

PickensPlan

T. Boone Pickens Media Coverage 3.20.10-3.22.10

Total of 21 Placements

Print: 9
Blog/Online: 9
Broadcast: 3

Coverage Summary:

The EPA announced last week that it plans to initiate a study to analyze potential ill-effects of hydraulic fracturing. Several outlets, including *Reuters*, *NY Times' Greenwire* and *MarketWatch* picked up comments made by ANGA discussing the safety of fracking.

Notable Natural Gas Coverage (Full Articles Below)

UPDATE 4-U.S. EPA Begins Study On Shale Gas Drilling – *Reuters* – 3/18/10
EPA Begins Study of Fracturing's Effects on Water Supplies – *NY Times' Greenwire* – 3/18/10
EPA Launches Study Of Fracking As Practice Widens – *MarketWatch* – 3/18/10
Hydraulic Fracturing Study Welcomed – *The Oklahoman* – 3/19/10
EPA to Initiate Study to Analyze Potential Ill-Effects of Hydraulic Fracturing – *TopNews* – 3/19/10
EPA Launches Hydraulic Fracturing Study – *Oil & Gas Journal* – 3/18/10
EPA To Study Impact Of Hydraulic Fracturing – *Denver Business Journal* – 3/18/10

Print Placements (Full Articles Below)

Lucky Strike – *Prospect Magazine* – 3/25/10
Does Icahn Still Make Them Tremble? – *New York Times* – 3/19/10

- o *CNBC*
- o *The Ledger*
- o *International Herald Tribune*
- o *Sarasota Herald-Tribune*

Books Offer Insight Into Powerful World Of Energy – *Evansville Courier & Press* – 3/21/10

Blog/Online Placements (Full Articles Below)

Open Letter to Sens. Kerry, Graham, and Lieberman: A Bipartisan Path Forward on Energy and Climate – *Huffington Post* – 3/19/10
Cramer Picks Nat Gas Laggard For Buyout Speculation – *Ticker Spy* – 3/22/10
Coal Companies Can Save Themselves: Poll – *The Street* – 3/22/10
Volkswagen Caddy Maxi EcoFuel Motors The Panamericana Without Gasoline – *The Car Connection* – 3/22/10

NOTABLE NATURAL GAS COVERAGE

UPDATE 4-U.S. EPA Begins Study On Shale Gas Drilling – Reuters – 3/18/10

- * Comes as oil majors invest in shale gas sector
- * Study to put spotlight on "fracking" impact on water
- * EPA's science board to hold public meeting April 7-8

By Tom Doggett WASHINGTON, March 18 (Reuters) - The U.S. Environmental Protection Agency said on Thursday it will begin to take a closer look at the environmental and human health impact of shale gas drilling, which could mean new regulations on a booming area of the energy sector.

The drilling technique known as hydraulic fracturing, or "fracking", is not subject to the federal safe drinking water law. New regulations could discourage removing gas from shale rock formations, which account for 15 percent to 20 percent of U.S. natural gas production and provide a relatively clean energy source for the United States, which is trying to reduce its dependence on foreign oil.

The EPA study, which the agency said could take two years to complete, will put the spotlight on the possible dangers of hydraulic fracturing at a time when major oil companies such as Exxon Mobil (XOM.N), BP (BP.L), Statoil (STL.OL) and Total (TOTF.PA) are pouring investment into the shale gas sector.

"Our research will be designed to answer questions about the potential impact of hydraulic fracturing on human health and the environment," Paul Anastas, assistant administrator for EPA's Office of Research and Development said in a statement.

"The study will be conducted through a transparent, peer-reviewed process, with significant stakeholder input." Separately, Interior Secretary Ken Salazar said Thursday his department is examining whether it should require shale gas producers using federal land to disclose the chemicals used in hydraulic fracturing.

"It is an issue that we are looking at," Salazar said at hearing before a House Appropriations subcommittee.

The EPA has allocated \$1.9 million for its study, which the agency said is in the very early stages.

The House Energy and Commerce Committee is conducting its own investigation into the effects of fracking.

Legislation is also pending in the House that would require oil and gas companies to disclose the chemicals they use.

The EPA said in a separate notice published Thursday in the Federal Register that the agency's science advisory board would hold a two-day public meeting over April 7-8 to discuss how the EPA plans to study hydraulic fracturing.

The EPA said in its notice that the agency plans to gather existing data for its study on hydraulic fracturing, seek input from affected groups, catalog "potential risks" to drinking water supplies and identify data gaps.

Hydraulic fracturing injects a mixture of water, sand and chemicals into rock formations to stimulate oil and natural gas production.

Some environmental groups claim the technique is unsafe and want the government to regulate it.

Energy companies say improved fracking technology allows them to drill for oil and gas in an environmentally safe manner. They also say there is no evidence fracking has contaminated water supplies.

"We expect the study to confirm what 60 years of experience and investigation have already demonstrated: That hydraulic fracturing is a safe and well understood technology for producing oil and natural gas," said the American Petroleum Institute.

"We are confident that a scientific and data-driven examination will provide policymakers and the public with even greater reassurance of the safety of this practice," said America's Natural Gas Alliance, which represents 34 of the leading U.S. natural gas companies.

U.S. natural gas reserves are up by a third since 2006, thanks to unconventional gas development including shale gas, with estimated reserves sufficient to supply the U.S. market for nearly 100 years at current rates.

(Additional reporting by Ayesha Rascoe; Editing by Lisa Shumaker)

EPA Begins Study of Fracturing's Effects on Water Supplies – *NY Times' Greenwire* – 3/18/10

By Katie Howell

U.S. EPA announced the start today of a study examining the effects of a controversial oil and gas production technique known as hydraulic fracturing on water supplies.

"Our research will be designed to answer questions about the potential impact of hydraulic fracturing on human health and the environment," EPA Assistant Administrator Paul Anastas said in a statement. "The study will be conducted through a transparent, peer-reviewed process, with significant stakeholder input."

Hydraulic fracturing is a decades-old technology used by the petroleum industry to improve production at aging wells by blasting water, chemicals and sand or plastic beads into a wellbore at high pressure. The technique has grabbed public attention as the industry has used it to tap vast stores of domestic natural gas, and drillers have poured into Pennsylvania and New York to tap the potentially vast Marcellus Shale formation.

"Understanding the risks that hydraulic fracturing poses to drinking water supplies is critical to guiding future policies and regulations that will safeguard the public," Rep. Maurice Hinchey (D-N.Y.) said in a statement heralding the study's launch.

Hinchey pushed for the congressionally authorized EPA study and has also been a key player on a bill (H.R. 2766 (pdf)) that would mandate federal regulation of fracturing under the Safe Drinking Water Act.

The new study is being praised by environmentalists who criticized a 2004 EPA probe whose results were skewed, they say, by data collected selectively from sources with a vested interest in the oil and gas industry.

"Independent, unbiased scientific inquiry into hydraulic fracturing is critical," said Amy Mall, a senior policy analyst for the Natural Resources Defense Council. "We are very pleased that the EPA is responding to families across the country who are concerned that oil and gas development is contaminating their drinking water."

Industry also welcomed the new study, saying it would prove claims that fracturing technology is safe.

"Assuming the study's methodology is technically sound, its evaluations are science-based, and its conclusions are peer-reviewed, there's really only one credible outcome this project can produce," said Chris Tucker, a spokesman for the industry-backed group Energy in Depth. "And -- spoiler alert -- it's not the one that opponents of responsible shale gas exploration are clamoring for."

The American Petroleum Institute and America's Natural Gas Alliance likewise expressed confidence the study would pacify critics of fracturing.

"We expect the study to confirm what 60 years of experience and investigation have already demonstrated: that hydraulic fracturing is a safe and well understood technology for producing oil and natural gas," API said in a statement.

