



## T. Boone Pickens Media Coverage 12.3.09

### Total of 3 Placements

- Print: 1
- Blog/Online: 2

### Coverage Summary:

*The Washington Post* ran a front page story on natural gas, highlighting advances in drilling techniques that have led to a supply of more than 100 years. The piece looks at efforts oil and gas companies are making to stake out territory near the Marcellus Shale and the economic impact natural gas development could create. While Pickens is not mentioned in the piece, former Colorado Senator Tim Wirth is quoted echoing Pickens' message that "natural gas can serve as a bridge fuel to a low-carbon, sustainable energy future."

*The Motley Fool* re-ran a Q&A with Pickens discussing renewable energy, the NAT GAS Act, the price of oil and his thoughts on energy investments. The piece, which was originally published in August, was considered one of their best articles from the past year.

### Highlighted Placements (Full Articles Below)

- **An Energy Answer in the Shale Below?** – *The Washington Post* – 12/3/09
- **A Conversation With T. Boone Pickens** – *The Motley Fool* – 12/3/09
  - *The Money Times*

## HIGHLIGHTED COVERAGE

### **An Energy Answer in the Shale Below?** – *The Washington Post* – 12/3/09

By Steven Mufson

The first time Chesapeake Energy tried to buy mineral rights from Diana Whitmore, a 74-year-old retired real estate broker in southern New York, it offered her \$125 for every acre of land plus a 12 percent royalty on whatever natural gas it extracts.

Nearly two years later, she's still holding out. Along with hundreds of other landowners, she has joined a coalition that is negotiating with nine oil and gas companies. The latest offers in the area are running as high as \$5,500 an acre with 20 percent royalties.

"It's what's really going to turn this whole place around," said her son Daniel Fitzsimmons, who has since helped form the Binghamton Conklin Gas Lease Coalition.

This corner of the state is at the forefront of an old-fashioned land rush that has implications far beyond Conklin, N.Y. Oil and gas companies are vying to stake out territory where they can tap natural gas trapped in shale rock. Just a few years ago, the industry didn't have the technology to unlock these reserves. But thanks to advances in horizontal drilling and methods of fracturing rock with high-pressure blasts of water, sand and chemicals, vast gas reserves in the United States are suddenly within reach.

As a result, said BP chief executive Tony Hayward, "the picture has changed dramatically."

"The United States is sitting on over 100 years of gas supply at the current rates of consumption," he said. Because natural gas emits half the greenhouse gases of coal, he added, that "provides the United States with a unique opportunity to address concerns about energy security and climate change."

Recoverable U.S. gas reserves could now be bigger than the immense gas reserves of Russia, some experts say. The Marcellus shale formation, stretching across swaths of Pennsylvania, New York and West Virginia, has enough gas to meet the entire nation's needs for at least 14 years, according to an estimate by two Pennsylvania State University experts. Just in Broome County, N.Y., where Fitzsimmons lives, shale gas development could create \$15 billion in economic activity, according to consultants hired by the county.

The country is carpeted with shale gas plays, including the Barnett in Texas, Fayetteville in Arkansas and Haynesville in Louisiana. Since 2000, gas from shale has grown from less than 1 percent of the nation's production to about 10 percent, according to the consulting firm PFC Energy, and it's picking up fast.

That's changing the energy and economic landscape from Broome County to the Gulf of Mexico. It could mean lower prices and reassurance to homeowners who heat with gas, or towns and companies with vehicle fleets running on the fuel. As winter begins, the price of natural gas is about a third of the level it was 14 months ago. Storage facilities are bursting.

With new supplies, the country will be less vulnerable to disruptions from Gulf Coast hurricanes and need to rely less on imports. Already, deliveries of liquefied natural gas from places such as Qatar, Nigeria and Trinidad are down 58 percent in 2008, idling costly U.S. terminals.

The prospect of new gas supplies at stable prices is also transforming debates over climate change. It deals another blow to proposals for new coal plants. And because gas plants can be switched on and off quickly, unlike coal and nuclear, natural gas could supplement wind and solar power facilities, whose output varies with the weather.

"Natural gas can serve as a bridge fuel to a low-carbon, sustainable energy future," said former Colorado senator Timothy Wirth, now head of the U.N. Foundation. Indeed, this year, coal use is down about 13

percent, while electricity demand has fallen only 5 percent and natural gas use has remained about steady.

