

**STMM Ltd.**  
**4<sup>th</sup> Annual Energy Symposium**  
**May 14, 2009**  
**San Antonio, Texas**  
**Energy Forces: The Good, the Bad and the Ugly**  
**Wrap-up by Nancy Sauer**

The day was devoted to the perspectives of a diverse group of Energy Leaders.

- A Texas Railroad Commissioner and statewide elected official: Commissioner Elizabeth Ames Jones,
- A national political commentator and media personality: Greg Valliere (CNBC),
- The chief economist for the American Petroleum Institute, the nation's leading energy trade association: John Felmy,
- An energy public policy leader from Rice University's Baker Institute: Amy Meyers Jaffe,
- An energy investor, investment banker and well-known leader in energy research: Dan Pickering (Tudor, Pickering, Holt and Co. Securities, Inc.), and
- An academic, author and international expert on transportation and climate change: Dr. Daniel Sperling (University of California, Davis).

While not all of our energy leaders were in agreement with each other, their varied perspectives on the industry outlined predictions for the days ahead.

Texas Railroad Commissioner Jones identified two **good** energy forces in Texas as: the new pipeline safety regulations ("the gold standard for pipeline safety") and new ways of managing energy demand. The **bad** news is that there has been a 50% reduction in drilling rig permits over the last year. In addition, she noted the Obama Administration's elimination of the \$50 million oil and gas research and development program as bad news for the industry. The **ugly** news is the proposed federal cap and trade legislation which is expected to have a \$20 billion impact on Texas and an average monthly household increase of \$54 on electric bills.

Political commentator Greg Valliere described the economy as the patient, the stimulus spending as the medicine and suggested that the doctor, Ben Bernanke, will save the patient, but the recovery will be "modest with complications." Valliere noted that the "bailout hangover" will lead to concerns over massive budget deficits and potential inflation. He warned that even if the economy recovers, markets still have plenty of concerns including: the extreme activism of the Obama Administration, aggressive reregulation and higher taxes. Valliere predicted that the Republicans are unlikely to mount a major assault on the Obama agenda and the 2010 elections are unlikely to produce much change. Valliere's **good** news is that it appears that the patient has been saved. His **bad** news is that some indicators such as unemployment will worsen in the

next few months. His **ugly** news is that federal budget deficit may hit \$2 trillion this year and will stay above \$1 trillion for several years after 2009.

API Chief Economist John Felmy reminded us that energy policy discussions in D.C. are inconsistent with energy reality. While doubling the supply of solar, wind and geothermal is good for electricity supply, Felmy noted that these sources comprise 1% of our total energy supply, so we will need a lot more from these sources if we plan to displace the 63% of the energy supply that comes from oil and gas. He also warned that we should be aware of unintended consequences. For example, if we switch from battery-driven cars, lithium will be the likely battery and Bolivia holds 50% of the world's lithium supply. Felmy also noted that the oil and gas industry employs 5.8 million people who work directly or indirectly in the industry. In addition, the industry is owned by tens of millions of Americans who have their retirement and savings invested in these firms. Felmy's **good** news is that there is a continued federal emphasis on energy policies, his **bad** news is that the discussion is focused on policies that do little to help consumers struggling with high energy prices and his **ugly** news is that proposals for punitive energy taxes and delays in programs to develop more energy only hurt the U.S. consumer and economy.

Baker Institute public policy leader Amy Myers Jaffe outlined the reasons why she believes that U.S. foreign policy and, specifically, the diplomatic skills of Secretary of State Hillary Rodham Clinton, will determine the price of oil in the days ahead. Jaffe debunked four common energy myths:

- Cost structure/price structure cannot come down,
- Demand growth will return at the same pace as soon as the economy rebounds,
- Saudi policy will be the same, and
- Green policies cannot change the energy mix or limit demand.

