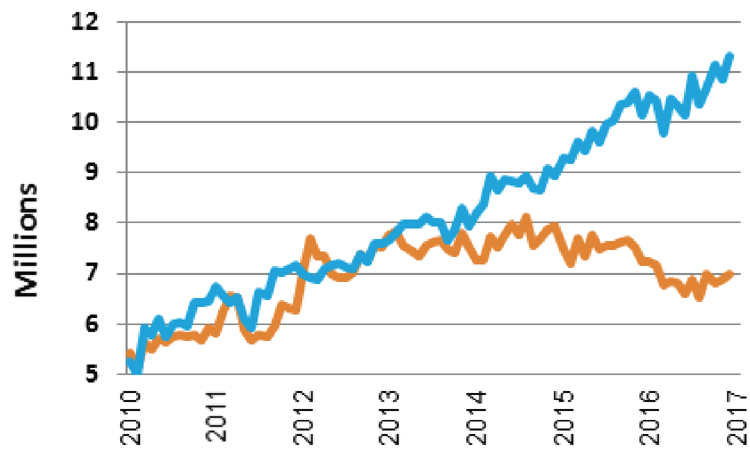
Over time oil price cannot be lower than the production costs of shale oil. In major shale oil projects in the US the full economic cost stands at approximately $ 70 a barrel.

The economic process that will affect the increase in oil prices has already begun. When oil prices are below $60 per barrel most of the new shale oil production projects are below the economic viability threshold. Projects which have already been invested in will continue production but new projects will halt their advancement and will not be developed. The result is a decrease in oil supply. In 2016 the pace of investment in exploration and production of oil and gas in the United States was about 60% below than in 2014. This sharp drop in the pace of investment will inevitably lead to a decrease in oil supply.

**US Oil and Gas E&P Spending**

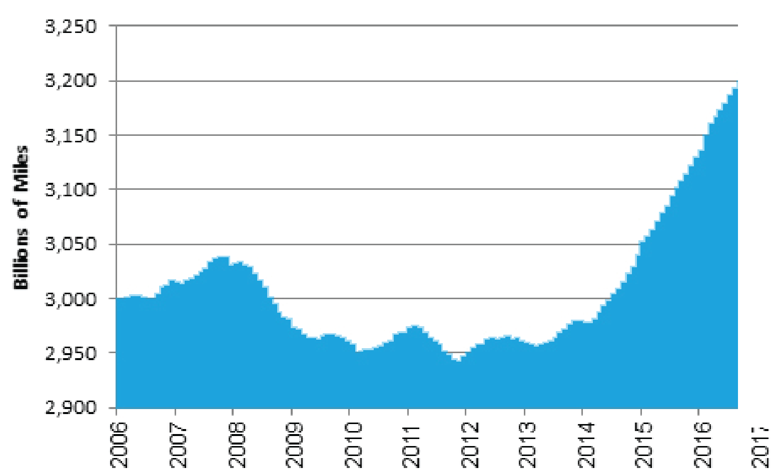
| $Billions | 2014 | 2015 | 2016e |
|---|---|---|---|
| Drilling and exploration | 194 | 122.2 | **73.3** |
| Production | 36.9 | 23.2 | **13.9** |
| OCS lease bonus | 1.0 | 0.6 | **0.5** |
| **Total E&P** | **231.8** | **146.0** | **87.8** |
| **% change YoY** | | **-37%** | **-40%** |

