BDO

Provided Courtesy Of
UP URISH POPECK
accountants and consultants

2014
www.bdo.com

2014 BDO OIL AND GAS RISKFACTOR REPORT

COMPETITION GROWS AS THE OIL & GAS INDUSTRY CONTINUES TO BOOM

The ***2014 BDO Oil & Gas RiskFactor Report*** examines the risk factors listed in the most recent SEC 10-K filings of the 100 largest publicly traded U.S. oil and gas E&P companies. The risk factors were analyzed and ranked in order of frequency cited.

The U.S. oil and gas industry continues to thrive on the heels of a steadily improving economy, stable prices and the ongoing profitability of shale formations scattered throughout the United States. This year's ***BDO Oil & Gas RiskFactor Report*** found that the top 20 industry risks continue to hold steady, with few new concerns bubbling up. The consistency of the two leading risks—regulatory changes and commodity price volatility—over the past four years suggests that companies remain primarily concerned about interruptions to the industry's ongoing growth.

As the industry grows, the number of operational entities does, as well: The U.S. Bureau of Labor Statistics reports that the number of active E&P companies increased by about 27 percent between 2003 and 2012. Amid this increasingly crowded marketplace, competitive risks are a growing concern, and they are becoming more specific.

Companies continue to compete with each other for customers and growth, but they are now also competing more aggressively for executives and new prospects. This year, 80 percent of companies cite the ability to attract and retain key personnel as a top risk, up nearly 10 percent from 2013. Meanwhile, 81 percent of companies also express apprehension that they may be unable to recover their undeveloped reserves economically or before their leases expire. This marks a one-third increase since 2013.

▶ Read more

For more information on BDO USA's service offerings to this industry, please contact one of the following practice leaders:

CHARLES DEWHURST, Houston
713-986-3127 / cdewhurst@bdo.com

KEVIN HUBBARD, Houston
713-986-3149 / khubbard@bdo.com

CARLOS ANCIRA, Austin
512-391-3510 / cancira@bdo.com

LANCE FROELICH, Houston
713-986-3186 / lfroelich@bdo.com

ROCKY HORVATH, Houston
713-986-3150 / rhorvath@bdo.com

JIM JOHNSON, Dallas
214-665-0614 / jwjohnson@bdo.com

CLARK SACKSCHEWSKY, Houston
713-986-3101 / csackschewsky@bdo.com

CHRIS SMITH, Los Angeles
310-557-8549 / chsmith@bdo.com

ALAN STEVENS, Dallas
214-665-0786 / astevens@bdo.com

"The non-conventional oil and gas industry is a highly competitive space, with new wells coming online and more companies entering the game all the time," said **Charles Dewhurst, leader of the Natural Resources practice at BDO**. "As the industry continues its upward trajectory, we may expect to see a growing number of companies vying for a relatively static and selective pool of prospects, leadership and labor."

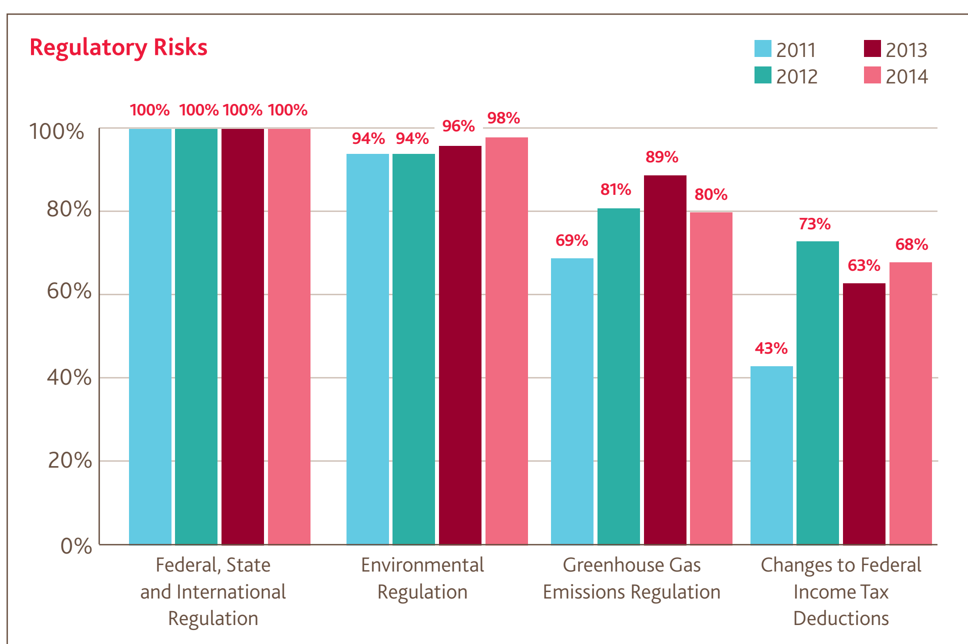
The Top 20 Risk Factors Cited by the 100 Largest U.S. E&P Companies

