

# Energy Transaction Trends

April 2009 | Volume 3

## Introduction

This is the third issue of Energy Transaction Trends, a publication prepared by the energy transaction professionals in PricewaterhouseCoopers' Energy M&A practice. This publication focuses on merger and acquisition trends in the Energy industry and other topics of current interest to energy companies.

The first article, Looking Ahead, offers insight into the immediate outlook for deal-making in the Energy sector. Although the first half of 2009 is expected to be sluggish for deals, there are compelling factors which support increased deal making during this period of economic uncertainty. The second article builds on these factors and also discusses the advantages and disadvantages of alternative deal structures. The third article, Oil and gas accounting—current developments, reviews the key revisions enacted by the SEC's final rule "Modernization of Oil and Gas Reporting" on December 31, 2008. This publication focuses on merger and acquisition trends in the Energy industry and other topics of current interest to energy companies.

## In this issue

Looking ahead .....	02
Consolidation factors and alternative deal structures .....	03
Oil and gas accounting—current developments .....	06
Summary of significant oil and gas deals and other pricing trends.....	10

## Looking ahead

The immediate outlook is for oil and gas deal-making to be subdued. A triple bottom line of constrained debt markets, depressed equity prices and depressed commodity prices looks set to stall significant deal-making for at least the first half of 2009. The opening of the market for new/large debt financing is not expected to gain much traction until the equity markets stabilize and companies prove they can raise equity. Note: The debt markets have recently shown some strength but the issuances primarily relate to refinancing as opposed to new/first time issuances.

After the equity markets stabilize and credit markets open up, especially for target re-financing, deal activity should reawaken. The long-term energy supply and demand fundamentals are still compelling. A change in confidence would remind everyone that supply constraints remain and the potential for a fast revival in the oil price and deal-making is there.

Once target debt refinancings and new debt begin flowing more consistency, the turnaround in deal momentum could happen quite quickly, probably led by stock-for-stock deals. Even without funding constraints being lifted, there are many players in the sector with healthy balance sheets and healthy acquisition funds available. Many of the majors and national oil companies are in a strong position following a period of high commodity prices. For companies from countries such as China, the current market offers unrivalled opportunities to gain access which, in other circumstances, would be denied to them. Similarly, sovereign wealth funds and many private equity investors will be watching the sector closely.

A sector environment with strong and weak players will, ultimately, be ripe for renewed deal momentum. Acquisitions are very compelling at current valuations. The larger upstream players will be able to bide their time if they choose, in the meantime concentrating on drilling rather than acquisition-led growth. The outlook is much tougher for smaller exploration and production companies who need

M&A to show growth. Many will become targets. A similar dynamic lies ahead between the larger and smaller players in the oilfield services sector.

While deal activity in the first half of the year will likely remain low, it is difficult to see stronger players remaining on the sidelines for all of 2009 given the opportunities for acquisitions at low valuations. Deals for major assets in locations such as Brazil and Canada, with access to end markets and promising reserve potential, are likely to be high on many companies' target screens. In the US, the opportunity to access the natural gas shale plays is also very compelling at these valuation levels.

There is also the potential for secondary deals to fall out from transactions made at stretched valuations at or close to the top of the market as companies are forced to ease balance sheet pressure. Finally, companies seeking to broaden their portfolios into alternative energy may find that distress and low valuations in alternative energy stocks offer a ripe opportunity for diversification moves. The appetite for moves of this kind will, in part, be influenced by the progress of talks in the run up to and at the December 2009 UN Climate Summit and the extent to which this establishes a framework for clean energy.

### About the author

Rick Roberge is a Partner in the Houston Transaction Services group of PricewaterhouseCoopers LLP. Rick brings over 20 years of financial advisory experience to our clients and focuses on Energy. Rick is a financial due diligence and valuation specialist and has worked with a number of PE funds and corporations helping them on M&A advisory services.

## Consolidation factors and alternative deal structures

With the exception of a small increase in the number of deals within the upstream sector in 2008 (albeit at a lower average transaction value compared to 2006 and 2007), other sectors within the Energy industry showed declines in both number of deals and average transaction value. Even before oil prices plunged from \$147 per barrel in July 2008 to settle near \$48 per barrel at March 31, 2009, large deals were less common in 2008 with only two deals valued at over \$5 billion. This compares to ten large deals in 2007. Although the beginning of 2009 remains sluggish for Energy, supporting factors for consolidation remain.