**Vehicles purchase in the US, by type**
Annual rate, in Million units



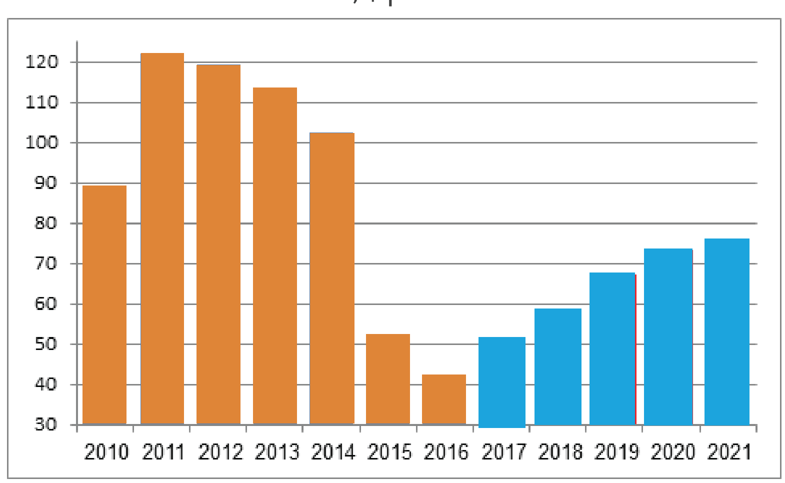

At the same time, the decline in oil prices leads to an increase in demand for oil products. There is a clear reason for the increase in demand – the decline in oil prices reduces oil's cost compared to other alternatives and therefore encourages and increases oil demand. Automotive buying patterns data in the United States clearly show the impact of falling oil prices on consumer preferences. Falling oil prices led to a decline in the number of cost-effective family vehicles, and a 50% increase in the amount of large vehicles (SUVs and pickup trucks) in 2016 relative to 2014.

**Miles travelled in the USA**
Total vehicle miles travelled, 12 months moving average




The decline in oil prices led not only to an increase of gas guzzling vehicles on the road, but also to the increase of kilometers traveled. The decline in oil prices together with the recovery of the US economy led to an increase of 6% in kilometers travelled annually.

**BDO's oil price forecast**
Brent, $ per barrel




This pincer movement that has already begun combines a decrease in supply as a result of the lack of feasibility of investment, and an increase demand, which is expected to take four years to bring the price of oil above its marginal cost of production. Accordingly, according to BDO's oil price forecast, the oil price is expected to reach $ 73 a barrel in 2020.

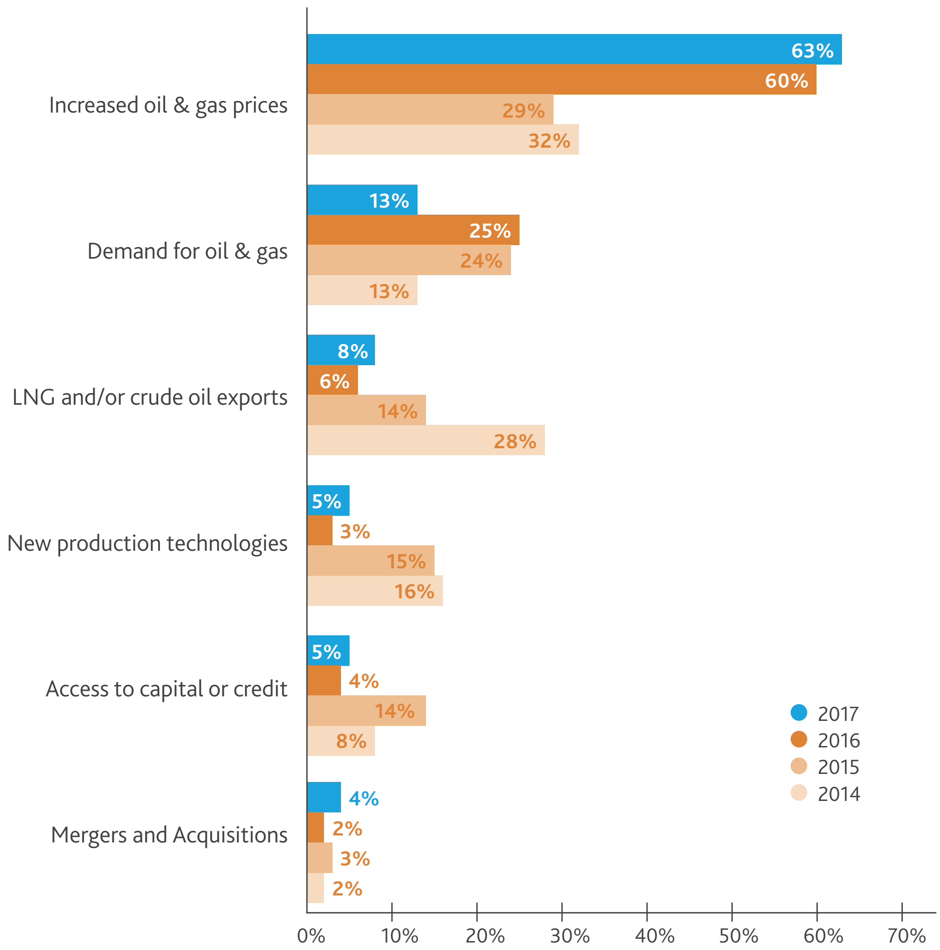
## Global Players Increasingly Influence Market

