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A great concern among Energy proponents the past year has been the reluctance of our present administration to support the development of USA offshore and onshore known reserve targets in the USA. For whatever reason, President Obama surprised the energy world recently by announcing that he will allow limited new offshore oil and gas drilling. Included in the remarks Mr. President promises to support development of leased acreage off the North Slope referring to a $2.6 billion lease sale in the Chukchi Sea that was completed in 2008. Companies are already preparing to drill there and it would be costly to roll this back. The puzzling news is that the administration cancelled five other leases in Alaska. Two of those are also in the Chukchi, which is estimated to hold 77 billion barrels of oil – compared to 22 billion in current U.S. proven reserves. Several other areas were mentioned for potential drilling all of which is likely a plan to get votes for the President's comprehensive energy and climate bill known as cap and trade tax. The administration still wants to raise the price of carbon energy so ethanol, wind and other unconventional sources have a chance to be competitive.

I. Global Review and Demand for Oil & Gas

Exxon / Mobil predicts that growing populations and economies in developing countries will drive global energy demand almost 35 percent higher in 2030 than it was in 2005. That increase is comparable to the current demand of the U.S. and Europe combined.

An example is the activity by India companies to scour the globe to secure crude resources and reduce this dependence on imported oil. India imports 90% of its oil with a price tag of $90 billion annually.

Another example is fast growing China who is hungry for fuel. Royal Dutch Shell PLC has agreed to explore for natural gas with China National Petroleum Corp. by signing a 30 year contract involving the Southwestern Province of Sichuan.

We do have a serious global problem and that is worldwide pollution of the atmosphere. Dr. Steven Chu, U.S. Secretary of Energy addressed the problem before a group of Berkeley students. He said "Coal is my worst nightmare" but he doesn't believe that developing countries like the U.S., China, Russia or India will give up coal anytime soon. Thus his next best hope is technology to develop the "clean coal" and carbon sequestration into which DOE has funneled some $3.4 billion in research from federal stimulus funds. China now leads the U.S. as the greatest carbon-emitting country on the globe. In a speech in July at China's Tsingham University, Chu noted that while developing nations are responsible for emitting carbon in the atmosphere, China is on track to emit more carbon in the next three decades than the U.S. has in its history. Dr. Chu said "We are all in this together so we need to fix it together".

II. Oil and Gas Pricing

Many large independent companies are changing exploration philosophy to shift focus from natural gas to become onshore U.S. oil producers. The large independent oil companies found huge amounts of natural gas reserves trapped in shale. This great success has flooded the market with gas. U.S. natural gas futures are trading near $4 a million British Thermal Unit which is below the cost of production for many companies.

Oil prices have more than doubled since early 2009 and are trading in the mid $80's per barrel. The emphasis is for horizontal drilling for oil. A spokesman for EOG Resources Inc. has been quoted by saying "Horizontal Oil will drive strong production growth over the next three years."

Analysts have speculated that oil price stability may have returned for a while. Historically oil prices have had long periods of relative stability with episodes of turmoil like the gyrations of 2008 and 2009 when prices varied from $70 to $85 per barrel. Energy experts have mentioned that global developments have put supply and demand for oil in relative equilibrium for time being. OPEC has remained fairly consistent in compliances with announced production quotas. Non-OPEC producers have growing oil output in Brazil, Russia and Gulf of Mexico which has counterbalanced production declines in North Sea, Alaska, Venezuela and Mexico.

III. Current Activity 2010

Development work in the Marcellus and Haynesville Shales has been underway only for a couple of years, but early returns from this "third wave of U.S. shale plays already have elevated the two unconventional gas giants into a league of their own and made them the envy of the western world. As a matter of fact Europe and Asia are scrambling to research the subsurface geology underlying their continents to determine potential.

It seems that the Barnett Shale blazed the natural gas trail with the discovery of its long life potential and now its Marcellus and Haynesville are proving the same. Financiers have changed the preferences from relatively low percentage field development and exploratory drilling to the repeatable financial regards of shale gas "manufacturing" process.

After the Barnett established the process of recoveries of commercial quantities of gas from shale, operators began to transplant look-a-like horizontal drilling hydraulic fracturing concepts to other plays, the Fayetteville and Woodford shales.

With improving technology, companies are intrigued with the repeatability and world class productivity of shale plays.

Total bought 25% of Chesapeake's Barnett Shale upstream assets which included current production of 175 million cubic feet to gas equivalent per day. Aurbrey McClenden CEO of Chesapeake reports that Total focused on the Barnett because of its size, maturity and immediate production impact. He further stated that from Chesapeake's perspective it was the only shale of the big four left in which Chesapeake did not have a JV partner. The company will continue to look at large acreage positions in the Eagle Ford Shale and in other unconventional shale plays. Chesapeake has agreed to discuss additional JV's with Total regarding the Eagle Ford and several Canadian natural gas shale plays.