### *What are the factors that support further consolidation in energy?*

Some of the more prevalent factors are:

- Significant cash at leading energy companies;
- Continued global demand for new reserves;
- The need to acquire technology;
- Liquidity constraints of highly leveraged companies; and
- Energy remains a highly fragmented and geographically diverse industry.

To further expand on these factors supporting consolidation, consider the following sampling of 2008 year-end cash (including cash equivalents) at these major oil and gas companies:<sup>1</sup>

	<i>(in US billions)</i>
Exxon Mobil Corporation	\$32.0
Total SA	\$17.4
Royal Dutch Shell plc	\$15.2
Chevron Corporation	\$9.6
BP plc	\$8.2
Schlumberger	\$3.7
Anadarko Petroleum Corporation	\$2.4
Occidental Petroleum	\$1.8
Noble Energy, Inc.	\$1.1
Halliburton	\$1.1

Source: Company financial reports for the year ended December 31, 2008.

The continued demand for new reserves is not a new concept and has received considerable press in the past five years. Much of this is due to the United States' continued reliance on oil and natural gas, and increased demand in China and India. In 1980, China and India together accounted for less than 8 percent of the world's total energy consumption; in 2005 their share had grown to 18 percent. By 2030, China and India will represent 25% of world energy consumption and their combined energy use between now and 2030 will almost double. Although some analysts are forecasting lower growth for China in 2009, worldwide demand is expected to increase despite the current global recessionary environment. Based on the latest estimates, worldwide oil and gas reserves are 1,200 - 1,300 billion barrels and 6,300 trillion cubic feet, respectively. Although there are varying predictions as to when the world will run out of oil and gas, many economists and experts agree that finding new energy reserves is vital to continued economic development. The need to acquire additional technology also coincides with the ability of oil and gas companies to locate additional reserves which reside in increasingly more challenging locations (i.e., deep water, shale formations, etc.), and which require access to more sophisticated technology.

Given the current state of the global economy, leverage and liquidity constraints are a growing concern for the industry. Although companies with low to moderate debt levels and cash on hand are expected to easily weather the storm, other companies are at risk due to leverage and high fixed charges. As Moody's stated in its new publication titled *Moody's US Bottom Rung, First Quarter 2009*, "Tight credit markets and the global economic downturn are rapidly swelling the population of U.S. companies with high default risk and weak liquidity." Although energy companies do not dominate the quarterly list of U.S. companies that are most at risk of defaulting, they do comprise 5% of the total list. Given the energy industry's high level of capital expenditure and its need to discover new reserves and acquire new technology, leverage cannot be ignored.

<sup>1</sup> Note that the cash amounts do not include access to financing that many of these companies have in place (or could otherwise obtain given their investment grade status).

### Alternative deal structures that are becoming more prevalent

Given the pressure to consolidate, alternative deal structures are becoming more commonplace. Some of these structures such as partnerships, strategic alliances, and joint ventures have the benefit of bringing together new combinations of companies, expertise and technology without waiting for the valuation gap between buyers and sellers to narrow. Many of these structures have the benefit of diminishing risk while still accomplishing the primary goal (i.e., acquire global scale, acquire new technology, obtain access to new reserves, etc.).