Signs of cautious market recovery began in late September,[1] when OPEC announced its intent to cut oil production and output for the first time since 2008. Speculation as to whether the 13 member countries could reach an agreement was put to rest on Nov. 30, when OPEC announced a formal deal to reduce output by 1.2 million barrels per day (bpd) to 32.5 million bpd. Perhaps even more significant is that for the first time since 2001, non-member countries—Russia among them—joined OPEC's initiative and pledged to reduce production by a combined 558,000 bpd.

In the period following OPEC's decision, the effects on the market have been palpable. In December, Fortune reported prices hit a peak of $57 per barrel—the highest point in 18 months. The industry's strong reaction is unsurprising; a plurality of energy CFOs (47 percent) identify OPEC actions as the key contributor to price volatility other than supply and demand.

**FACTORS DRIVING GROWTH FOR THE U.S. OIL & GAS INDUSTRY**

% of CFOs Citing Growth Factor

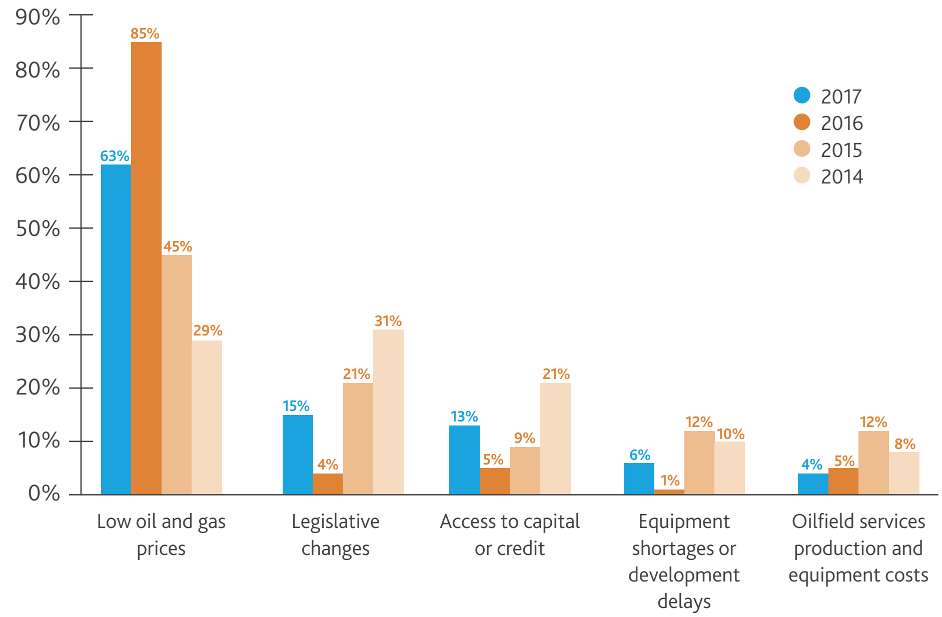



1 82 percent of respondents to BDO's 2017 Energy Outlook were surveyed after OPEC announced its intent to cut output on Sept. 28, 2016.