The trade group added, "While the technology has been used for more than a half century, its continued use is crucial. It is enabling access to massive new supplies of natural gas trapped in shale formations across the United States."

EPA's new study will get a start with \$1.9 million in funding and will be designed by the agency's Office of Research and Development and guided by the EPA science advisory board.

House Energy and Commerce Committee Democrats are continuing with their probe into chemicals used by hydraulic fracturing companies. Meanwhile, H.R. 2766 and Senate companion legislation (S. 1215 (pdf)) that would require federal regulation of fracturing are languishing.

"While we eagerly await the results [of the EPA study], we also think there is sufficient information for Congress to move ahead to protect drinking water by closing the Halliburton loophole and ensuring that hydraulic fracturing is regulated under the Safe Drinking Water Act," NRDC's Mall said.

EPA Launches Study Of Fracking As Practice Widens – *MarketWatch* – 3/18/10

By Steve Gelsi

NEW YORK (MarketWatch) - The U.S. Environmental Protection Agency said Thursday it'll conduct a massive study to investigate any potential adverse impact of hydraulic fracturing to extract natural gas, as the energy industry moves to boost domestic natural gas supplies.

The effort comes as part of a move by government officials and academics to grapple with an expected increase in the decades-old practice of extracting natural gas by injecting water and fracturing rock, a practice known as fracking.

"There are concerns that hydraulic fracturing may impact ground water and surface water quality in ways that threaten human health and the environment," the EPA said Thursday.

The agency said it's re-allocating \$1.9 million to help pay for a, "comprehensive, peer-reviewed" study. It'll request funding for 2011 in President Barack Obama's budget proposal. The EPA hopes to complete the study by the end of 2012.

Regina Hopper, president of the industry group, America's Natural Gas Alliance, said the EPA study will help affirm the safety of fracking.

"Hydraulic fracturing has been refined and improved over the past 60 years and has been used safely on more than one million U.S. wells," Hopper said in a prepared statement. "We look forward to sharing with the EPA the extensive work done at every step of the natural gas extraction process."

While hydraulic fracturing usually takes place far underground, well below aquifers for domestic water supplies, it also produces wastewater which much be treated on site or trucked off for disposal.

Last month, the House Energy and Commerce Committee launched an investigation into the potential impact and said it would like to see more information on the chemicals used in fracturing liquid.

Lots of potential, but at what costs?

"Hydraulic fracturing could help us unlock vast domestic natural gas reserves once thought unattainable, strengthening America's energy independence and reducing carbon emissions," said Chairman Henry Waxman, (D., Calif.). "As we use this technology in more parts of the country on a much larger scale, we must ensure that we are not creating new environmental and public health problems."

Fracking piqued the interest of Congress in recent months after Exxon Mobil set plans to buy hydraulic fracturing giant XTO Energy in a deal worth about \$40 billion, as part of the energy giant's effort to ramp up the practice around the U.S.

In a hearing on Jan. 20 with Exxon Mobil CEO Rex Tillerson, members of the House Subcommittee on Energy and Environment were generally supportive of the jobs and domestic energy production created by the unconventional gas production business.

The EPA study is the last of a wave of attention drawn by fracking, including a study of possible earth tremors caused by the practice in Texas.

Southern Methodist University seismologists Brian Stump and Chris Hayward said seismographs recorded 11 earthquakes between Nov. 9, 2008 and Jan. 2, 2009 - too small to be felt by area residents -- near the Dallas/Fort Worth International Airport. The area is part of the Barnett Shale in Texas, a rich source of unconventional natural gas, and close to well operated by Chesapeake Energy Corp.

The largest tremor measured 3.3 on the Richter scale, as reported by the USGS National Earthquake Information Center. Stump cautioned that the study raised many questions.

"What we have is a correlation between seismicity, and the time and location of saltwater injection," Stump said in a prepared statement on the study. "What we don't have is complete information about the subsurface structure in the area - things like the porosity and permeability of the rock, the fluid path and how that might induce an earthquake."

The study, which also included researchers from the University of Texas, was featured in the March issue of *The Leading Edge*, the publication for the Society of Exploration Geophysicists.

Julie Wilson, a spokeswoman for Chesapeake, told *The Wall Street Journal* that the drilling and fracturing "have absolutely nothing to do with the seismic activity" near the airport.

Steve Gelsi is a reporter for MarketWatch in New York.

Hydraulic Fracturing Study Welcomed – *The Oklahoman* – 3/19/10

By Jay F. Marks

Oil and gas industry officials do not seem overly concerned about a U.S. Environmental Protection Agency plan announced Thursday to study one of their key processes.

The EPA intends to conduct a comprehensive research study into effects of hydraulic fracturing on water quality and public health. The agency is allocating \$1.9 million for the study this year, with plans to seek additional funding in fiscal year 2011.

"Our research will be designed to answer questions about the potential impact of hydraulic fracturing on human health and the environment," said Paul T. Anastas, assistant administrator for EPA's Office of Research and Development.

Industry officials welcomed the move, which they said should address concerns over whether hydraulic fracturing is safe.

Devon Energy Corp. spokesman Chip Minty said earlier studies — in 1995 and 2004 — concluded the process used for 60 years to extract oil and natural gas from tight formations is no danger to groundwater.

The American Petroleum Institute expects the EPA's study to confirm "that hydraulic fracturing is a safe and well understood technology for producing oil and natural gas."

Environmental group Earthjustice also applauded the announcement.

"From Wyoming to Pennsylvania, people are worried about what this untested process is doing to their drinking water," said Jessica Ennis, legislative associate for Earthjustice.

Industry officials said there has been no documented case of groundwater contamination caused by hydraulic fracturing.

The process has been used on more than 1 million wells since its first success near Duncan in 1949.

"Hydraulic fracturing is one of the U.S. oil and gas industry's crowning achievements, enabling us to produce energy supplies at enormous depths with surgical precision and unrivaled environmental safety records," said Lee Fuller, executive director of advocacy group Energy in Depth. "And, simply put, new innovations are making these technologies better and better by the day."

"We are confident that a scientific and data-driven examination will provide policymakers and the public with even greater reassurance of the safety of this practice," said Regina Hopper, president of America's Natural Gas Alliance.

U.S. Sen. Jim Inhofe, R-Tulsa, ranking member of the Senate's Environment and Public Works committee, said he intends to work with the EPA to ensure its latest study is based on the best science available.

EPA to Initiate Study to Analyze Potential Ill-Effects of Hydraulic Fracturing – *TopNews* – 3/19/10

By Sarabjit Heera

On Thursday, the US Environmental Protection Agency confirmed that it will be conducting a major study to look into any potential ill-effects of hydraulic fracturing to extract natural gas, with the energy industry moving forward to boost domestic natural gas supplies.

The initiative has come as a part of a move by Government officials and academics to try and cope up with an expected rise in the years old practice of extracting of natural gas by injecting water and fracturing rock, a process officially known as fracking.

"There are concerns that hydraulic fracturing may impact ground water and surface water quality in ways that threaten human health and the environment", the EPA said.

The agency has shared that it is now busy reallocating \$1.9 Million to help fund for a "comprehensive, peer-reviewed" study. It will send in a request for funds for the coming year in President Barack Obama's budget proposal.

"Hydraulic fracturing has been refined and improved over the past 60 years and has been used safely on more than one million U. S. wells", said America's Natural Gas Alliance President Regina Hopper, while stressing that the new study would help re-affirm fracking's safety.

The EPA has shared that it is hoping to complete the study by the time 2012 rolls in.

EPA Launches Hydraulic Fracturing Study – *Oil & Gas Journal* – 3/18/10

By Nick Snow

WASHINGTON, DC, Mar. 18 – The US Environmental Protection Agency initiated a comprehensive study of hydraulic fracturing to determine whether the tight shale gas production technology potentially could have an adverse impact on ground and surface water supplies.