But the prospect of widespread shale gas drilling is also driving wedges in the environmental community. Many environmentalists have sounded alarms about the chemicals that drillers use to fracture the rock and the danger of natural gas or other substances contaminating water supplies. A video posted on the Web shows a man in Fort Lupton, Colo., lighting a fire with the tapwater in his kitchen sink -- although it isn't clear what caused that problem.

Residents of New York City, which draws drinking supplies from a large watershed that reaches up to the Catskill Mountains, have protested, and Chesapeake Energy has voluntarily announced that it would not drill in the watershed. Gov. David A. Paterson (D) has declared a moratorium on drilling until the state's Department of Environmental Conservation issues rules, which are open for public comment. A raucous meeting in Manhattan last month ended before even a third of the people who wanted to comment got a chance to speak.

"This is probably the biggest thing to happen to the state of New York since the initial clearing by settlers," said Wes Gillingham, executive director of the Catskill Mountainkeeper.

In north Texas, some people are also wondering whether drilling in the Barnett shale is to blame for a series of barely perceptible but highly unusual earthquakes now being investigated by geologists.

Yet other environmental groups favor developing gas to displace coal. "There are legitimate concerns that need to be addressed," said Bruce Nilles, a lawyer at the Sierra Club. But, he added, new natural gas supplies could be a "game-changer" in the battle against coal plants.

Nilles said New York's 20 coal plants largely burn Appalachian coal from areas with mountaintop removal. "The status quo means continuing to destroy the oldest mountain range in the country," he said.

Credit for discovering that gas could be economically extracted from shale generally goes to George Mitchell, former head of Mitchell Energy. In the early 1980s, as the company's production was declining, Mitchell and his geologists started experimenting with "hydraulic fracturing" -- blasting underground layers of shale with a mixture of water, chemicals and sand to crack the rock and get gas flowing out of it.

"Mitchell had hired an investment banking firm in 1999 to see if anyone wanted to buy them," recalled Larry Nichols, chief executive of Devon Energy. "Devon and everyone else looked and said, 'No, that technology doesn't work.' We, like everyone else, turned up our noses."

Three years later, Devon paid \$3.1 billion to acquire Mitchell. It combined hydraulic fracturing with horizontal drilling, which enabled a single well to turn, follow a seam of shale for up to two miles and produce much more gas. Now a quarter of the natural gas produced by Devon, a \$30 billion company, comes from shale.

Historically, most of the natural gas produced in the United States came from relatively small pockets in porous rock. The oil and gas industry has been "eternally searching for relatively small traps," Nichols said. Shale, by contrast, is widespread and hard to miss. "Devon has drilled 4,000 wells in the Barnett and is planning 4,000 more, at least. And we have not drilled a dry hole," Nichols said.

The stakes are high for companies and consumers, as well as the environment. Shale gas has already added billions of dollars to the value of companies like Devon, but it unsettles people living in scenic portions of Pennsylvania and New York, which were the first places oil was discovered but which have been relatively undisturbed for decades.

Some people are just happy about the money. Fitzsimmons, for example, suffers from arthritis and has a nonverbal autistic 18-year-old son. He and his family own 185 acres. "If you're a property owner, it's amazing," he said. "Even some of the ones who are members of these organizations that are supposedly

against it -- when it comes time to get a check on their property, suddenly they're all for getting the check."

### **Drilling Right into a Heated Environmental Debate**

Oil and gas companies have figured out how to turn shale rock into natural gas gushers, but they have also hit a deep well of anxiety about the environmental impact of drilling in some of the country's most scenic areas.

The debate revolves around a technique known as hydraulic fracturing, which unlocks natural gas by shattering shale rock with high-pressure blasts of water, chemicals and sand.

Starting up a well requires 3 million to 7 million gallons of water. Drillers mix in chemicals that environmentalists say can imperil rivers and springs. Critics say natural gas can seep into drinking supplies, too.

Large volumes of water, containing leftover chemicals and mineral waste, return to the surface once a well is complete; that water requires safe disposal or treatment. Residents fear accidents, even if firms take precautions such as using steel tanks.

Cabot Oil & Gas has been mired in two disputes. Earlier this year, residents of the Dimock, Pa., area reported evidence of natural gas in their water supplies. Inspectors from the state's Department of Environmental Protection discovered that the casings on some of Cabot's gas wells were cemented improperly, allowing contamination.

On Sept. 16, Cabot's contractors, Baker and Halliburton, spilled 7,980 gallons of fluids in Dimock. Cabot said that it included only 0.5 percent chemical lubricating "gel" and that the mixture was "not hazardous or dangerous." But the DEP suspended the company's drilling activities.