McMoran Exploration Co. has hit a big discovery at its deep Davy Jones prospect on the Gulf of Mexico shelf. The prospect covers 20,000 acres and is potentially one of the largest discoveries in decades on the Gulf of Mexico shelf. On seismic it appears as one big uniform structure. Eocene Wilcox Sands at depths below 28,000 feet were encountered in shallow-water South Marsh Island Block 230. Analysts think the prospect could contain 2 Trillion cubic feet equivalent of reserves. McMoran will drill deeper to test additional sands and then hopes to get a production test within a year.

Leading foreign activity, Brazil has it all – pre salt, post salt, deepwater, shallow water, natural gas, field rejuvenation presenting a lavish spread of opportunities for domestic and international firms.

Brazil held 12.6 billion barrels of oil reserves at the end of 2008 according to BP's annual 2009 Energy Review. ANP, Brazil Petroleum regulatory agency, estimates Brazil's pre-salt potential at 80 billion barrels. It has been decades since any country has experienced such a dramatic and impressive turnaround in its oil reserves.

IV. Outstanding Exploration and Production Activity

Sand Ridge Energy is acquiring Arena Resources, Inc. for 1.6 billion. The acquisition is a significant deal for Oklahoma City based Sand Ridge, which has a market cap of about 1.6 Billion and until recently focused almost entirely on natural gas. This will shift the company into significant conventional oil assets.

Consol Energy Inc. has acquired Dominion Resources Inc's natural gas business for 3.48 billion in an effort to diversify and mitigate the impact of potential carbon regulation. Consol, the fourth largest coal producer would become one of the largest participants in the Marcellus Shale formation in the Appalachian area. This position was a realization that a tax on carbon as well as tighter restrictions on surface mining and storage of coal waste would drive up the cost of burning coal for utilities. Making natural gas a more attractive alternative justified the acquisition. Gas emits roughly half as much carbon dioxide as coal to produce the same amount of energy.

Australian Coal for China

Resourcehouse Ltd of Australia reported that it signed a U.S. $60 billion 20 year export contract with one of China's largest power companies. Australian billionaire Clive Palmer's Resourcehouse based in Brisbane, also said that Export-Import Bank of China agreed to lead debt financing for the project contributing U.S. $5.6 billion of the estimated U.S. $8 billion development cost. China Power International Development LTD agreed to buy 30 million tons of coal annually at a cost of around U.S. $3 billion per year. The mine in Queensland's state is stated to produce around 40 million tons a year starting in 2014. China is the world's largest producer and user of coal and last year became a net importer of the fuel, which provides two-thirds of its energy needs.

A recent transaction involving hedged production was the acquisition by Concho Resources from Terrace Production Corp for $260 million. Properties are in the Permian Basin. Deal involved derivatives for all proved developed producing oil at $86 per barrel and $6.28 per MMBTU through 2012.

V. Alternative Fuels

Wind

USA produces the most power from wind turbines, however, it has not established it's first offshore wind farm.

A speaker at the March 2010 Marine Log conference in Washington D.C. reported that Europe has already begun to tap the vast potential of offshore wind. Further, that the U.K. would need to generate 29 gigawatts from offshore wind to meet its goal of producing 25% of its electricity from this clean source of energy by 2020. The spokesman further said that this equates roughly to 6000 offshore turbines.

No doubt, wind power is one of the fastest growing alternative energy sources in the world. It is a low-carbon, renewable source of electricity that can deliver millions of watts of relatively low cost power. It is important to note however that all sources of alternative energy whether wind, nuclear, biofuel, solar or electric cars will be slow to develop and take a long time to solve the money problems of high costs, new technology installation problem, locations resistance and transmission lines and many other obstacles. Fossil fuels must keep us supplied for years to come.

Biofuel Plants

The US Congress failed to renew a tax credit of $1 per gallon for the alternative fuel on December 31, 2009. In place since 2004, the credit gave a dollar to refineries for every gallon biodiesel they blend into petroleum diesel. Without it output of biodiesel plants nationwide is grinding to a halt. Iowa based Renewable Energy Group is one of the largest biodiesel producers. The President, Mr. Daniel J. Oh reported that the company's nine plants are expected to be affected by the loss of the credit. Biodiesel is a cleaner burning substitute to petroleum diesel. In the U.S. it is typically made from vegetable oils and animal fats. A prolonged delay in renewing the credit could be devastating for the whole industry.