Responding to language in its fiscal 2010 budget, EPA said on Mar. 18 that it would reallocate \$1.9 million for the peer-reviewed study this year and request funding to continue it in fiscal 2011, which begins on Oct. 1, 2010.

"Our research will be designed to answer questions about the potential impact of hydraulic fracturing on human health and the environment," said Paul T. Anastas, assistant administrator for EPA's Research and Development Office. "The study will be conducted through a transparent, peer-reviewed process, with significant stakeholder input."

Oil and gas associations welcomed the news. The American Petroleum Institute said it expects EPA's study to confirm what 60 years of experience and investigation have shown: that hydraulic fracturing is a safe and well understood technology for producing oil and gas.

"We hope the agency will provide ample opportunity for stakeholder comment and participation," API said. "Our members are experts on well construction and development, and on safe and effective hydraulic fracturing operations."

Natural Gas Supply Association President R. Skip Horvath said he believes EPA's study will show that concerns about groundwater contamination from hydraulic fracturing are unfounded as long as producers comply with numerous existing and stringent state regulations.

"Production from shale formations is the nation's fastest growing source of natural gas, contributing to an unprecedented 39% increase in the estimated size of the gas resource base since 2006," Horvath said. "In Pennsylvania alone, the production of natural gas from shale has created 50,000 new jobs in 2008 and 2009."

Opportunity, responsibility

Regina Hopper, president of America's Natural Gas Alliance. Said the gas community looks forward to working with EPA.

"With the extraordinary opportunity presented by our nation's gas abundance comes the responsibility to be good stewards of the land," Hopper said. "Our members take this responsibility seriously, and we look forward to sharing with EPA the extensive work done at every step of the gas extraction process."

Lee O. Fuller, executive director of Energy in Depth, said he welcomed another study on this issue. Energy in Depth is an oil and gas educational organization.

“Hydraulic fracturing is one of the US oil and gas industry’s crowning achievements, enabling us to produce energy supplies at enormous depths with surgical precision and unrivaled environmental safety records,” Fuller said. “And, simply put, new innovations are making these technologies better and better by the day, a fact widely recognized by the agencies that regulate hydraulic fracturing in energy-producing states,” he maintained.

Groups and federal lawmakers seeking heavier regulation of the technology also welcomed the announcement.

“An earlier EPA study into hydraulic fracturing, conducted during the Bush administration, was widely discredited,” said Jessica Ennis, a legislative associate at the Earthjustice environmental organization. “By committing to a serious, peer-reviewed study and expediting the necessary funds, [administrator] Lisa Jackson’s EPA is demonstrated that this issue is indeed an agency priority, as well as it should be.”

‘Significant step’

US Rep. Diana DeGette (D-Colo.), who introduced a bill with Rep. Maurice D. Hinchey (D-NY) that would regulate hydraulic fracturing under the Safe Drinking Water Act, also said that EPA’s new study would be the first comprehensive effort. The agency’s 2004 study stopped short of the full scientific assessment and independent assessment which is required, she said.

“This study may be a challenge, given that companies are not currently required to disclose the chemicals used in hydraulic fracturing fluids,” said DeGette. “But it will be a significant step in ensuring that our nation’s drinking water supply is protected.”

Hinchey said that he was pleased that EPA decided to begin a study examining risks hydraulic fracturing pose to drinking water supplies in New York and across the country. He said that it was an important and necessary step “since EPA’s 2004 study on the matter was marred by biased data influenced by senior officials in the previous administration.”

EPA said that it is in the very early stages of designing a hydraulic fracturing program. It is a proposing a process to define research questions and identify data gaps. Next, there would be a process gathering comments and identifying priorities. This would lead to development of a detailed study design for external peer review, leading to implementation of the planned research studies.

To support initial planning and to guide the plan’s development, the agency said that it is seeking suggestions and comments from its Science Advisory Board, an independent, external federal advisory committee. EPA said that it has asked the board’s Environmental Engineering Committee to evaluate and provide advice on the agency’s planned approach. It said that it would use this advise and “extensive stakeholder input” to guide the study’s design.

Contact Nick Snow at nicks@pennwell.com

EPA To Study Impact Of Hydraulic Fracturing – *Denver Business Journal* – 3/18/10

By Cathy Procter

The Environmental Protection Agency on Thursday said it will study whether hydraulic fracturing, a technique used to crack underground rock seams to get to natural gas and oil, has an adverse impact on water quality and public health.

“Natural gas plays a key role in our nation’s clean energy future and the process known as hydraulic fracturing is one way of accessing that vital resource,” the EPA said in its announcement. “[But] there are concerns that hydraulic fracturing may impact ground water and surface water quality in ways that threaten human health and the environment.”

The EPA said it will re-allocate \$1.9 million for the 2010 fiscal year and plans to seek more money for the 2011 fiscal year for what it called a “comprehensive, peer-reviewed study.” The study was authorized by Congress last year.

The EPA said hydraulic fracturing is a process that drills vertical and horizontal cracks underground that help withdraw gas, or oil, from coalbeds, shale and other geological formations. While each site is unique, in general, the process involves vertical and horizontal drilling, taking water from the ground, injecting fracturing fluids and sands into the formation, and withdrawing gas and separating and managing the leftover waters.

The technique has been controversial, with U.S. Rep. Diana DeGette, D-Denver, pushing proposals to remove the technique’s exemption from the Clean Water Act and force natural gas companies to disclose the chemicals used in the technique — information company executives have said they believe is proprietary, competitive, information.

DeGette, vice chair of the U.S. House of Representatives Committee on Energy and Commerce, on Thursday hailed the EPA’s announcement.

“This study may be a challenge, given that companies are not currently required to disclose the chemicals used in hydraulic fracturing fluids. But it will be a significant step in ensuring that our nation’s drinking water supply is protected,” DeGette said in a statement.

The natural gas industry also hailed the start of the study.

“The natural gas community looks forward to working with the EPA to reaffirm the safety of this long-standing practice. Hydraulic fracturing has been refined and improved over the past 60 years and has been used safely on more than 1 million U.S. wells,” said Regina Hopper, president and CEO of Washington-based trade group America’s Natural Gas Alliance (ANGA), in a statement.

PRINT COVERAGE

Lucky Strike – *Prospect Magazine* – 3/25/10

By Derek Brower

Europe's politicians and bureaucrats have spent the past five years trying to figure out how to wean the continent off its reliance on natural gas from Russia. Costly new pipeline projects and efforts to promote a rapid rise in renewable energy were two responses. What no one in Brussels seems to have realised, however, was that a small firm of wildcat drillers in Texas had found a solution: releasing natural gas trapped in shale rock through hydraulic fracturing and horizontal drilling.

Hydraulic fracturing, called "fracking," involves blasting a mix of water and some chemicals into the earth to smash open the shale and release the gas. Horizontal drilling—turning the drill sideways and allowing it to travel horizontally for several kilometres underground—has helped make fracking possible across large tracts of shale. The combination of these techniques is set to transform North America's energy sector. In Europe, vast reserves of shale gas could reduce our reliance on companies such as Gazprom, while China, the middle east, Africa and Russia also have huge potential reserves. And as natural gas burns cleaner than other fossil fuels there is potential for reducing carbon emissions.

The large-scale use of these technologies was pioneered by a company called Mitchell Energy in the Barnett shale, a huge geological structure in Texas. Mitchell had been trying to prove the technology since the 1990s. It came good when soaring natural gas prices suddenly made the techniques profitable. Now the method is cheaper than traditional drilling for gas, and the Barnett shale alone meets 7 per cent of US natural gas demand. A host of new projects in North America, from Louisiana to British Columbia, are under development and all of the big oil companies want in. In December, ExxonMobil spent \$41bn (£27bn) buying one specialist shale-gas developer.