Structure Type	Advantages	Disadvantages
Stock for stock	<ul style="list-style-type: none"> <li>Acquirer does not use any cash (freeing cash for other purposes)</li> <li>No need to access the debt markets</li> <li>No financing contingency which provides speed to close and certainty</li> <li>Opportunity for synergies (reduced workforce, eliminate redundant back office functions, etc.)</li> </ul>	<ul style="list-style-type: none"> <li>May require shareholder approval</li> <li>May be dilutive to existing shareholders</li> <li>Deal prices change daily with stock price changes</li> <li>Change in control triggers on Seller debt which may require accessing the capital markets</li> <li>Acquiree has to be comfortable with the Acquirer's business model</li> <li>Acquiree may prefer cash or part cash / part equity</li> <li>Public and rating agencies perspectives may be negative</li> <li>Combined entity may have integration risk which may include combining cultures</li> </ul>
Partnerships, strategic alliances and joint ventures	<ul style="list-style-type: none"> <li>Usually easier to implement</li> <li>Less time consuming and costly to unwind</li> <li>These structures provide both partners with something that is wanted / needed</li> </ul>	<ul style="list-style-type: none"> <li>Reputational risk</li> <li>Lack of control for one party (which may be desired)</li> <li>Parties may have to share technology or intellectual property which they view as proprietary</li> </ul>
Spin-offs	<ul style="list-style-type: none"> <li>Parent may receive cash and equity in new entity</li> <li>Parent can focus on core operations</li> <li>Higher growth potential for new entity</li> <li>Opportunity for a subsidiary to obtain Parent support but not be impacted by Parent's image or history</li> </ul>	<ul style="list-style-type: none"> <li>Time intensive process to prepare for the separation</li> <li>Both entities usually remain linked and dependant on one another for a time period</li> <li>Parent has reputational risk</li> <li>Human capital and intellectual property losses at Parent</li> </ul>
Volumetric production payments (VPP)	<ul style="list-style-type: none"> <li>Purchaser can hedge large quantities of production for a long duration</li> <li>VPP's for the Purchaser are free of operating costs, capital expenditures and taxes</li> <li>Advantages to Seller as compared to selling assets (upside potential, VPP's are usually not treated as a sale for tax purposes, maintain operating control)</li> </ul>	<ul style="list-style-type: none"> <li>Purchaser has reserve risk, production risk, price risk, off-take risk and hedge exposure</li> <li>Purchaser may have to consolidate for FIN46(r) (may be an advantage depending on circumstance)</li> <li>Rating agencies generally treat VPP's as debt for the Seller</li> </ul>
All cash	<ul style="list-style-type: none"> <li>Cash is King!</li> <li>Time to close should be shorter than if external financing was required</li> <li>Provides certainty for Acquiree</li> </ul>	<ul style="list-style-type: none"> <li>Depletes Acquirer's cash reserves should other opportunities arise</li> <li>More pressure on the acquisition to be successful given the capital intensive nature of the Energy industry</li> </ul>

### *Other considerations*

There are various items to consider based on the acquisition structure. For example, contingent consideration and earn-outs are becoming more popular given the uncertainty of future cash flows and forecast assumptions. However, there are pitfalls that the Buyer and Seller must consider to ensure both parties agree on the earn-out calculation and understand the accounting impacts given that the acquisition accounting rules have recently changed. This process will require the Buyer to take into account its integration plans to ensure that cash flows related to the earn-out can be easily identifiable throughout the earn-out period. Under the latest guidance prescribed in SFAS No. 141(R), Business Combinations, earn-outs are measured at fair value as of the acquisition date and may require subsequent re-measurement depending on how the earn-out is classified (i.e. equity, derivative or asset / liability). This may introduce income statement volatility whereas the old accounting rules required adjusting goodwill. Preferred equity is also becoming more prevalent as the preferred equity holders rank senior to debt and common equity holders and usually receive dividends. For partnerships, strategic alliances and joint ventures, governance and partnership rights will continue to be important to protect both parties and increase the likelihood of a successful arrangement.

### *About the author*

Kimberly Dennison is a Director in the Houston Transaction Services group of PricewaterhouseCoopers LLP. Kimberly has been in Transaction Services for 10 years and has worked on a broad range of corporate and private equity clients in the United States and Australia. The most exciting part of deals for Kimberly is after a buy decision has been made and the focus changes from diligence to negotiation of the various closing documents and implementation of the structure.

## Oil and gas accounting—Current developments

On December 31, 2008, the SEC issued its final rule “Modernization of Oil and Gas Reporting” (the Rule). This Rule revises the disclosures required for oil and gas companies subject to SEC reporting requirements and amends many of the definitions and calculations used to determine oil and gas reserves.

The revisions are “intended to provide investors with a more meaningful and comprehensive understanding of oil and gas reserves,” in order to help investors evaluate their investments in oil and gas companies. The revisions also are intended to align oil and gas disclosure requirements with current practices and the technological advances that have occurred in the three decades since the original disclosure requirements were adopted.

The SEC currently is coordinating with the Financial Accounting Standards Board (FASB) and the International Accounting Standards Board (IASB) to ensure a smooth transition to the new Rule. However, while the SEC and the IASB are committed to working towards convergence in this area, both acknowledge that differences in determining and reporting reserves quantities may continue to exist after the IASB completes its Extractive Activities Research Project

( the Extractive Project). The purpose of the Extractive Project is to lay the foundation for new accounting and reporting requirements, including for oil and gas reserves determination and disclosures, in the extractive industries.<sup>1</sup> Coordination with the FASB also is important because, as written, the new Rule conflicts with certain oil and gas specific pronouncements issued by the FASB.