Royal Dutch Shell PLC has revealed plans to create a multibillion dollar joint venture with Cosan SA to produce and sell ethanol made from sugar case. Shell will contribute $1.68 billion in cash to the venture over two years. Shell will have access to one of the world's biggest biofuel markets. All new cars sold in Brazil are equipped with flexfuel engines which run on a mix of ethanol and gasoline.

Landfill Energy Project Increasing

In 2009 the US EPA counted 517 active landfill energy projects out of 1,800 municipal landfills. This was up 50% from 2000 and 28% from 2004. Landfills produce methane gas. Bacteria breaks down food scraps, paper, lawn trim, other organic waste resulting in dry methane gas. California has the largest land fill to LNG plant in the world producing 13,000 gallons a day of LNG. It will take 30,000 tons a year of CO_2 from the environment. Vapor recovery units capture the methane gas resulting in LNG being used in garbage and recycling trucks or moved to special fueling stations. This is not a new process but can certainly be considered as one more way to help with our energy problems.

Heavy Oil

Heavy oil deposits exist in varying quantities all over the globe. If we want to exploit new sources of oil, then we must go after the reserves on the North Slope of Alaska which has an estimated "in place" heavy oil reserve of 30 billion barrels. One fifth of this could be recoverable. A small percentage of it is presently being produced. The negative part is that heavy oil is traditionally more expensive to produce than light oil and the environmentalists object because it creates more greenhouse gases than many other energy sources.

VI. Other Recent Energy M&A Deals

- HOUSTON, TX / April, 2010 / – Halliburton (NYSE: HAL) and Boots & Coots (NYSE Amex: WEL) jointly announced that Halliburton has entered into a definitive merger agreement to acquire all of the outstanding stock of Boots & Coots in a stock and cash transaction. Under the merger agreement, Boots & Coots stockholders will receive $3.00 per share for each share of Boots & Coots common stock they hold, comprised of $1.73 in cash and $1.27 in Halliburton common stock, subject to election, proration features and an exchange ratio based on Halliburton's five-day average share price immediately prior to closing. The Boards of Directors of both Halliburton and Boots & Coots have approved the transaction, which is expected to close in the summer of 2010, subject to regulatory approvals, approval by Boots & Coots' stockholders and other conditions.
- ATLANTA & HOUSTON / April, 2010 / Mirant Corporation (NYSE: MIR) and RRI Energy, Inc. (NYSE: RRI) announced that they have entered into a definitive agreement to create GenOn Energy, which will be one of the largest independent power producers in the United States, with approximately 24,700 megawatts (MW) of electric generating capacity and a pro forma market capitalization of $3.1 billion. The transaction is structured as an all-stock, tax-free merger.

- PARIS / March, 2010 / Schlumberger (NYSE:SLB) announced the acquisition of Geoservices—a privately owned French oilfield services company specialized in mud logging, slickline and production surveillance operations. The total value of the transaction, including net debt, is $1,070 million. Geoservices, founded in 1958, employs approximately 5000 people active in more than 50 countries worldwide. The company is the leading mud-logging company, and has invested heavily in the development of new technology for exploration and appraisal well activities, particularly in the emerging deepwater market.
- HOUSTON, TX / February, 2010 / Schlumberger Ltd (NYSE: SLB) and Smith International, Inc. (NYSE: SII) jointly announced today that their Boards of Directors have unanimously approved a definitive merger agreement in which the companies would combine in a stock-for-stock transaction. Under the terms of the agreement, Smith shareholders will receive 0.6966 shares of Schlumberger in exchange for each Smith share. Based upon the undisturbed closing stock prices for both companies on February 18, 2010, the agreement places a value of $45.84 per Smith share, representing a 37.5% premium. Upon closing, and reflecting the issuance of new Schlumberger shares, Smith stockholders collectively will own approximately 12.8% of Schlumberger's outstanding shares of common stock.
- Houma, LA / February, 2010 / Mergers & Acquisitions magazine reports Rock Hill Capital Group placed an unspecified equity investment in Blackhawk Specialty Tools, the Louisiana-based, privately-held oilfield services tools maker. Terms of the deal were not disclosed. Other deals in the space in the last 12 months include multiple plays by Lime Rock Partners LP, a PE firm that concentrates on energy deals. Last year, Lime Rock invested $25 million in Expert Petroleum, a Romanian rehabilitator of mature oil and gas fields. Later, the PE firm invested $11 million in Pangeo Subsea along with CTTV Investments, Chevron's VC arm. Lime Rock also backstopped Allis-Chalmers, a Texan oilfield services company that sold shares to pay down debt.

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