The notion that US natural gas production had peaked and was in decline—a mainstay of energy planners just a few years ago—has been turned on its head. Last summer, the authoritative Potential Gas Committee of the Colorado School of Mines, said "unconventional" reserves now offered the US 100 years of natural gas supply. Many analysts expect that figure to grow, if it hasn't already. And as the output from these fields has ramped up, natural gas prices have slumped, making the fuel competitive with coal, which accounts for half of America's electricity. Switching to natural gas would slash emissions, because burning natural gas emits about half as much CO₂ as coal. Now a battle is shaping up between America's powerful coal lobby and an oil-and-gas sector that is suddenly asking Washington to pass climate legislation that would price coal out of the market. A mere \$30-a-tonne levy on carbon, say executives in the gas sector, would knock out the black stuff.

The advent of shale also boosts US dreams of energy independence, an Obama campaign promise. The mega-investor T Boone Pickens has hatched a plan to convert the country's vehicles to natural gas. Switching America's fleet of 18-wheeled trucks to gas, say supporters, would halve the crude oil imports from Opec.

All of this has already affected Europe and other importers of natural gas. With its own ample domestic reserves, the US has now almost disappeared as a force in the global liquefied natural gas (LNG) market. Politicians and the mainstream media haven't recognised it, but the world is facing a glut of natural gas. Britain still needs storage infrastructure to prevent spikes in price, but long-term supply worries are dissipating, even as conventional output from the North sea continues its precipitous decline.

A host of companies, including the big oil-and-gas multinationals, are now scouring the EU for shale-gas structures. Poland, Hungary, Germany, Austria and other countries in—coincidentally—the region of Europe most exposed to Russian gas, show promise. No one yet knows the extent of Europe's reserves,

but the International Energy Agency says they could be 35 trillion cubic metres—six times the size of the conventional existing reserves. Some analysts say the resource is much larger.

There are obstacles. Some environmentalists—and Gazprom—say the drilling process threatens water sources. For that reason, New York has prevented shale-gas exploitation in its share of the Marcellus shale (while Pennsylvania, which shares the field, has allowed it). Inhabitants of densely populated Europe, unaccustomed to disruption by the oil industry, might not like the rapid rate at which multiple shale wells must be drilled to sustain output.

But take Gazprom's objections with a pinch of salt. The arrival of shale gas in the mainstream threatens its business model, which is based on the development of huge, expensive conventional gas fields in inhospitable regions of Russia. Some of these projects are already being mothballed.

Oil-and-gas executives say that natural gas's low emissions and its new abundance make it the ideal "bridging fuel" as the world moves to renewable energy. A couple of years ago such an idea looked ludicrous. Now, thanks to the frackers of Texas, natural gas could be the oil of the 21st century.

Derek Brower contributes to *Petroleum Economist* and the *Economist*

Does Icahn Still Make Them Tremble? – *New York Times* – 3/19/10

By Julie Creswell

HE is a billionaire several times over. He has spent the better part of four decades terrorizing corporate chiefs and battling entrenched boards. His name is emblazoned on a stadium on an island in the East River, a laboratory at Princeton, a science center at the Choate Rosemary Hall school in Connecticut and charter schools in the Bronx.

Yet, for all of his high-profile successes, Carl C. Icahn says he feels misunderstood.

"There's a misperception out there that we bust up companies. Or that I believe that all people on boards are bad," growls Mr. Icahn, the 74-year-old investor, as he sets a coffee cup on a small mahogany table in his office on the 47th floor of a Midtown Manhattan tower. "It's just that, in some cases, the C.E.O.'s are so wrong," he grumbles, then quickly flashes a big smile and laughs at his own joke.

While Mr. Icahn likes to pull out his Rodney Dangerfield-esque why-can't-I-get-any-respect? routine, he has over the years perfected the art of stirring up trouble for companies and making money — sometimes lots of it — for his investors and himself.

And while many of his peers from back in the day — names including T. Boone Pickens, Saul P. Steinberg, Robert M. Bass — keep significantly lower profiles these days, Mr. Icahn has not gone quietly into the night.

"He is a survivor," said Chris Young, a director at Institutional Shareholder Services, a Rockville, Md., proxy advisory firm. "If you look at the proxy pipeline, he's involved with a bunch of contentious situations."

On Friday, Mr. Icahn made a hostile offer to buy the Hollywood studio Lionsgate Entertainment; meanwhile, through the \$8 billion hedge fund and other assets he oversees — \$6 billion is his money — he is waging proxy fights to get new or additional board seats at the biotech companies Biogen Idec and Genzyme. They are also warring with Donald Trump and debt holders in a New Jersey bankruptcy court over ownership of three casinos in Atlantic City that bear Mr. Trump's name. In recent months, Mr. Icahn has bought a partly built casino on the Las Vegas strip and the Tropicana Casino and Resort in Atlantic City from bankruptcy.

It is too early to tell whether he will prevail in these battles. But after all these years, a career of victories and occasional misses, one thing can certainly be said of Mr. Icahn: He is one of Wall Street's most colorful, controversial and complicated characters.

Wearing slightly rumpled khakis and waving his eyeglasses to punctuate key points, Mr. Icahn is constantly jumping from one topic to another in an endless stream of dialogue. In that respect, he more closely resembles an absent-minded professor than a master of the universe.

Corporate executives visiting his offices walk through hallways adorned with paintings of battle scenes and sculptures of cowboys on bucking broncos. One large painting in the conference room features a lion gazing at the bones of an animal in a desert.

Yet he bristles at being labeled a "raider," despite the fact that he is widely viewed as a founding member of the clan that roamed Wall Street in the 1980s, occasionally pursuing hostile takeovers with ruthless abandon.

He prefers to paint his role in those years with the same "activist investor" brush he holds today, arguing that he has created tens of billions of dollars of value for shareholders in companies in which he invested. (In conversations, he declares that he has created \$30 billion, \$40 billion and even \$50 billion worth of value for shareholders. What is a few billion among friends?)

Last year, his hedge fund, highly concentrated in a handful of stocks and bonds, soared 32 percent, after fees, according to a letter sent to investors. That's a reversal from 2008, when it fell 36 percent, including fees. Mr. Icahn's firm declined to provide an after-fees figure.

To some people, Mr. Icahn and activist investors of his ilk are the heroes of the financial system. "They are the ones who are holding corporate America's feet to the fire and incentivizing companies to perform better," said Frank Partnoy, a professor of law and finance at the University of San Diego. Mr. Partnoy contributed to a study that examined activist investing from 2001 to 2006 and found that activists held stocks longer than others and that the companies they pursue often outperform the market.

But some fellow activists contend that Mr. Icahn's strong-armed methods of arguing to get on a board and then pushing for a quick change — such as paying a dividend, buying back stock, merging with another company or cleaving off an underperforming unit — are sadly out of date in today's corporate boardrooms.

"There are times when you push back and be harsh and times when you roll up your sleeves and work with management, getting more involved with operations," said Eric Jackson, an activist investor in Naples, Fla. "Carl's record on that score hasn't been as successful."

Mr. Icahn and his defenders say he has improved several companies he has invested in or owns. (Besides the hedge fund, he oversees Icahn Enterprises, a hodgepodge of companies he has collected over the years in the automotive, metals and real estate industries.)

Late one recent Friday afternoon, Mr. Icahn, a workaholic night owl who rarely appears at glittering high-society functions, dismissed thoughts about going out to dinner with his wife, Gail, or — gasp — taking a bigger break from the business altogether.

"What else am I going to do?" Mr. Icahn asked before returning to his office for a meeting on his real estate holdings. "Play shuffleboard?"

IN the spring of 2008, Roy J. Bostock, the chairman of Yahoo, and his fellow directors were coming under a barrage of criticism from investors after Microsoft abruptly broke off merger talks.