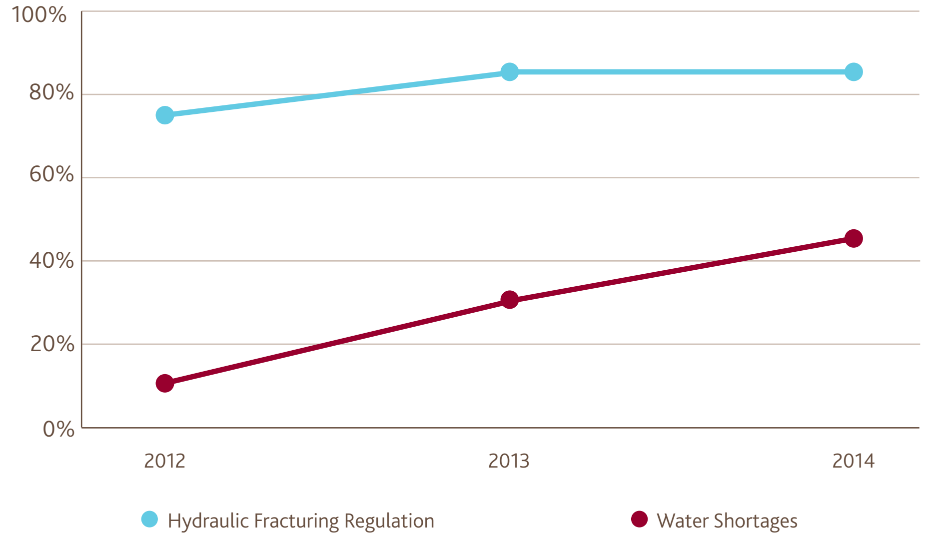
2014 Rank	Risk Factor Cited in 10-K Filing	2014	2013	2012	2011
1.	Regulatory and legislative changes and increased cost of compliance	100%	100%	100%	100%
1t*.	Volatile oil and gas prices	100%	100%	99%	100%
3.	Inability to expand reserves or find replacement reserves	98%	96%	98%	98%
3t.	Environmental and/or health regulations	98%	96%	94%	94%
3t.	Operational hazards including blowouts, spills and personal injury	98%	95%	98%	97%
6.	Natural disasters and extreme weather conditions	96%	96%	95%	96%
7.	Inadequate liquidity or access to capital, indebtedness	95%	91%	94%	95%
8.	Changes in demand for oil or natural gas	92%	91%	87%	76%
9.	General national or global economic conditions	90%	92%	94%	91%
10.	Inaccurate reserve estimates	89%	93%	95%	96%
11.	Hydraulic fracturing regulation	85%	85%	74%	52%
11t.	Use of hedging or derivative instruments	85%	77%	48%	N/A
13.	General industry competition	84%	90%	89%	87%
13t.	Inadequate or unavailable insurance coverage	84%	86%	88%	87%
13t.	Insufficient pipeline, storage or trucking capacity	84%	80%	63%	29%
16.	Liabilities for pollution resulting from current or previous operations	83%	87%	79%	59%
17.	Ability to properly recover undeveloped reserves	81%	61%	26%	N/A
18.	Impact of climate change and greenhouse gas regulation	80%	89%	81%	69%
18t.	Ability to attract and retain key personnel	80%	73%	79%	78%
20.	Price of and competition from alternative fuels	79%	76%	78%	72%

*t – indicates a tie in the risk factor ranking

▶REGULATORY CONCERNS PERSIST

Federal, state and international regulations remain the most frequently cited risk in companies' 10-Ks this year, an ongoing trend since the study's inception. State regulations have grown particularly stringent in recent years for oil and gas companies. While federal regulation remains piecemeal, states have made concerted moves toward improving industry safety standards. The Government Accountability Office reported in May 2014 that many states have implemented stricter standards for well construction and integrity testing, while other states, including Texas, Oklahoma, California and Colorado have recently revisited their regulations for waste disposal, water testing and cement standards.