The key provisions of the new Rule related to the reserve estimation process are summarized in the following table.<sup>2</sup>

---

<sup>1</sup> The IASB’s Extractive Project has been underway for several years and the project team is expected to issue a discussion paper in 2009, highlighting the project team’s views on the requirements and steps necessary towards the development of an acceptable approach to resolving accounting issues that are unique to upstream extractive activities (i.e., mining and oil and gas).

<sup>2</sup> The tables included in this article are summaries of the new Rule. Readers are advised to read the new Rule in its entirety for a comprehensive understanding of the SEC’s new oil and gas reporting and disclosure requirements.

Description	Old rule	New rule
Prices used to determine reserve quantities	Companies previously were required to utilize year-end pricing to determine reserve quantities.	Companies now will be required to use the 12-month historical average price to determine reserve quantities.
Non-traditional resources	“Non-traditional” and “unconventional” sources of oil and gas were not included in the SEC’s definitions of “oil and gas producing activities.”	The definition of “oil and gas producing activities” has been revised to include non-traditional resources and unconventional sources, such as bitumen extracted from oil sands and oil and gas extracted from coal and shale (i.e., synthetic oil and gas).
Use of new-technology to determine quantities of oil and gas	Historically, the SEC limited the use of new technologies to support the determination of oil and gas quantities.	Companies now will be allowed to use new reliable technologies to support reserve estimates.
Probable and possible reserves	Companies previously were prohibited from reporting reserves other than proved oil and gas reserves.	Companies now will be permitted, but not required, to disclose probable and possible oil and gas reserves.
Full cost ceiling test	The full cost ceiling test previously was calculated utilizing “current prices,” which had been defined as the single-day, year-end prices. Additionally, current prices could be revised to take into consideration price increases subsequent to the period end.	Companies now will be required to use a 12-month average price to calculate the full cost ceiling. Price increases subsequent to year-end no longer may be considered in the ceiling test.

In addition to the above noted revisions related to determining reserves quantities, the SEC also amended certain disclosure requirements, including:

Disclosure	Old rule	New rule
Geographic area	Companies previously were required to separately disclose information about significant geographic locations.	The new rule defines the term “by geographic area” and establishes a percentage threshold (15%) at which disclosures related to production, reserves and per unit average sales prices and costs are required.
New technologies	N/A	Companies now are required to disclose the technologies used to establish additions to reserves estimates.
Reserves estimation process	N/A	Companies now are required to disclose the internal controls used to assure objectivity in the reserves estimation process and the qualifications of the technical person primarily responsible for preparing reserves estimates.
Third-party reserves estimates/audits	N/A	Companies that disclose a third party either prepared their reserves estimate or conducted a reserves audit must file a report of the third party.
Proved Undeveloped Reserves (PUDs) – changes	N/A	Companies now are required to provide narrative disclosure of 1) total proved undeveloped reserves at year end; 2) any material changes that occurred during the year; 3) investments and progress made during the year to convert PUDs to proved developed; and 4) why material concentrations of PUDs in individual fields or countries remained undeveloped for five or more years.
Foreign Private Issuers (FPIs)	FPIs previously were required to provide oil and gas disclosures, but on a more limited basis than US issuers.	FPIs now are required to provide expanded oil and gas disclosures which are consistent with those provided by US issuers.

Overall, the SEC appears to have taken a large and positive step forward to modernize its rules related to the determination and reporting of oil and gas reserves. This new Rule more closely aligns reserves reporting with current industry practice and increases the usefulness of the reserves reporting to the market and investors.

However, application of the new Rule does entail a few challenges, including:

#### Effective date.

Although coordination with the FASB and IASB could delay the adoption date, the new Rule currently requires companies to update their financial reporting and operational information systems and their internal controls over oil and gas reporting for their 2009 annual report. The short time frame during which companies will be required to comply with the new computational, disclosure and internal control requirements represents a substantial challenge for most oil and gas companies.

#### Level of effort.

The SEC estimates the incremental effort of complying with the new Rule to be approximately 135 hours for US issuers and 150 hours for FPI's. However, responses submitted by US issuers and FPIs to the SEC's proposed rule to modernize oil and gas accounting indicates that these issuers expect the incremental effort to comply with the new Rule to be substantially in excess of the SEC's estimate.

#### FPIs.

Foreign Private Issuers now will be required to comply with the same oil and gas reporting and disclosure requirements as US issuers. As a result, FPIs may be required to prepare and disclose multiple versions of oil and gas disclosures in order to comply with their local and SEC reporting requirements.

#### FASB.

The new Rule currently conflicts with existing oil and gas-related accounting standards. As a result, the FASB will need to amend certain standards prior to the effective date of the new Rule.