## Factors Contributing to Price Volatility

Despite the recent upswing in oil prices and widespread anticipation that they will continue to rise, the industry is not expected to fully recover to highs of $100 per barrel in the near term—a price that was once relatively normal. A majority (62 percent) of energy CFOs cite low oil and gas prices as their greatest financial challenge in 2017, down from 85 percent last year. In addition, fewer CFOs—49 percent this year, compared to 55 percent last year—expect decreasing prices to inhibit growth. While this decline suggests improving sentiment in the industry, it is clear low prices are still a considerable concern.

**FINANCIAL CHALLENGES IN 2017**

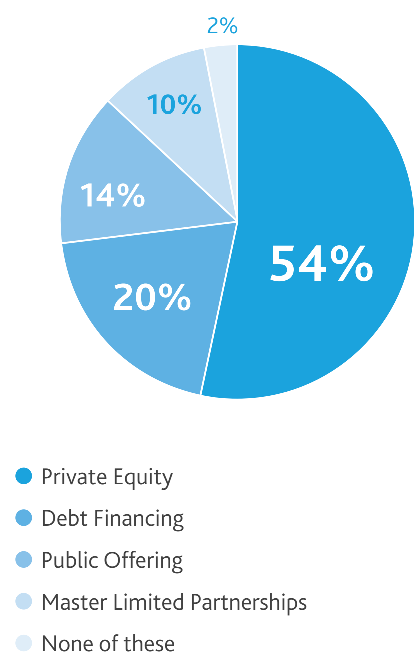



## M&A Accelerates, But Likely to Level in 2017

Upstream oil & gas M&A activity in 2016 totaled $56.7 billion by mid-November, far outpacing the $26.8 billion raised over the same period last year, according to CNBC. This ramp-up in activity is consistent with the industry's expectations for 2016, but CFOs generally think deal-making will taper slightly in the year ahead. Two-thirds expect M&A to increase, down from 75 percent last year, while 32 percent expect it to stay consistent with 2016 levels. Unsurprisingly, the bulk of M&A activity in 2016 is largely concentrated in the Permian basin. According to the U.S. Energy Information Administration (EIA), the number of active onshore and offshore oil rigs in the resource-rich area—consisting of parts of West Texas and New Mexico—is nearly equivalent to the rest of the nation's aggregate total.

Fifty-four percent of CFOs say private equity will be the primary source of capital behind industry transactions in 2017, suggesting that we can expect to see firms continue to leave the sidelines as the financial position of U.S. E&P companies slowly improves. Renewed interest could be a result of the improving exit environment for PE firms. This October, the industry saw Extraction Oil & Gas go public, the first E&P IPO since 2014, and the energy industry's biggest in 2016.

**SOURCES OF M&A FINANCING**




"Throughout the downturn, private equity interest in the energy industry largely stemmed from firms dedicated to the space. With the uptick in oil prices, however, we expect investments in the energy sector could become a regular asset in private equity portfolios across the board."