Jaffe's assessment of **good** energy forces are the U.S. progress in Iraq, improvements in energy efficiency and increasingly "green" policies. She believes that **bad** forces relate to continued reductions in energy production costs. Jaffe believes that the **ugly** energy forces relate to the increased complexity of the five areas that define the future of energy: Iran, Israel, Russia, South America and the United States. Specifically, Jaffe noted that Iran's nuclear ambitions and Israel's response could lead to a use of force

Tudor Pickering's Dan Pickering described the 2009 energy story as a macroeconomic environment where demand is soft and must be stable or better in 2010 for energy commodities and stocks to improve. He noted that oil is a demand weakness story where supply has not peaked but will be difficult to add. The slowing capex will likely result in flat/down non-OPEC production for the next few years. OPEC has stabilized the current market and oil prices should average \$45-\$50/bbl, \$60/bbl in 2010 and \$80 bbl in a more normal environment. Pickering emphasized that natural gas has a problem of excess supply and weak demand. Shales have changed the supply game for the next 3-5 years. These market characteristics will cause natural gas prices to stay below \$6/mcf through 2010. Long-term natural gas prices should rise to \$7/mcf.

Although energy stocks are overbought in the near term, they offer solid value. Exploration and production companies offer the most attractive sector as companies are able to grow independently of commodity price. Master limited partnerships have interesting yields and midstream companies are “cheap backdoor” exploration and production plays. Oil service is the least interesting sector to Pickering given U.S. overcapacity and the shifts in production dynamics as a result of more shale plays. Pickering’s **good** energy forces relate to the fact that we are not in a “peak oil” scenario. Since supply growth will be tough, Pickering believes long term oil prices should be closer to \$80-\$90/bbl. Additional **good** news is that the “fix” is already underway via lower exploration and production capital spending and reduced oil service activity/capacity. The **bad** forces are that times are tough, “demand stinks and commodity prices are low. It is no fun being in a down cycle.” Finally, Pickering’s **ugly** forces are the U.S. natural gas markets for 2009.

Dr. Daniel Sperling, author, climate change advisor, state regulator and professor at the University of California, Davis outlined three energy problems:

- The oil problem is a transportation problem,
- Our transportation system is “carbonized,” and
- Climate change threatens our environment and is real.

Sperling noted the American “transportation monoculture” and challenged attendees to think differently about our transportation future. He is enthusiastic about the potential **good** energy sources to be found in biofuels, hydrogen and electricity. He also believes that a low carbon fuel standard will provide a 10% reduction in carbon by 2020. He also stated that vehicles can be made more efficient without any sacrifices to fuel economy. Sperling’s **bad** and **ugly** energy forces related to the challenges to make energy solutions commercial through increased research and development, promulgation of performance standards, use of market instruments to drive alternative transportation options and the reformation of institutions.

Since the mind can only absorb what the seat can bear, we recognize the need to conclude a day of stimulating discussion. It is interesting to note that none of our speakers referred to the impact of water resources, nanotechnology or international Law of the Sea Treaty issues that are all expected to play important roles in the future of energy. The major shale plays in the U.S. and elsewhere demand large quantities of water and create increased competition for water resources. At the Federal level, S. 797 has been introduced by Senator Feingold (D-Wisc.) and co-sponsored by 23 other senators to amend the Federal Water Pollution Control Act. This bill clarifies Federal jurisdiction over “the waters of the United States.” The bill is pending in the Senate Committee on Environment and Public Works. The primary concern over the bill relates to the removal of the phrase “navigable” from the definition of “waters of the United States.” Some groups, such as the American Farm Bureau Federation, fear that the bill will sever the Clean Water Act from the commerce clause of the U.S. Constitution and give Federal agencies the authority regulate water resources more broadly. Additionally, nanotechnology is another energy force that is transforming all aspects of the energy

industry through improvements in energy efficiency, energy generation, energy extraction, energy storage and handling. Finally, the race to claim, mine and use ocean resources may very well be the next “great game.” On May 13, 2009, signatories to the U.S. Law of the Sea Treaty were required to define their continental shelves to a United Nations commission that will set limits for national rights to seabed resources. Russia and Denmark have competing claims to the seabed beneath the North Pole and additional territorial conflicts exist between Japan and Russia, China and other South China Sea nations and Britain and Argentina. Gas hydrates, a potential source of natural gas, found on the floor of the sea could represent a new source of fossil energy. Additionally, seafloor sequestration of carbon dioxide is also a new frontier.

We thank our speakers and the clients and friends of South Texas Money Management, Ltd. for rich day of presentations and discussion. We look forward to a continuation of this important dialog and how it affects your investments for the future. We welcome your association with the firm.