#### IASB.

The SEC did not directly coordinate its reserves modernization project with the IASB's Extractive Project. As such, SEC registrants will need to comply with new oil and gas reporting and disclosure requirements in their 2009 annual reports. Then, upon the US's transition to IFRS, these same SEC registrants may be required to comply with the potentially different IASB oil and gas definitions and reserves reporting requirements. This lack of convergence will add to the level of effort, complexity and cost for SEC registrants to convert to IFRS.

The provisions of this new rule are effective for registration statements filed on or after January 1, 2010, and for annual reports for fiscal years ending on or after December 31, 2009.

#### About the author

Joe Dunleavy is a Houston-based Partner in the Accounting and Financial Reporting Practice of PricewaterhouseCoopers LLP. Joe has spent over 15 years serving clients in the energy sector.

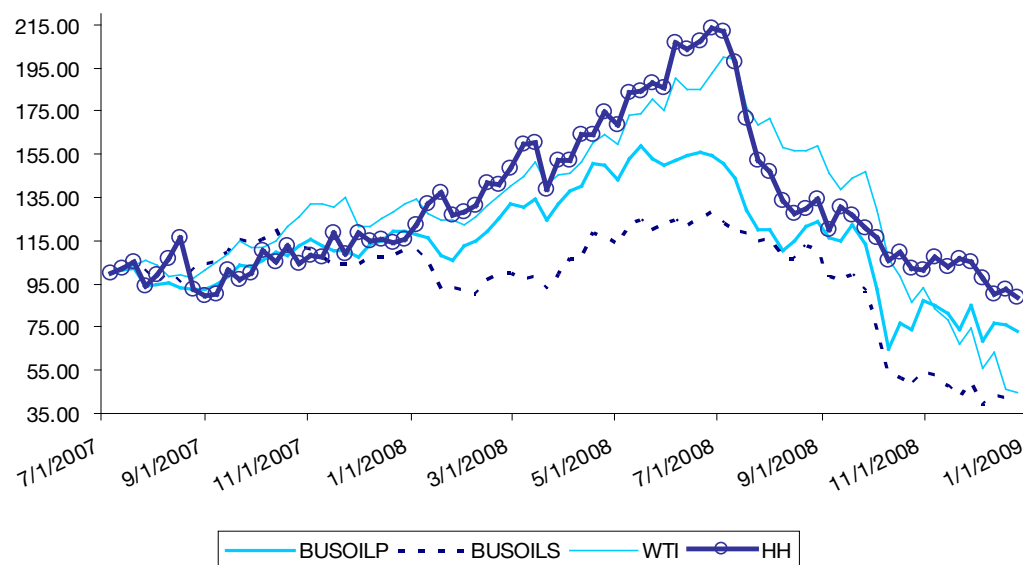
## Summary of significant 2008 oil & gas deals