**Brad Ross, managing director with BDO Transaction Advisory Services**

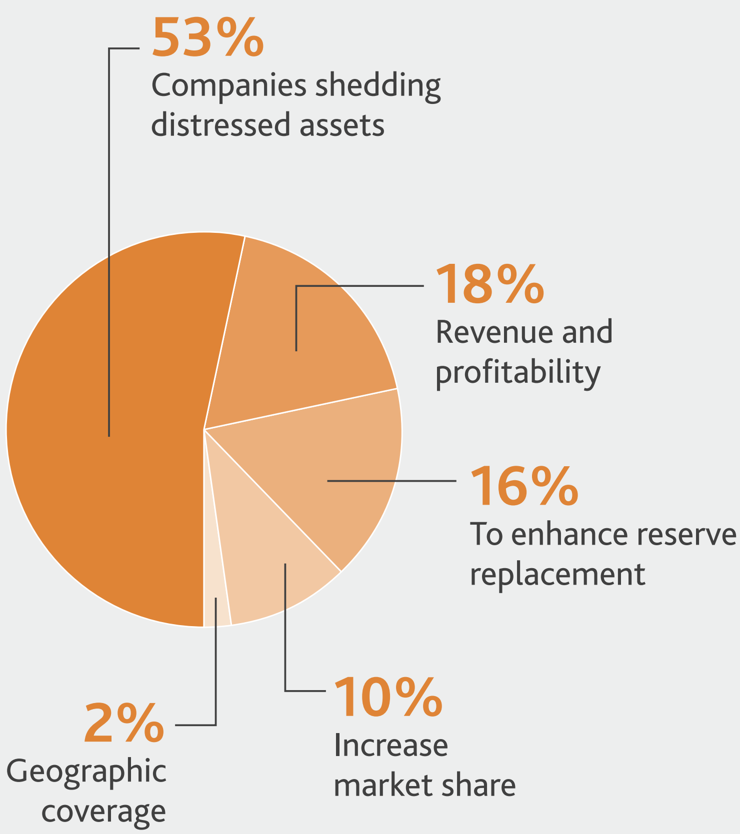
# Residual Effects of Downturn Persist

A total of 213 North American oil & gas companies filed for bankruptcy between 2015 and November 2016, according to the Houston Chronicle. While the frequency of bankruptcy filings among E&P companies has waned toward the end of 2016, 53 percent of energy CFOs expect bankruptcies to increase in 2017 as companies continue to cope with the fallout of record low oil prices in the past year.

More than half (53 percent) of respondents believe shedding distressed assets will be the primary driver of M&A activity, followed distantly by revenue and profitability (18 percent) and enhancing reserve replacement (16 percent). Perhaps even more telling, 35 percent of CFOs expect their own companies will sell off distressed assets in 2017.

Despite residual effects of the downturn, there are signs of lessening financial stress on energy companies in 2017. Fifty-nine percent of CFOs feel better about their ability to access capital, up slightly from 55 percent last year. The energy industry is eager to streamline operations, with 65 percent likely to seek efficiencies and cut costs to improve profitability, up from 59 percent last year—suggesting the frugal attitude nurtured during the downturn persists even as conditions improve.

## M&A DRIVERS




"While the climate for the energy industry is looking more positive in the year ahead, most businesses are still contending with the financial strain introduced by the downturn. Whether energy companies have already filed for bankruptcy or plan to in the coming months, balance sheet and operational restructuring will continue to be a key feature of the industry in 2017."

**Basil Karampelas, managing director in BDO Consulting's Business Restructuring and Turnaround Services practice**

## Labor & Compensation Outlook Brightens

Throughout the downturn, belt-tightening and cost-cutting initiatives have impacted wages and hiring at every position within energy companies. According to our *2014 Energy Outlook*—fielded well before the price crash—61 percent of CFOs expected their labor costs to increase in the coming year. By 2016, that number had declined to a low of 23 percent. However, this year's survey suggests that things may be looking up for wages, with 29 percent of CFOs saying they expect labor costs to increase in 2017—and only 6 percent expecting a decline (in contrast, 22 percent of CFOs expected labor costs to decrease last year). Headcount reductions are likely to start to subside in 2017, as well, with the proportion of CFOs anticipating hiring additional staff more than doubling, from 10 percent last year to 23 percent this year.

Compensation may also begin to right-size as prices recover. In contrast to last year's stagnant or decreasing annual bonuses, 12 percent of CFOs anticipate bonuses will increase in fiscal year 2016, compared to just 2 percent the prior year. A plurality of CFOs (44 percent) expect bonuses to be smaller for fiscal year 2016; however, this represents a decrease from 57 percent in our 2016 study.

In terms of their own compensation, energy CFOs are slightly more optimistic than they have been in years past. The downturn has taken a toll on executive compensation in the industry: According to the *BDO 600: 2016 Survey of CEO/CFO Compensation Practices*, middle market energy CFOs saw their total direct compensation decrease by nearly 6 percent between fiscal years 2014 and 2015. But the 2017 Energy Outlook finds that energy CFOs may be feeling sunnier about their pay packages in the coming year, with more than two-thirds (68 percent) believing their compensation will remain the same. However, 19 percent do expect an increase—nearly double the number anticipating an increase last year. Meanwhile, just 13 percent believe their compensation will decline, down from 20 percent in 2016.