In addition, companies continue to keep a wary eye on changes to the federal tax regimes governing their industry. After the number of companies citing the loss of federal income tax deductions dipped last year, it grew again this year by eight percent, with two-thirds of companies listing it as a risk in their 10-Ks. Many companies specifically express concern that looming tax reforms may eliminate deductions for intangible drilling costs and percentage depletion, among other benefits.

Environmental legislative initiatives also remain top of mind for the industry, with nearly all companies in the study (98 percent) specifically mentioning health and environmental regulation. While fewer organizations note climate change and greenhouse gas regulation as a risk (down approximately 10 percent from 2013), the recent Supreme Court ruling empowering the Environmental Protection Agency to take stronger action on carbon emissions may ultimately have unanticipated reverberations from upstream to downstream.

HYDRAULIC FRACTURING POSES UNIQUE CHALLENGES

Hydraulic fracturing, or fracking, and related technology have been the cornerstone of the United States' energy boom. However, it is still a relatively new technology, and its use entails very different operational and safety risks than more traditional drilling methods. Of the companies referencing operational risks in their 10-Ks, nearly one-in-four specifically cites the use of fracking and horizontal drilling technology as a concern.

At the same time, the regulatory environment surrounding fracking continues to evolve. Typically managed at the state level, fracking regulations vary across the nation, with some states (such as Texas) not implementing any fracking-specific legislation beyond existing energy industry regulations, and others, such as Vermont, banning the practice outright. Most states, including Ohio, Pennsylvania and New York, are seeking a middle ground. As a result of this flux and uncertainty, 85 percent of companies cite fracking regulation as a risk this year, consistent with 2013 but nearly double the proportion citing it in BDO's inaugural Oil and Gas RiskFactor Report in 2011. Nevertheless, the lack of significant increase this year suggests that companies are more prepared for regulation and are seeking to cooperate with both the government and public to manage fracking's potential impact on communities, the land and the environment.

As fracking grows more widespread, however, companies are expressing increasing concern about their ability to secure sufficient water to facilitate the process. Whether as a result of increasing competition, government-imposed restrictions or a shortage driven by drought conditions, a lack of water can put a crimp in fracking operations. This year, the number of companies citing water shortages as a risk grew by nearly one-third, up to 42 percent from 32 percent in 2013 and 11 percent in 2012.

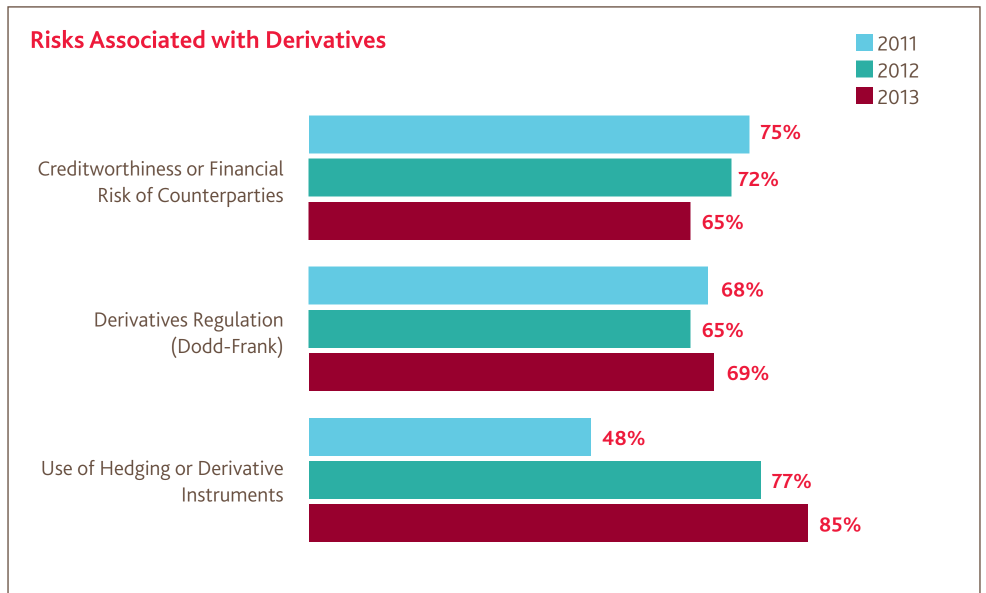
"National election years like this one almost inevitably introduce some degree of regulatory uncertainty for this often-politicized industry," said **Clark Sackschewsky, tax partner with BDO's Natural Resources practice**. "Until the dust settles, companies may be reticent to aggressively pursue new production opportunities as they wait to see if new regulations will come down the pike."