Buyer	Seller	Announce Date	Value of Transaction (in billions)
<b>Upstream deals</b>			
ConocoPhillips	Origin Energy Ltd	09/08/08	5.8
Royal Dutch Shell plc	Duvernay Oil Corp	07/14/08	5.8
XTO Energy Incorporated	Hassie Hunt Exploration Co; Hunt Petroleum Corporation	06/10/08	4.2
StatoilHydro ASA	Chesapeake Energy Corporation	11/11/08	3.4
Plains Exploration & Production Co	Chesapeake Energy Corporation	07/01/08	3.3
BG Group plc	Queensland Gas Company Ltd	10/28/08	2.9
China's State Administration of Foreign Exchange; China Investment Corporation Ltd	Total SA	04/04/08	2.7
Gazprom	EON AG	10/02/08	2.6
ONGC Videsh Ltd; Oil & Natural Gas Corp Ltd	Imperial Energy Corporation PLC	08/26/08	2.2
GEPetrol	Devon Energy Corporation	04/08/08	2.2
<b>Midstream deals</b>			
Deutsche Bank AG; AMP Capital Investors	Enbridge	05/29/08	1.6
AP Moeller Group	Brostrom AB	08/27/08	1.2
Enbridge Incorporated	Enbridge Energy Partners LP	11/18/08	1.0
Riverstone Holdings LLC	Hunting plc	08/06/08	1.0
El Paso Pipeline Partners LP	El Paso Corporation	09/17/08	0.7
Duncan Energy Partners LP	Enterprise Product Partners LP	12/08/08	0.7
Gazprom	Rosneft	07/21/08	0.6
Plains All American Pipeline LP	Rainbow Pipe Line Company Ltd	04/07/08	0.5
General Maritime Corp	Arlington Tankers Ltd	08/06/08	0.5
TEPPCO Partners LP	Cenac Towing Inc; Cenac Offshore LLC	02/04/08	0.5
<b>Downstream deals</b>			
BASF AG	Ciba Holding AG	09/15/08	4.7
LUKOIL	ERG SpA	06/24/08	2.1
Cosan SA Industria e Comercio	Exxon Mobil Corporation	04/24/08	1.0
TNK-BP	Undisclosed (several deals or parties)	12/01/08	0.9
Ultrapar Participacoes SA	Chevron Corporation	08/14/08	0.7
Pilot Corp	Marathon Oil Corporation	10/01/08	0.7
Ashmore Investment Management Ltd	Government of Philippines	10/23/08	0.5
Alon USA Energy Inc	Valero Energy Corporation	05/08/08	0.5
Ashmore Group	Saudi Arabian Oil Company	03/19/08	0.5
RWE AG	Excelerate Energy LLC	02/15/08	0.5
<b>Oilfield services deals</b>			
China Oilfield Services Limited	Awilco Offshore ASA	07/07/08	3.8
Alphinvest Partners; JC Flowers & Co LLC; Goldman Sachs Group Inc; Candover Investments plc	Expro International Group	06/13/08	3.7
Smith International Incorporated	W-H Energy Services Inc	06/03/08	2.8
First Reserve Corp	CHC Helicopter Corp	02/22/08	2.2
Ship Finance International Ltd	SeaDrill Ltd	09/16/08	1.7
Dryships Inc	Ocean RIG ASA	04/22/08	1.6
Precision Drilling Trust	Grey Wolf Incorporated	08/25/08	1.6
Great Offshore Ltd	Undisclosed	01/16/08	1.4
Fortune Super Equity Management LLC	Scorpion Offshore Ltd	02/15/08	1.2
General Electric	Tenaris SA	01/28/08	1.1

Source: Based on published transactions from John S. Herold, Inc. M&A database December 2008.

## 2007 and 2008 weekly values through December 26, 2008

The chart below captures several key benchmarks and their relationship to one another:



### Observations:

Both energy indices and commodity prices peaked in late June / early July. However, the credit crisis and falling commodity prices in the third and fourth quarter served as a “double whammy” and hit the energy sector particularly hard as indices and commodity prices have fallen between 54% (Producers Index) and 78% (WTI oil prices) between the peak in mid 2008 and December 26, 2008.

- The oil & gas prices / indices in the accompanying chart have been normalized for presentation on a comparable basis with July 2007 equaling 100.
- BUSOILP: This is the Bloomberg US Oil and Gas Producers Index.
- BUSOILS: This is the Bloomberg US Oil and Gas Services Index.
- WTI: West Texas Intermediate crude oil prices at Cushing, Oklahoma.
- HH: Henry Hub natural gas prices.

For additional information on the Energy M&A team, please contact the following partners in our Houston based team:

Michael Collier  
Tel: 713.356.8133  
Email: michael.collier@us.pwc.com

Joseph Dunleavy  
Tel: 713.356.4034  
Email: joseph.p.dunleavy@us.pwc.com

Rob McCeney  
Tel: 713.356.6600  
Email: rob.mcceney@us.pwc.com

Rick Roberge  
Tel: 713.356.8285  
Email: rick.roberge@us.pwc.com

## About PricewaterhouseCoopers

PricewaterhouseCoopers ([www.pwc.com](http://www.pwc.com)) provides industry-focused assurance, tax and advisory services to build public trust and enhance value for its clients and their stakeholders. More than 154,000 people in 153 countries across our network share their thinking, experience and solutions to develop fresh perspectives and practical advice.

## About the PricewaterhouseCoopers energy practice

Recognized globally for deep energy industry experience, PricewaterhouseCoopers has an extensive history of providing resources and proven solutions that enable energy companies to meet their business imperatives. By providing audit, tax, and business advisory services to the Supermajors and key National Oil Companies and the vast majority of the Fortune 500, PricewaterhouseCoopers' professionals possess the experience necessary to provide optimal insight and impact. The global energy practice of more than 3,100 professionals, including 300 partners, is headquartered in Houston, Texas, and is committed to building meaningful relationships with energy clients. Commitment to the energy industry goes beyond service delivery and is demonstrated by an additional focus on knowledge sharing accomplished through thought leadership publications, educational opportunities, and industry event participation and sponsorship.