"As commodity prices begin to rise, the outlook for hiring and compensation will likely begin to reflect the industry's resurgence. Energy companies will need to recruit and retain a strong set of skilled workers to fully capitalize on opportunities in the current market."

**Rick Smith, managing director with BDO's Global Employer Services**

“A sense of uncertainty was prevalent in 2016 in anticipation of the U.S. general election and in the months following the Brexit vote. That uncertainty is likely to persist in early 2017, as energy companies wait to see how the new administration’s policies will take shape and what impact they will have for the industry.”

**Tom Elder, co-leader of BDO’s Natural Resources practice**

## Changing Regulatory Environment is Top Concern

Concerns surrounding the 2016 general election were high when the survey was fielded,[2] with 42 percent of CFOs identifying it as their top political concern. As expected during a presidential election year, concerns around legislative and regulatory changes ramped up for 2017. The proportion of CFOs citing legislative changes as their greatest financial challenge in the coming year more than tripled—15 percent compared to just 4 percent in 2016. Concerns around industry regulation may have subsided in part following the election results, as President-elect Donald Trump has indicated a preference for policies that may prove friendlier to the energy industry than those passed in prior administrations.

Although a majority of energy CFOs (62 percent) feel better about the U.S. economy, up from just 44 percent last year, fears of a recession and its impact on oil price volatility saw an uptick from 8 percent to 15 percent in 2017. The economy’s overall strength and the direction set by the new presidential administration will be of utmost importance to the energy industry in the coming months.

## New Partnership Taxation Rules to Impact Sector

Consistent with prior years, intangible drilling costs and percentage depletion are the top tax issues for the sector, cited by 42 percent and 32 percent of CFOs, respectively. Percentage depletion has become a bigger concern for the industry in 2017, up from just 24 percent last year. This shift could stem from new regulations that the IRS issued in October set to impact companies across all industries that use partnership structures. The regulations address liability allocations under IRC Section 752 and contain guidance on disguised sales under IRC Section 707. In addition to implementing an accelerated filing date of March 15, the new IRS audit regulations add an additional layer of complexity to the already intricate nature of partnership structures in the oil & gas industry. Under the new regulations, if a partnership under IRS audit has an assessment that increases taxable income, the tax assessment may fall to the partnership itself rather than members of the partnership.

2 Survey responses were collected prior to the 2016 election.

“Whenever there is a transition between presidential administrations, the potential for tax reform becomes a larger concern across all industries. Energy companies are particularly attuned to any changes to tax policy that could impact their bottom line. Adjusting to the recent IRS rulings on partnership taxation is one area that CFOs will likely prioritize in 2017.”