▶DESPITE INTERNATIONAL PRICE STABILITY, HEDGING GROWS RISKIER

The U.S. shale boom has been instrumental in helping to stabilize international oil prices in a time of historic international upheaval. Despite ongoing conflict in the Middle East, the impact of sanctions on Iran's oil industry and simmering tensions with Russia, fewer companies cite disruptions due to political turmoil as a risk this year, down to 74 percent from 82 percent in 2013. With U.S. oil helping to offset the oil shut in by international unrest, crude prices have remained relatively steady: The U.S. Department of Energy reports that 2013 saw the smallest range of daily oil price movements in more than a decade. However, natural gas prices remain persistently low as U.S. companies continue to produce large quantities of natural gas without adequate means to ship the product—specifically liquefied natural gas—abroad to eager markets.

U.S. companies face uncertainty about the sustainability of natural gas production in this environment and the long-term ability of U.S. production to compensate for supply fluctuations worldwide. Combined with the historical volatility of commodity prices, it is no surprise that all companies note oil and gas price volatility as a risk in their 10-Ks. In an effort to offset this uncertainty, many companies have entered into hedging arrangements to protect their revenues and cushion themselves against price declines.

But many oil and gas companies using derivatives in the current pricing environment could lose out on potential profits should prices increase in the future, and a majority (85 percent) list their use of hedging instruments as a risk in their 10-Ks. Many are also concerned that counterparties to these derivatives transactions may default—a risk specifically noted by 65 percent of companies, down slightly from 72 percent last year. In addition, 69 percent of companies indicate that hedging regulation (i.e., Dodd-Frank) may pose a risk to their operations, consistent with previous years.



▶CYBERSECURITY RISKS CONTINUE TO GROW

Continuing the trend from last year, U.S. oil and gas producers express increasing concern about data breaches and the theft of sensitive digital information. With numerous companies, including Saudi Aramco, Chevron and Qatar's RasGas all experiencing data compromise in recent years, the number of companies citing cybersecurity risks reached 53 percent this year, up from 46 percent in 2013 and 12 percent in 2012.

