

## ENERGY

INDUSTRY QUARTERLY

## IN THIS ISSUE

Global Reserves and Demand for Oil &amp; Gas

Current Activity – 2008

Alternative Sources of Energy

Outstanding Deals - 2008

Jerald Alexander

JP Balestrieri

Herbert Bud Boles

Deanna Cannon

S. Lee Crawley

Michael Gardner

Roy Graham

Lawrence Rogers

November 2008 | H.F. “Bud” Boles, Editor

When my Energy IPG Associates suggested that we have a routine quarterly report of the energy business, I eagerly agreed to an initial draft of the newsletter. My assumption was that this should be a routine report of increasing demand for oil and gas with limited supply. Little did I realize a swing up to \$140.00 per barrel and down to \$60.00 per barrel in a matter of weeks.

We are all confused and perplexed by the subsequent events that threw the national economic picture in doubt and its possible effects on our energy future.

The market for petroleum products is much more complicated than supply and demand. Many variables are involved not the least of which is the investment community. The Oil & Gas Financial Journal recently quoted Peter C. Fusaro of Energy Hedge Funds in New York City as follows:

“Economists have estimated that over \$250 billion is in the energy sector compared to \$46 billion three years ago. With so much new dumb money in the sector we are seeing even more uncertainty and price volatility in daily markets.”

## I. Global Reserves and Demand for Oil & Gas

Matthew Simmons authored the book *Twilight In The Desert: The Coming Saudi Oil Shock And The World Economy* in which he referred to The Hubbert Curve which postulated that world production would peak in between 2005 and 2010. The peak of 85.7 million barrels per day of crude and liquids occurred in 2005 and production fell in 2006 and 2007. Global demand is rising at 4% - 7% per annum in much of the developing world. Simmons advanced the shocking opinion that Saudi Arabia reserves are grossly over estimated. The Abraham Energy Report states:

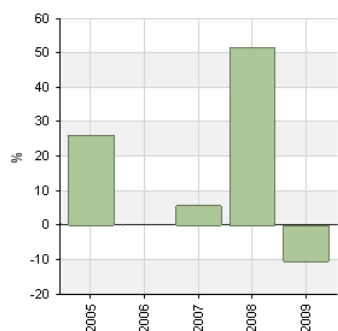
“The world faces a perfect storm of constrained fossil fuel supplies, unbounded energy demand and new resolve to reduce greenhouse gas emission, all of which qualify as significant economic and political stress factors today and in the future. The International Energy Agency (IEA) predicts a 55% increase in worldwide energy demand by 2030. Meeting future energy needs will require a diverse fuel mix, including fossil fuels, renewable energy and nuclear power.”

Demand for domestic reserves has remained steady with imports of approximately 60% of our consumption. Adverse factors including political restrictions of drilling certain U.S. reserves, environmental and increasing restrictions of regulatory requirements as well as hurricane damage have limited growth of U.S. of production capacity.

## II. Current Activity – 2008

US Oil Drilling & Gas  
Extraction Industry

Revenue Growth Rate



Source: IBIS World

- Offshore Domestic discoveries have been established in 10,000 to 20,000 feet of water by major companies. Significant discoveries have been made offshore Brazil. Apache has had great success in Egypt with the largest discovery in Apache's history. 2.5 TCF of gas and 80 MMBO of condensate.
- Energy Partners completed Gulf of Mexico wells with average volumes of 15,789 BOEPD comprising 56.5 MMCFD and 6,370 BOPD.
- The North American continent is experiencing one of the largest natural gas plays in history resulting from shale plays with increasing technology involving frac techniques as well as improving horizontal drilling technology. The Barnett Shale play in North Texas, Arkansas Fayetteville Shale, Appalachian Basin Marcellus Shale play, Woodford Shale in Oklahoma, Woodford Shale in West Texas and Bakken Shale play in Montana and N. Dakota have all proved to be economic developments. These are only a few of the major developments in the exploration and production activity.
- Global objectives will recognize tight energy markets continuing into the future, reflecting mounting demand from India and China and the lack of production capacity. Meeting future energy needs require a diverse fuel mix including fossil fuels, renewable energy and nuclear power.

## III. Alternative Sources of Energy

### Liquefied Natural Gas (LNG)

Quote from Abraham Energy Report:

“LNG is becoming a credible and likely alternative to meeting long term global energy needs. The nation of Qatar is at the top of the list. Sitting on 900 trillion cubic feet (tcf) of gas reserves the nation may become the leading supplier of LNG, topping 42 million tons in exports by the end of the decade.”

### Coalbed Methane Gas

The North American Continent has an abundance of coal reserves which has resulted in numerous development projects to exploit coalbed methane gas reserves.

### Tight Sands

Tight Sand projects have been attractive targets because of improving production recovery techniques and horizontal drilling.

### Tar Sands

Development of vast tar sands in Canada is in progress.

### Insitu Nuclear Combustion Of Oil Shales In U.S.

This technology has been in research and pilot stages for many years and will ultimately be an important source of reserves

---

### **Marginal oil production in USA**

Marginal oil and natural gas wells, defined as those producing less than 10 barrels of oil or 60 Mcf of natural gas per day, provide vital energy and economic security to states and the nation every day. Ryder Scott Petroleum estimated marginal wells that were plugged and abandoned in eleven states resulted in a loss of \$1.77 billion in economic output, \$369.2 million in earnings reductions and 8,223 jobs.

### **Clean Coal**

There is great potential in the future for clean fuel for massive power plants.

### **Ethanol**

Ethanol development projects have been uneconomical and unsuccessful.

## **IV. Outstanding Deals – 2008**

- Chesapeake Energy and British Petroleum have entered into a joint venture whereby BP will acquire a 25% stake in Chesapeake's Fayetteville Shale Assets in Arkansas for \$1.9 billion. The assets have new production of 180 MMCFD and include 540,000 net acres. The companies believe this position could support the drilling of up to 6,700 future horizontal wells on 60 acre spacing.
- Devon has been a leader in the Barnett Shale having drilling over 3,000 wells in the play. The company has now disclosed that the company has acquired 483,000 leasehold acres in the Haynesville play in East Texas and NW Louisiana.
- Occidental Petroleum has agreed to purchase all of Plains E&P interests in the Permian and Piceance Basins for \$1.25 billion. Net production is 13,000 BOEPD and proved reserves of 92 MMBOE (6% gas and 45% developed)

This report has intentionally omitted references to political pressure, adverse actions by our government and other hostile governments in the world. Considering the global energy future, only time will hopefully witness a rude awakening for the necessity of energy independence. Energy IPG will report on this subject in the future.



The Energy Practice Group is a multi-disciplinary group of investment banking advisors within Corporate Finance Associates. Collectively, the Energy Practice Group provides M&A advice to independent and integrated energy companies in all sectors of the energy industry, including power generation, oil & gas, utilities, mining and natural resources, renewable energy and businesses that serve the energy industry, in all aspects of oil and gas land-based transactions, mergers, acquisitions, joint ventures and financial resources. For more information contact your local Corporate Finance Associates office.

Energy Industry Practice Group  
Corporate Finance Associates

949.305.6710  
[www.cfaw.com/](http://www.cfaw.com/)