**Clark Sackschewsky, tax managing principal with BDO’s Natural Resources practice**

### Top Tax Issues

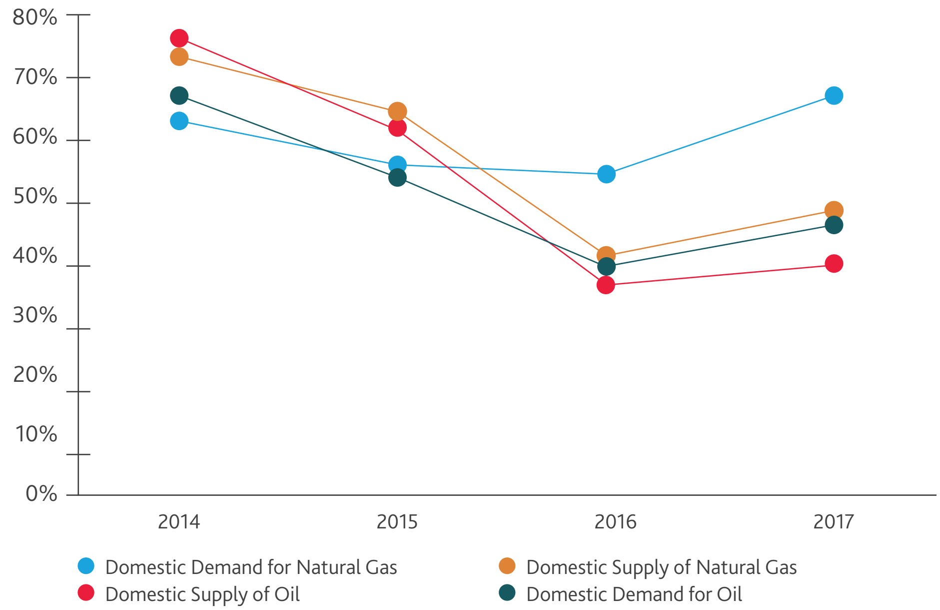
- 42% INTANGIBLE DRILLING COSTS
- 32% PERCENTAGE DEPRECIATION
- 9% RESEARCH TAX CREDITS
- 9% DOMESTIC MANUFACTURING DEDUCTION
- 7% INTERNATIONAL TAX REFORM

## Industry Keeps a Close Watch on Supply and Demand

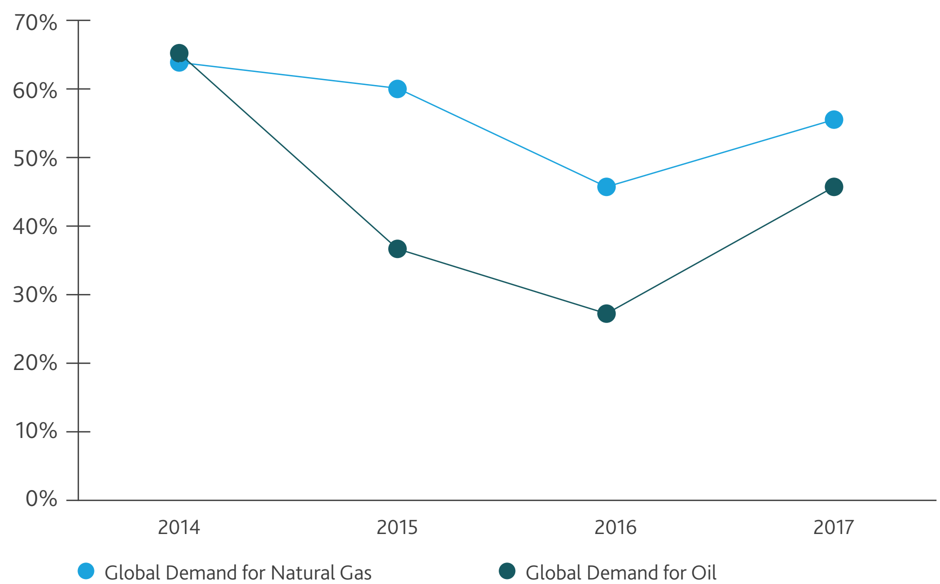
With a proliferation of macroeconomic factors impacting the supply and demand of oil and natural gas, the industry is keeping a close eye on global production levels and the level of oil in the market. Overall, CFOs generally expect to see more robust global and domestic demand for oil and gas than in the previous year. CFOs are slightly more bullish on natural gas, with a majority expecting to see both global (56 percent) and domestic (68 percent) demand grow in the coming year. On the oil side, respondents expect demand to remain consistent with 2016 levels. A majority expect the domestic supply of both oil and gas to either increase or remain the same. Perhaps contributing to the expected uptick in supply, more CFOs (36 percent) plan to increase their investment in non-conventional exploration this year, compared to 32 percent in 2016.

More than two-thirds of CFOs (69 percent) believe liquefied natural gas (LNG) and/or crude exports are likely to grow in 2017, which closely aligns with the current pace of production and loosening restrictions on U.S. exports. In November, the United States exported an average of 7.4 billion cubic feet of natural gas per day—becoming a net exporter of natural gas for the first time in nearly 60 years, according to S&P Global Platts and the EIA. The U.S. Energy Department predicts that the country will be the world's third largest producer of LNG for export by the year 2020.