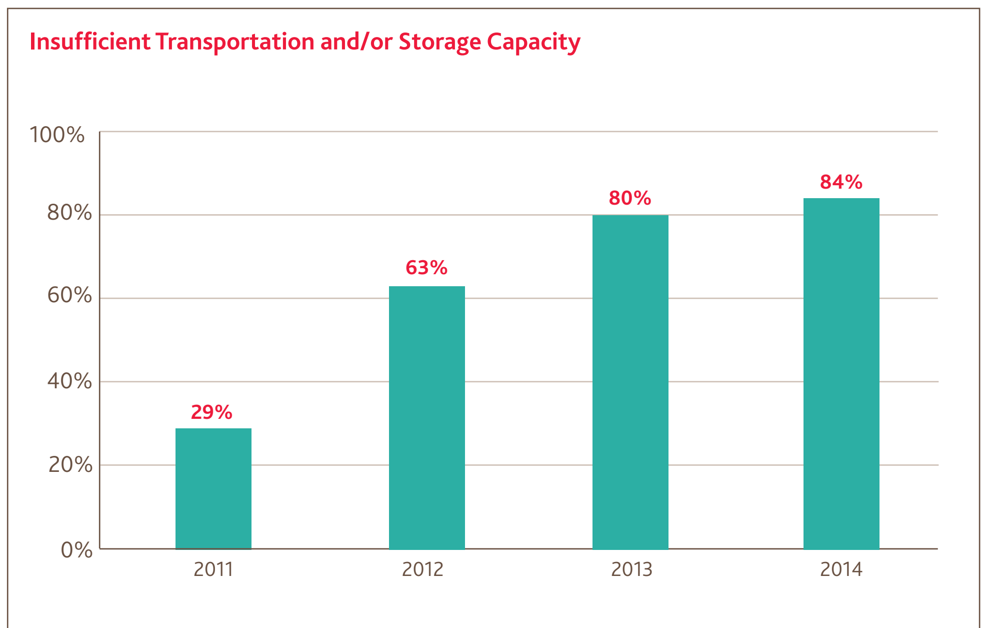
▶LABOR SHORTAGES WORRY PRODUCERS

While oil and gas companies continue to focus on attracting and retaining key personnel, they also expect to compete for skilled laborers, such as engineers and geophysicists, in the coming year: Nearly two-thirds (63 percent) of companies list a shortage of skilled labor as a threat to their operations, up from 44 percent from last year. As the industry's core workforce nears the age of retirement, oil and gas companies are actively looking to recruit young engineers and technicians straight out of college—leaving them with a gap between new and more experienced technical personnel, and forcing them to compete not only among themselves, but also with other employers of choice, such as the technology sector.

"Given the complex global nature of oil and gas operations, reducing exposure to cybersecurity threats relies on a keen understanding of both internal and external risks," said **Karen Schuler, Managing Director at BDO Consulting and leader of the firm's Forensic Technology Services Practice in Washington, D.C.** "Through more stringent internal oversight of supervisory control and data acquisition (SCADA) systems, network infrastructure and employees, as well as persistent monitoring of vendors and other potential external threats, companies can better protect their systems and help avoid costly operational disruptions."

▶PRODUCERS GRAPPLE WITH TRANSPORTATION CONSTRAINTS

As oil and gas production continues to grow, companies continue to worry about their ability to bring their resources to market. A majority (84 percent) of companies cite insufficient pipeline, trucking or storage capacity as a risk in their 10-Ks this year, up slightly from last year.



This highlights ongoing capacity issues in the midstream sector, which is racing to keep up with exploding supply while working to transport oil and gas safely and with minimal impact to the environment. While the southern portion of the Keystone XL Pipeline has been completed and went into operation in early 2014, a number of high-profile rail accidents have highlighted the need to further improve the United States' pipeline network to more safely move oil and gas from the shale formations to key markets.

Overall, this year's ***Oil & Gas RiskFactor Report*** suggests that industry growth remains strong and promising; however, with this growth comes inherent risk. Competitive pressures in particular may proliferate, with companies battling for a limited pool of labor, executive leadership, prospects and transportation capacity. Meanwhile, regulatory and commodity price risks have become perennial concerns that many companies have come to accept as a standard part of the business. Despite these risks, however, the industry remains a bright spot for both the United States and the international economy.

ABOUT THE NATURAL RESOURCES INDUSTRY PRACTICE AT BDO USA, LLP

BDO's Natural Resources industry practice provides assurance, tax and advisory services to emerging and established businesses in the United States and all over the world that are involved in both the traditional and alternative energy industries. Our clients often operate across borders, either raising capital or making acquisitions abroad. Our extensive industry knowledge is supported by our global network of 1,264 offices in 144 countries, allowing us to provide a consistently high level of service wherever our clients do business.

ABOUT BDO USA, LLP

BDO is the brand name for BDO USA, LLP, a U.S. professional services firm providing assurance, tax, financial advisory and consulting services to a wide range of publicly traded and privately held companies. For more than 100 years, BDO has provided quality service through the active involvement of experienced and committed professionals. The firm serves clients through 49 offices and over 400 independent alliance firm locations nationwide. As an independent Member Firm of BDO International Limited, BDO serves multinational clients through a global network of 1,264 offices in 144 countries.

BDO USA, LLP, a Delaware limited liability partnership, is the U.S. member of BDO International Limited, a UK company limited by guarantee, and forms part of the international BDO network of independent member firms. BDO is the brand name for the BDO network and for each of the BDO Member Firms. For more information, please visit www.bdo.com.

Material discussed is meant to provide general information and should not be acted upon without first obtaining professional advice appropriately tailored to your individual circumstances.

To ensure compliance with Treasury Department regulations, we wish to inform you that any tax advice that may be contained in this communication (including any attachments) is not intended or written to be used, and cannot be used, for the purpose of (i) avoiding tax-related penalties under the Internal Revenue Code or applicable state or local tax or (ii) promoting, marketing or recommending to another party any tax-related matters addressed herein.

© 2014 BDO USA, LLP. All rights reserved.

People who know Natural Resources, know BDO.

BDO