Mr. Icahn, who had a large stake in Yahoo, jumped into the fray. In a scathing letter to Mr. Bostock, he said the board had "acted irrationally" and "completely botched" the merger. Mr. Icahn's solution included

putting up a slate of 10 directors picked by him. (The company eventually settled, placing Mr. Icahn and two of his other nominees on the 11-member board.)

What Mr. Icahn did or did not accomplish in his 15 months on the Yahoo board — he stepped down last fall — is the subject of hot debate.

But what's surprising about that debate is that one of Mr. Icahn's biggest detractors is Mr. Jackson, a fellow activist investor. And his biggest supporters are some other Yahoo directors.

"I think in the first couple of meetings, there was a lot of trepidation: Will he just be disruptive and not constructive? Can this work?" said Maggie Wilderotter, the C.E.O. of Frontier Communications, who resigned from Yahoo's board last year. "Carl doesn't worry about what people around the table think about him. He's blunt. If there's an elephant in the room, he puts it on the center of the table."

And while Mr. Bostock recalled with humor at least one conversation with Mr. Icahn that involved many "four-letter words going back and forth," he said he appreciated Mr. Icahn's persistence and the different point of view he brought to discussions.

"Carl brought financial acumen to the board and a good, solid understanding of the strategic imperatives that faced the company, particularly what it would take to compete longer term with the likes of Google, Microsoft and others from a capital-expenditures point of view," Mr. Bostock said. "It was one of the reasons he was pushing for a Microsoft deal."

But Mr. Jackson, who manages a small activist hedge fund called Ironfire Capital, says Mr. Icahn blew it with Yahoo.

"There was a sense that shareholders were going to go to Sunnyvale with pitchforks," Mr. Jackson said, referring to Yahoo's California base. "He saw that and thought he could ride in on a horse and take control of the company. He didn't realize that he had to articulate to investors what it was he was going to do if he actually had the keys to the car and was driving things."

"He's the granddaddy of activist investing. Anyone who practices activist investing has to pay homage to him and the trail that he's blazed," Mr. Jackson added. But "I would say his involvement with the company did nothing for shareholders and hurt his own investors in the stock."

Mr. Icahn said that while his firm did not make money in Yahoo, it was supportive in bringing on board Carol Bartz, the company's C.E.O., and instrumental in eventually forging an Internet search and advertising partnership with Microsoft. As for the criticism from Mr. Jackson that his methods do not work, Mr. Icahn said, "To say that we don't add value is absurd."

MR. ICAHN grew up in a middle-class neighborhood in Queens, and started his first business at the age of 13, when he snapped pictures of neighbors' homes. He developed the photographs in his basement and glued them to the covers of matchbooks that he would buy for 50 cents a box. He sold the boxes to homeowners for \$1.50.

When he turned 15, he played his own version of the ice futures market as a cabana boy at a beach club, ordering extra ice on hot mornings to sell to visitors who would run out later in the day. After graduating from Princeton with a degree in philosophy and briefly serving as a medic in the Army, Mr. Icahn landed on Wall Street, opening his own brokerage firm in 1968. In the late 1970s, he waged his first proxy battles.

When the buyout barons and corporate raiders ruled Wall Street in the 1980s, he was one of the kings. He made plays for some of the largest companies in America, including Phillips Petroleum, the steel giant USX, Texaco and T.W.A. Some were big victories for Mr. Icahn; others were perhaps more trouble than they were ultimately worth.

"He had a very devil's-advocate way of reviewing investments," said Gary Siegler, who worked with Mr. Icahn from 1985 to 1990. "You had to be able to support your point of view."

After the junk bond market collapsed and boards adopted anti-takeover measures, some raiders moved on in the early 1990s to other things. Mr. Icahn stayed the course, battling for control of the comic book publisher Marvel Entertainment and badgering RJR Nabisco to split its food and tobacco units.

Some of his fights in recent years have involved technology and entertainment companies, including Time Warner, Motorola, Blockbuster and the video game maker Take-Two Interactive Software.

"He's had a mixed record on returns" and in understanding the evolution of the media business, said Matthew Harrigan, an analyst at research firm Wunderlich Securities who is watching Mr. Icahn's moves against Lionsgate. Among other things, Mr. Icahn is angling to get his son and fellow chess player, Brett, who works at Mr. Icahn's company, on the studio's board.

Associates of Mr. Icahn say that his company made money on its Time Warner investment and that while his Motorola investment has not gone as well, they believe it will eventually pay off.

"We hold these things for a long time and the jury is still out," Mr. Icahn added.

He has fared better in some of his biotech holdings, which make up a big chunk of the hedge fund's investments.

"The biotechs have been his big winners recently," particularly investments in ImClone Systems and MedImmune, said Mr. Young at Institutional Shareholder Services. "His thesis, which is no secret, is that biotech firms should be purchased by Big Pharma, which is always in need of new products. In his mind, that's a match made in heaven."

Mr. Icahn says he has also made money in industrial and gambling companies he has acquired out of bankruptcy and nursed back to health.

He said that a couple of years ago, for instance, his company booked a \$1 billion profit after selling gambling properties, including the Las Vegas Stratosphere hotel and casino, that it had picked up largely in bankruptcy proceedings. Similarly, he made an additional \$1 billion or so selling energy companies he had acquired years earlier.

In those cases and others, Mr. Icahn argues that he is not given enough credit for holding companies for long periods and investing even more of his own money into the businesses to help them grow. He specifically cites his investments in a rail-car business and the automotive parts supplier Federal-Mogul.

"What gives me the greatest excitement and joy is building a company," Mr. Icahn said. "By the way, it's also the way to make the most money."

It may not, however, be the easiest way to make a buck. One of the companies in which he owns a majority stake — XO Communications — has been fighting lawsuits by R2, a Fort Worth, Tex., fund controlled by a hedge fund called Q Investments. The hedge fund is run by Geoffrey Raynor, a former investment banker who worked for the Bass family of Texas. R2 accuses Mr. Icahn of engaging in "sweetheart" transactions and "self-dealing" in his oversight of the communications company.

In another suit against Mr. Icahn, Mr. Raynor, through another fund, contends that "material misinformation" was included in a recent \$2 billion bond offering. Mr. Raynor declined to comment for this article.

Mr. Icahn, who denies all of the accusations made against him, filed his own \$100 million lawsuit against Mr. Raynor recently, saying Mr. Raynor's lawsuit caused economic harm to the bond offering. Mr. Icahn

called Mr. Raynor a “serial sue-er,” and in a court document he contends that the hedge fund has filed 45 lawsuits against various parties in the last four years.

Disputing that figure, a spokesman for Mr. Raynor says that in the last 10 years, the firm has been a plaintiff in 16 non-bankruptcy proceedings, along with the two legal disputes with Mr. Icahn.

“I’ve put \$1 billion into this company. I don’t get a salary, and I spend hours on it each week,” Mr. Icahn said, his tone rising in frustration. “About \$80 million of the company’s revenues each year are coming from introductions I brought in.”

Later, as further proof of his involvement with the communications company he proudly showed off the latest addition to a row of awards arrayed on a cabinet just outside his office. It is a large glass cup engraved with his name, declaring him XO’s “salesman of the decade.”

LATE last year, Donald Trump was sitting in his office when he was alerted that Carl Icahn was on the phone.

Mr. Icahn told him that he had joined the Texas banker D. Andrew Beal in his effort to gain control of three Atlantic City casinos bearing Mr. Trump’s name, acquiring a majority of the first-lien mortgages held by Beal Bank.

“He told me he was doing it because he heard I wasn’t involved, but he knew I was involved, that I had a deal with bondholders,” Mr. Trump said. “I was very surprised and also very disappointed that Carl got involved,” Mr. Trump added. He said the two had been friends for years and that Mr. Icahn had sought his advice when he was divorcing his first wife. Mr. Trump said the two had not spoken since the call.