Gas exploration companies say that proper drilling techniques seal off wells with concrete and that the shale layer is a mile or more below drinking-water aquifers, providing protection. Moreover, they assert, the water pumped underground contains only a tiny percentage of chemicals. Once the rock is fractured, no further water is needed. Larry Nichols, chief executive of Devon Energy, said the water needed to "frac" a well equals what's needed to water a golf course or fill three Olympic swimming pools.

What chemicals are used isn't clear. In 2005, Congress exempted chemicals used in hydraulic fracturing from the Safe Drinking Water Act and said firms need not disclose the chemicals, which are often viewed as trade secrets. This is widely known as the "Halliburton loophole," after the company whose former chief executive, Dick Cheney, was then vice president.

The Endocrine Disruption Exchange, a nonprofit group run by Florida public health advocate Theo Colborn, has identified 344 hazardous chemicals used in fracturing, including 2-butoxyethanol and formaldehyde. Sen. Robert P. Casey Jr. (D-Pa.) and three House members have introduced bills that would repeal the exemption.

"The environmentalists have come out with long chemical names, but most are in baking soda and things we have around our houses," Nichols said.

Some companies are voluntarily disclosing the chemicals they use. "We as an industry need to demystify [hydraulic fracturing]," Chesapeake Energy chief executive Aubrey McClendon told a conference, according to Reuters.

Oilfield services giant Schlumberger said it is developing "green" fracturing fluids. Range Resources said it has figured out how to recycle 100 percent of the waste water from drilling.

Many environmentalists aren't satisfied. "While toxic chemicals may be found in commonly used household products, they should not be in a home's drinking water," said a report by Environment America. The group's legislative director, Anna Aurilio, said, "Natural gas might be a little cleaner than coal, but drinking water is precious to us."

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## **A Conversation With T. Boone Pickens – *The Motley Fool* – 12/3/09**

By Jennifer Schonberger

*In the grand post-Thanksgiving tradition, we're digging through our fridge to warm up some of our best articles from the past year. Whether you missed them the first time around, or you just want a second helping, it's never too late to fill up on Foolishness.*

It's no secret that America is at an energy crossroads. Energy prices are only expected to increase, and relying on foreign oil could pose a national security threat. Renewable energy seems like a possible alternative, especially with government incentives -- yet capital markets aren't permitting it right now.

To gain some perspective on the multitude of issues that plague the energy space, I spoke with T. Boone Pickens, oil tycoon, champion of the Pickens Plan, and chairman of hedge fund BP Capital.

Pickens says he's moving forward with the Pickens Plan, despite having to postpone his wind farm project because of clamped capital markets and difficulties surrounding transmission of energy generation. Aside from the plan, the billionaire says the Commodities Futures trading Commission's (CFTC) potential regulation to limit trading in the oil futures markets doesn't faze him. Pickens says he thinks oil is going to \$75 a barrel by year-end -- and higher in the longer term.

We also discussed Pickens' favorite energy companies to invest in. After crashing in 2008, Pickens -- who has a 20% stake in his hedge fund -- has seen his fund's energy futures fund rise 79% this year, while his energy equity fund is up 14%.

What follows is an edited transcript:

Jennifer Schonberger: What is your outlook for renewable energy as a whole, and do you still believe in wind energy as the future energy source for America?

T. Boone Pickens: Yes. You're going to start to use our resources in this country and quit depending on somebody else's oil. Now, wind and solar are not going to replace crude oil, because oil is used primarily for diesel and gas transportation fuel. So we need to get on our own resources, and I think that is starting to happen. I think this administration is committed to it, and they're going to see that it does happen.

Schonberger: What about the fact that the recession has caused energy prices to fall, which in turn has made expensive renewable sources such as wind and solar non-competitive in terms of cost -- an important consideration at a time when consumers are trying to save on energy bills. How does that bode for the future of renewables?

Pickens: On the renewables, no question, demand often makes a difference, but that's just a temporary situation. By the time they get the legislation passed, I'm confident that the price of fuel will be back up again. ... I think that the renewables are going to be used, and once we get started, we'll find out that we can do it cheaper than when we start out.

Schonberger: Senate Majority Leader Harry Reid introduced the Natural Gas Act into the Senate (incentives for natural-gas-fueled cars). Do you think the bill will pass?