### DOMESTIC SUPPLY & DEMAND PROJECTIONS




### GLOBAL DEMAND PROJECTIONS



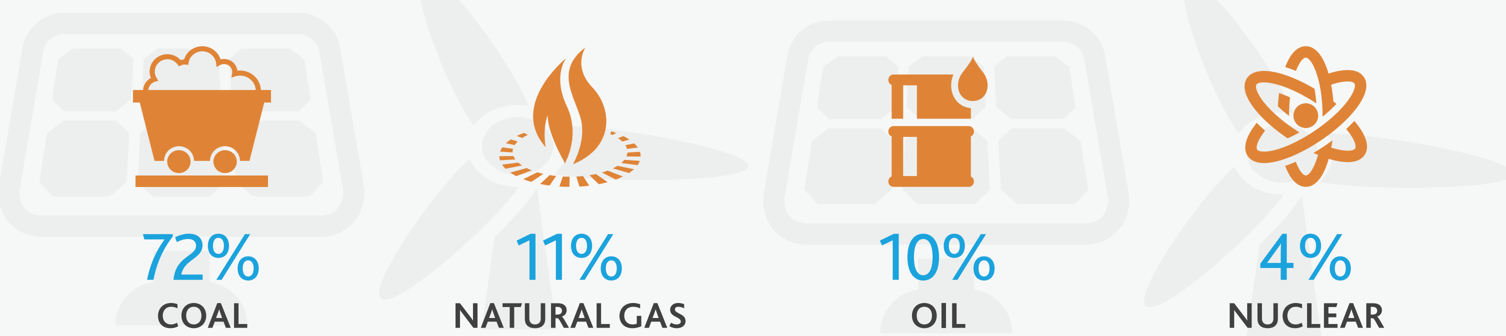
## Addressing Environmental Pressures, Alternative Energy is Top of Mind

In November, the U.S. Environmental Protection Agency (EPA) finalized renewable fuel standard volumes for the upcoming year. Representing a 6 percent increase from 2016, total renewable fuel standard volumes are set at 19.28 billion gallons for 2017. With alternative energy continuing to grow as a global fuel source, oil & gas executives are sizing up the competition. Coal is likely to be most directly impacted by the expanding market for alternative energy. In fact, nearly three-fourths of CFOs (72 percent) identify coal as the energy source that is most at risk due to growing competition from alternative fuels.

CFOs also appear to be placing renewed focus on addressing environmental regulation in 2017, with 37 percent saying they will focus their risk reduction activities in this area, up from 21 percent last year. Environmentally friendly technologies have become a slightly larger priority in 2017 as well, with 27 percent of CFOs planning to increase their investment, up slightly from 22 percent in 2016. Interestingly, a plurality (31 percent) of CFOs say they will direct the most resources toward water pollution and usage in 2017, and the number of CFOs citing the impact of hydraulic fracturing as an environmental priority decreased to 27 percent. These priorities could shift in the year ahead and might prove more closely aligned, however, after a recent EPA report concluded that fracking could contaminate drinking water in some cases.

After a more than two-year slump, the energy industry could take strides to recover from the extended period of financial hardship in 2017. Driven by global collaboration among OPEC and non-member countries, supply and oil prices are both slowly beginning to stabilize. Energy companies that capitalize on the current market opportunities with an eye toward hedging against unexpected downturns ahead will position themselves for more sustained success and operations in the future.

### Energy Sources Most at Risk Due to Competition from Alternative Fuels




The ***BDO 2017 Energy Outlook Survey*** is a national telephone survey conducted by Market Measurement, Inc., an independent market research consulting firm, whose executive interviewers spoke directly to CFOs at 100 U.S. oil & gas exploration and production companies from September through November 4, 2016. The sample comprised companies of all sizes, though was weighted more heavily towards companies with the largest annual revenues.

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