“I should be the one that is surprised he is upset,” Mr. Icahn said. “I might possibly feel bad had I interfered at a time when he was running the business,” but that’s not the case, he added.

“Additionally I find it odd that he’s now claiming to be my good friend,” Mr. Icahn said. “I was not surprised when I was not invited to his daughter’s wedding precisely because we are not good friends.”

The Trump casino deal shows that Mr. Icahn is not afraid to take on big names if there is money to be made. He also makes it clear in other dealings that he is aggressive in protecting his interests.

Consider the case involving the activist manager William A. Ackman. Mr. Ackman’s fund, Gotham Partners, has sued a company owned by Mr. Icahn over a profit-sharing agreement between the men that was made about seven years ago.

According to court documents, Mr. Ackman sold his investment in Hallwood Realty to Mr. Icahn in 2003 with an agreement that if the assets were sold or transferred at a profit within three years, Mr. Ackman and his fund would get a share of the action. The assets were sold about a year later and, in an interview, Mr. Ackman said Mr. Icahn owed him about \$4.7 million. The New York Supreme Court found in favor of Mr. Ackman, and the First Department appellate court affirmed that decision. Mr. Icahn has not paid any of the money and is disputing the legal fees, which with interest bring the total owed to \$8 million Mr. Ackman said.

“I call it my Carl Icahn money market account,” he said. “I don’t get these sort of rates anywhere else.”

Mr. Icahn responded that “I never agreed to give him the profit he now claims, and the case will be appealed.”

Mr. Icahn does not seem to let anything, including a very close friendship, get in the way of protecting his and his investors’ profits. Late in 2008, through his hedge fund, he sued Realogy, a real estate company controlled by Leon Black, the head of the private equity firm Apollo Management. Mr. Black was trying to reduce Realogy’s hefty debt load by offering to exchange some of the debt with bondholders.

Mr. Icahn, a bondholder who has known and been friends with Mr. Black for decades — the two have been longtime tennis partners — objected to some terms of the exchange and sued.

“Carl and I have been good friends for over 25 years,” Mr. Black said in an e-mail message. “Occasionally we skirmish as couples are wont to do, but I believe we both feel that when the chips are down that the friendship is paramount.”

How, exactly, does one sue and still be good friends with someone on Wall Street? Mr. Icahn smiles sagely over his cup of coffee: “The two of us have a saying that we always use whenever there is friction in our business dealings. We always say, ‘there’s only one Maltese Falcon.’ ”

At one point in that classic 1941 film, a character chasing a valuable figurine says to a close associate, “You’ve been like a son to me,” Mr. Icahn explains, paraphrasing from the movie.

Then, lowering his voice with mock intensity, Mr. Icahn adds that the character says that if you lose a son, it’s possible to get another — “but there’s only one Maltese Falcon.’ ”

Books Offer Insight Into Powerful World Of Energy – *Evansville Courier & Press* – 3/21/10

By Pam Locker

"Power Trip: From Oil Wells to Solar Cells — Our Ride to the Renewable Future" by Amanda Little (HarperCollins, 2009) is an optimistic, but intriguing account of our energy future.

Written by an award-winning freelance journalist in Nashville, Tenn., Little crisscrossed the country, getting up close and personal with our power grid by visiting such entities as a deep-sea oil rig, the Pentagon's fuel-logistics division and oil magnate T. Boone Pickens.

She explores the complexity of all the energy options as well as conservation measures, concluding with a look at the energetic people, companies and government officials working on viable solutions.

Pam Locker is manager of Oaklyn Branch Library and alternates writing "Check it Out" with other Evansville Vanderburgh Public Library staff members. Readers may contact Locker at 428-8234, ext. 5403, or by e-mail at paml@evpl.org. The opinions expressed in this column are personal and do not reflect policies or official recommendations of the library.

BLOG/ONLINE COVERAGE

Open Letter to Sens. Kerry, Graham, and Lieberman: A Bipartisan Path Forward on Energy and Climate – *Huffington Post* – 3/19/10

By David Roberts

Sens. Kerry, Graham, and Lieberman,

Thank you for the work you're doing to address America's climate and energy challenges. As you meet with a broader group of stakeholders and begin to structure a bill, you face an enormous challenge of your own: Crafting legislation that can get 60 votes in a fractured and somewhat exhausted Senate. The odds are steep, but I believe there is a strong, bipartisan path forward.

The crucial starting point is this: The American people want clean energy. They want to make more energy in America; they want to use energy more wisely; they want to create jobs and compete in new global industries; they want to leave behind a clean environment and healthy children. These aspirations are shared across the country, across income groups and demographics, and across party lines, as reflected in poll after poll after poll.

What Americans and their political representatives are more ambivalent about is a policy instrument designed to serve those goals: Putting a price on greenhouse gas emissions. One form of carbon pricing in particular -- cap-and-trade -- has become a partisan political football and moved, unfortunately, to the center of the public conversation. Cap-and-trade comprises only about a third of the comprehensive climate and energy bill passed in the House last year, yet in political and media circles it was discussed almost exclusively as a "cap-and-trade bill."

Cap-and-trade has become the "death panels" of clean energy policy, rendering hyper-partisan what should be a rare area of pragmatic consensus. This is the dynamic you must change if you're to have any hope of success. The question is: how?

Moving carbon pricing to the background

Past efforts at climate legislation, dating back to Sen. Lieberman's first effort with Sen. McCain, have tried to secure support for a price on carbon by making concessions to affected industries and legislators from energy-intensive states. Lawmakers have distributed free permits under a cap-and-trade system; promised subsidies and tax breaks; weakened targets and increased the number of carbon offsets. As the Senate's recent experience with health care shows, Americans do not particularly enjoy the sight of this kind of deal-making. Regardless, it hasn't worked: No bill has offered enough sweeteners to lure 60 votes for carbon pricing in the Senate.

All of you, notably (and to his credit) Sen. Graham, have resisted the call for an "energy-only" bill. You agree with economists that a price on carbon is necessary for a long-term energy transition. How can you thread this needle?

There is a way. It begins by changing the way we think about carbon pricing. For at least the next five to ten years, no politically palatable price on carbon is going to serve as a primary driver of change. Anything that can pass simply won't be high enough and its effects will be too diffuse. The main goal with your bill should be to establish a framework whereby a carbon price is implemented and steadily raised. The initial price can be low -- low enough to avoid the kind of political backlash that has poisoned previous efforts -- and phase in over time so affected industries have time to prepare. At least in the short term, we should think of carbon pricing as a funding mechanism for clean energy policies. It's a form of responsible budgeting, nothing more, nothing less.

As long as the revenue it raises isn't being siphoned away for payoffs to nervous voters and energy incumbents, a relatively modest carbon price could produce the revenue needed to fund an ambitious clean energy effort without imposing undue pain on consumers or manufacturers.

This strategy moves carbon pricing where it belongs for the next decade: Into the background, as part of a sturdy, multifaceted policy infrastructure. In the post-2020 years, the price will reach a point where it plays a more direct role in driving behavior change. By then, clean energy will have built up enough capacity and market demand to give the public an appetite for increased ambition. In the meantime, clean energy and energy efficiency policies -- the job creators and money savers -- should move into the foreground.

In exchange for reducing the role of carbon pricing, you should push to strengthen and expand the clean energy and efficiency provisions in your bill. Without a substantial price on carbon those policies will have to be that much more robust if they are to meet the goal President Obama promised in Copenhagen: 17 percent from 2005 levels by 2020.

Moving clean energy and efficiency to the foreground

The energy bill passed by the Energy Committee last year is a credible effort. Sens. Bingaman and Murkowski are to be lauded for the work it took to put it together. But as they both recognize, much more needs to be done. The political climate is ripe for greater ambition and a host of good ideas on energy, many with demonstrated bipartisan appeal, have been put forward recently.