Pickens: Look at what happened two weeks ago on H.R. 1622. It was a nonpartisan natural gas bill that offers \$30 million in funding per year for research on natural gas vehicles. It went right through. Now, no question it was a small bill, but it gives you a pretty good indication of how our Congress is looking at anything related to natural gas. Yes, I think that 1835, the Natural Gas Act, will pass. When you look at the co-sponsors on the bill, they have 100 co-sponsors and they're split 50-50 Democrats and Republicans. The companion bill in the Senate is 1408, and those two bills are very compatible and will help [the legislation] come together real fast. So yes, I think the Natural Gas Act is going to pass in October.

Schonberger: With regard to natural-gas-fueled cars, how long will it take to set up the infrastructure and what is the cost to replace the gasoline-fueled internal combustion engine?

Pickens: I see it as a seamless event. The way it works is, you cut out diesel for the purchase of new 18-wheelers. Set it up where you use domestic fuel on the 18-wheelers and cut out the diesel. That's good for the environmentalists because natural gas, for instance, is 50% cleaner than diesel. It's cheaper, it's ours, and it's abundant. So start with the 18-wheelers and the infrastructure will come as fast as the vehicles show up. The government doesn't have to set up the infrastructure. That can be done by private industry. ...

Don't worry about costly. Private industry will expect to make a profit off it, and if they do, they'll pay taxes, which will help the economy by creating jobs. 350,000 18-wheelers will get you 420,000 jobs. The only place [government would] need to help is to incentivize the 18-wheeler owner, because you have an incremental difference in the cost of a natural-gas truck and a diesel truck, but you can make up for it on the cost of fuel.

Schonberger: The CFTC has suggested speculators have been a strong force in driving volatile swings in oil prices. As a result, the agency is widely expected to adopt new rules that would limit the amount of investments in commodities by big institutions that are only in it for financial gains, as opposed to taking delivery of the commodity. As someone whose energy futures fund is up 79% this year, where do you stand on this issue?

Pickens: They can do whatever they want to. Whatever rules they set up, we'll play under those rules. Throw the ball up in the air, tell me what kind of game it is, and we'll play that game.

Schonberger: Should this regulation pass, what are the implications for the stocks of energy companies that have profited from such a surge in oil prices (driven by speculators or not)? Would the passage compromise profits for these companies?

Pickens: I don't believe speculation drives up the physical market. So too high for the price of oil are the people that have the oil, and so when the Saudis tell me it's going to be \$75 oil, I believe them. That's what they're going to have. It doesn't have anything to do with the Nymex.

Schonberger: Where do you see the price of crude oil going by the end of the year? What about 2010 and long-term?

Pickens: I see oil at \$75 by the end of the year, and in 2010 and longer term, it will be higher.

Schonberger: Oil is obviously a commodity. To that end, do you think we are in a secular commodities bull market?

Pickens: Well, in oil you're dealing with a supply of 85 million barrels a day globally, and that's all you're going to get. Jump out to December 2010 on the commodity market, and it shows \$75/\$77 [a barrel] right now. For December 2011 it's \$80. I would imagine that market, that distance out there looking at the commodity, I think that's probably fairly accurate.

Schonberger: In terms of hot spots you and your funds are investing in within the energy space, what areas do you favor most right now? E&P, oil services/natural gas, refiners?

Pickens: We're in the E&P companies. I've said before that I think the two best on oil are Suncor Energy (NYSE: SU) and Continental Resources (NYSE: CLR).

Devon Energy (NYSE: DVN), Chesapeake Energy (NYSE: CHK), SandRidge Energy (NYSE: SD), and Range Resources (NYSE: RRC) are also well-run companies, and they'll do well when natural gas recovers. We [also] like their reserve bases.

Schonberger: Does your hedge fund have plans to roll out a renewable energy fund?

Pickens: No.

Schonberger: Could you update me on the status of your plan?

Pickens: We're not going to have transmission available to us until 2013. We start to receive turbines in the first quarter of 2011, so we're going to have to find another place to use them then where we thought we were going to, so it's not anything more than you experience in other deals. You have to make adjustments from time to time. We'll make an adjustment, use the turbines in 2011 someplace else and use turbines in 2013 back on the Pampa Project ...

So I think the Pickens Plan is right on course. We're further down the track. We haven't lost any of the components that we talked about from the outset in July 2008, everything is still alive and it's moving forward. I think you're going to have legislation from Congress this year that will dictate the direction of energy for the next 50 years for the United States. It will be monumental if it comes off like I think it will.

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