An effective starting point for the effort can be found in the "practical energy plan" being developed by Sen. Dick Lugar, who, like all of you, is a long-time Senate bridge-builder. His plan is admirable for its simplicity and the clarity of its goals: Capturing energy efficiency, diversifying and cleaning up the electricity sector, and reducing foreign oil dependence. Each of those goals is served by a range of policy instruments, from building efficiency standards to loan guarantees for clean energy generators to higher CAFE standards. It's a strong foundation that should be built on in a few important ways.

1. Strengthen the energy efficiency title.

Efficiency should be at the heart of any bipartisan effort: It saves consumers money, creates jobs, benefits every single congressional district, and can be achieved quickly. As a comprehensive new report from the World Economic Forum and IHS Cambridge Energy Research Associates puts it: "Of all the energy options, [energy efficiency] can provide the biggest 'amount' of energy in the near and medium term while contributing to reductions in greenhouse gas emissions." Strong energy efficiency provisions can easily save consumers more money than a price on carbon would cost them; most people, particularly low- and middle-income Americans, would come out ahead.

The most important efficiency provision to add is a separate, free-standing energy efficiency resource standard (EERS) to complement the clean energy standard. It would require that utilities satisfy a percentage of new demand with efficiency programs of the sort that have repeatedly demonstrated their effectiveness. The American Council for an Energy Efficient Economy has done extensive modeling work on this subject and found that even a modest, easily achievable national EERS has the potential to save American consumers billions of dollars and create thousands of jobs. An ambitious EERS -- say, 20 percent by 2020 -- can do even more. It's the lowest hanging fruit in energy policy and can benefit every region and every state.

Other energy efficiency bills focused on the building sector have emerged recently, backed by the Obama administration and several senators. The Home Star and Building Star programs would offer consumers and businesses incentives to invest in energy efficiency retrofits, while creating much-needed jobs for the struggling construction trades. Property-assessed clean energy bonds (so-called PACE programs) remove one of the primary barriers to cost-effective efficiency investments: the steep up-front costs. They have proven wildly popular in a growing number of cities and states. The Rural Energy Savings Program

recently put forward by a bicameral, bipartisan group of lawmakers (including Sen. Graham) would extend the same employment and money-saving benefits to rural areas.

More ideas like this emerge every week, as legislators' eyes open to the win-win potential of energy efficiency. It can serve as the heart of your bill and as common political ground.

2. Strengthen the clean energy standard.

Just this week, a bipartisan coalition of 29 governors joined in a call for a renewable electricity standard (RES) of 20 percent by 2020. The Department of Energy found that an RES of 25 percent by 2025 is both affordable and achievable, and that's with fairly some pessimistic projections of scale and innovation.

Unfortunately, the RES in the Energy Committee bill -- 15 percent by 2021 -- would do little to boost renewables above business as usual, according to both ACEEE and the Union of Concerned Scientists. The politics of clean energy have been vexed because some senators, particularly from the Southeast, believe their states have little access to clean energy and will end up subsidizing other regions. This is simply mistaken. As an analysis (PDF) from the Southern Alliance for Clean Energy shows, Southern states have access to copious biomass, along with plentiful solar, geothermal, and offshore wind energy. (West Virginia's Joe Manchin is part of the coalition of governors.)

Further support could be built by allowing some nuclear power and coal with carbon sequestration to qualify under a broader clean energy standard, of the sort Sens. Lugar and Graham have proposed. If those sources are permitted, however, their contribution should be capped; genuinely renewable sources deserve special consideration.

3. Address the legacy fleet of dirty U.S. coal plants

One of the biggest impediments to the growth of clean energy is America's fleet of aging dirty coal plants. Just under 10 percent of U.S. power plants produce fully half the power sector's carbon pollution. Of those plants, 83 percent were built 30 or more years ago. That same group of decrepit plants also produces a disproportionate share of particulate emissions and mercury pollution, at substantial public health cost.

Because they are fully amortized and face no pollution controls (they were "grandfathered" under the Clean Air Act), the energy these plants produce is extremely cheap. For that reason, they have been run more intensively the last 20 years. For the same reason, no carbon price likely in the next 20 years will render them uneconomic. They must be addressed by regulation.

The best way to do this is via regulations of greenhouse gases by the EPA. Those regulations are the subject of heated controversy; legislators from energy- or manufacturing-intensive states are concerned that they will be intrusive and expensive. (Less widely understood is the fact that a few simple legislative modifications to the Clean Air Act could allay those fears. The threshold for a regulated entity could be raised to 25,000 tons, or higher, to insure that only the biggest polluters are subject to regulation. The vexed question of what constitutes "best available control technology" under the Clean Air Act could be settled by Congress in a way that balances economic and environmental concerns.)

If, as is rumored, EPA authority over greenhouse gases is pre-empted by your legislation, Congress will still need to address the problem. Steadily rising plant-by-plant performance standards would prompt utilities to upgrade or close those plants. Alternatively, T. Boone Pickens and Ted Turner have proposed a "cash for coal clunkers" program that would effectively buy out the oldest, dirtiest plants.

4. Pick the best of the rest

There are plenty of other worthwhile provisions in circulation, in the Energy Committee bill and elsewhere. They address the need for bulked up energy transmission and a smarter grid; the need to establish institutions (like a Clean Energy Bank) to provide stable financing; the need to bring utility regulations into

the 21st century. Many of these ideas have, quietly and without fanfare, gathered bipartisan support. Look outside the conventional channels and conventional ideas. Beyond the somewhat stale thinking in the Beltway, many of America's brightest minds are furiously attacking this problem. Unleash them!

In long-overdue conclusion

America is ready for clean energy. A vast amount of private capital is being held back as investors wait for clear rules. The dispute over carbon pricing should not be permitted to cause further delays, concessions, or trimmed ambitions. The smarter path forward is to establish a minimal or slowly phased in carbon price, acceptable to most industries and legislators, along with a framework whereby it can be raised in the future. With that contentious debate behind you, you can turn to crafting the ambitious clean energy bill for which the American people have unambiguously voiced support.

Cramer Picks Nat Gas Laggard For Buyout Speculation – *Ticker Spy* – 3/22/10

By Owen Vater

The recent wave of natural gas merger mania got CNBC's Jim Cramer talking about SandRidge Energy (SD).

Bargain basement natural gas prices have done more than just weigh on the wind portion of T. Boone Pickens' domestic energy plan recently. The low prices have also sent companies rushing to acquire assets or even initiate takeovers of other firms. The M&A spike has spurred plenty of speculation as to which company could be next, and Cramer said Oklahoma-based independent natural gas and oil player SandRidge energy would be a good one, according to coverage of Friday's "Mad Money" television show on CNBC.com.

A look at the Oil and Gas Driller Explorer Stocks Index shows that SandRidge is a laggard over the month leading to Friday's close, down by -12.4%. Meanwhile, Compton Petroleum (CMZ), Kodiak Oil & Gas (KOG), and Cano Petroleum (CFW) all shot up by over 20% for the period.

Cramer noted that SandRidge is a better-than-average speculation play because it's just a couple points off its 52-week low, which could limit its downside risk in the case of a broad equity selloff, according to CNBC.com. By our calculation, SandRidge was more than 20% from its one-year low as of Friday's close, but most of the sector has rallied by 50% from respective lows by comparison – Exxon-Mobil (XOM) and oil sands giant Suncor Energy (SU) being notable exceptions. Of course, given their scale, Exxon and Suncor are more likely suitors than targets in the natural gas segment.

Elsewhere in the sector there was some real buyout news over the weekend when Consol Energy (CNX) announced that it will buy the remaining 37% stake in CNX Gas (CXG) that it doesn't already own. The deal prices CNX Gas shares at \$38.25 in cash, bringing the grand total to about \$363.4 million according to the Associated Press.

As of Friday's close, the Oil and Gas Driller Explorer Stocks Index was just shy of the 50 worst performing tickerspy Indexes over the last month. It will be interesting to see if merger speculation or buyout news can help the sector higher in the near future.

Investors can track the Oil and Gas Driller Explorer Stocks Index for performance trends and a suite of other metrics at tickerspy.com.

Coal Companies Can Save Themselves: Poll – *The Street* – 3/22/10

By Andrea Tse

NEW YORK (TheStreet) -- Despite proposed clean-air legislation; burgeoning clean-energy alternatives like solar and wind power; and speculation as to the demise of coal as an electric-power source; coal companies and coal stocks will likely save themselves, according to a recent poll by TheStreet. No fewer than 79.9% of voters in our weeklong poll, conducted during the week of March 15, say that coal stocks will embrace clean-coal technology to a degree sufficient to keep them viable for decades. The remaining 20.1% of respondents disagree, saying they still consider coal stocks to be a risky investment, given the prohibitively expensive cost of clean coal technology.

Or, then again, much of the recent investor interest in coal stocks might actually have less to do with optimism about clean-coal technology and more to do with pessimism about the pace of renewable energy sources.

Indeed, Bloomberg reports that the shift away from First Solar(FSLR) towards Peabody Energy(BTU) is taking place at its fastest pace in two years, even as veteran financiers like T. Boone Pickens and Warren Buffett pour cash into environmentally friendly technologies.

Firsthand Alternative Energy Fund's Kevin Landis tells Bloomberg that the trend reflects the conventional wisdom that government support for reducing greenhouse gases has been waning; the Stowe Global Coal index of 38 coal producers has increased 6.5% in 2010, while the Bloomberg Global Leaders Solar index of 38 solar module and component makers has plunged 17%, according to Bloomberg.

Meanwhile, companies like Consol Energy(CNX), which on Mar. 15 announced its agreement to buy Dominion Resources'(D) natural gas properties for \$3.5 billion in cash, have proven that coal and natural gas businesses are not mutually exclusive. Another coal producer, Massey Energy (MEE) continues to seek potential natural gas deals, even as it carries on with expanding its coal reserves.

Also, in February, coal company Alpha Natural Resources(ANR) announced a joint venture with Rice Energy to begin developing that company's Marcellus shale gas resource in southwestern Pennsylvania.

First Solar has fallen 2.6% to \$110.30 a share in pre-market trading, while Peabody Energy is down 2.1% at \$46 a share. CONSOL Energy has fallen 1.5% to \$44.90 and Dominion Resources is flat at \$40.70.

Meanwhile, Massey Energy has fallen 2% to \$48.90 and Alpha Natural Resources is down 1.2% at \$46.90.

Volkswagen Caddy Maxi EcoFuel Motors The Panamericana Without Gasoline – *The Car Connection* – 3/22/10

By Richard Read

Last week, we covered the kick-off of Tesla's round-the-world tour, featuring a special-edition 2010 Tesla Roadster designed by luxury watchmaker TAG Heuer. The high-profile stunt is designed to show that Tesla's all-electric Roadster has plenty of range, and that it can circumnavigate the globe without using a single drop of gas. But the Roadster isn't alone on either of those fronts: there's another long-distance drive currently underway that has turned its back on gasoline, and it features a much more humble Volkswagen.

The drive is one of the longest on Planet Earth: the legendary Panamericana, or Pan-American Highway. It's being carried out by Rainer Zeitlow in a Volkswagen Caddy Maxi EcoFuel, which runs entirely on compressed natural gas (CNG). Between October 5 and November 3, 2009, Zeitlow drove the VW from Portugal to Japan along the Amur Transcontinental. He began the Panamericana trip just two months later, on January 2, in South America's southernmost CNG station in Rio Grande, Argentina.

After nearly three months and a couple of long side trips into Brazil and America's eastern seaboard, Zeitlow has nearly finished his run through the Americas. He hit San Francisco on Friday, and he aims to wrap up the journey a week from Thursday, on April 2, when he motors into North America's northernmost CNG station in Barrow, Alaska. In all, Zeitlow will have covered some 24,855 miles on the two excursions.

So, what's our take?

As pure spectacle, it's fantastic. We love a good rally, even if there's only one competitor. And alternative fuels are exciting, too -- even though they may be worse for the environment and the economy than good old-fashioned gasoline. Still, as tech geeks, we like to watch the tests anyway.

Unfortunately, CNG doesn't seem like an especially viable alternative fuel for most consumers -- despite T. Boone Pickens' efforts to prove that it is. He may be right when it comes to commercial hauling fleets and mass transit, but for most passenger vehicles, the future looks more like the all-electric one proposed by Tesla. In fact, it may look more like the all-electric one proposed by Honda, GM and others, thanks to vehicles powered by hydrogen fuel cells.

We say that for a variety of reasons, not the least of which is that hydrogen fuel cell technology relies on easily renewable resources (e.g. water) and produces zero carbon emissions, which are stated goals of many automakers, governments, and political groups these days. True, the hydrogen infrastructure is expensive to create -- around \$2 million per fueling station to start -- but after that initial investment, the costs begin to trail off. Skeptics say that hydrogen will never be a viable source of energy because it's so difficult and expensive to create, and that could be true. But no matter where the electricity to power EV batteries comes from, the industry seems poised to transition away from vehicles that run directly on fossil fuels and toward those powered by batteries.

CNG, on the other hand, is expensive to recover, and it's not likely to become any less so over time. Furthermore, it's a limited resource, and limited resources always come with high costs -- politically, socially, environmentally, and economically. (Though it's only fair to point out that the lithium used in lithium ion batteries is even more limited than natural gas, and the mother-lode seems to be in Bolivia; in other words, until new battery tech rolls out, the politics of battery-powered vehicles will be tricky, too.) Finally, CNG vehicles aren't zero-emission. They're far cleaner than gasoline-powered rides, but they're not perfect.

BROADCAST COVERAGE

1. Land Line Now

Road Dog Trucking (Sirius XM), National | DMA: 0

03/19/2010, 07:00 PM - 08:00 PM

00:42:00 We have talked several times to Texas oilman **T Boone Pickens**, the author of the Pickens Plan. That plan would move electrical production over the sources like **wind**, solar and other renewables domestic sources ... Then vehicles would move over to **natural gas** which America has been far far greater amounts than it does **oil** ... That series of conversations still brings in calls like this one .. "I have a couple of questions... what are the miles per gallon... how much does it weigh? .. as it as clean burnign as propane?" ... 00:43:59

Audience: N/A **Spot Cost:** N/A

2. CTN Schedule

CT-N, Hartford/New Haven | DMA: 30

03/19/2010, 06:00 PM - 08:00 PM

[CC] 00:35:10 (speaker is John Larson) How much longer will we be content to send money overseas that arms the very terrorists that are fighting our men and women in Iraq and afghanistan? How much water are we going to export dollars overseas instead of a rebuilding co our own **energy** system here, ? Hydrogen will be the ultimate vehicle and **natural gas** is here today. It is abundant, currants and accessible and as **T. Boone Pickens** says it is our spokesman. With the latest it reports on **natural gas**, the **natural** life span is about 100 years due to new techniques in drilling and new finds more than 400 years. America ought to have its shoulder to the will making sure we bring home to this form of **energy**. The cost of **energy** in Ct.s one of the reasons why the cost of doing business is expensive and difficult... 00:38:06

Audience: N/A **Spot Cost:** N/A

3. CTN Schedule

CT-N, Hartford/New Haven | DMA: 30

03/19/2010, 04:00 PM - 06:00 PM

[CC] 01:58:00 I have talked to business owners ... people have asked about that and we know you're busy. There is always something going on. **Energy** : another big issue. I commend you for your reference. I also commend you for bringing in **T. Boone Pickens** and if you could give us insight on alternative **energy**. ... 01:59:54

Audience: N/A **Spot Cost:** N/A