

PickensPlan

T. Boone Pickens Media Coverage 8.24.10

Total of 4 Placements

- Print: 1
- Blog/Online: 3

Coverage Summary:

The *Energy Washington Week* piece looks at what topics are expected to be discussed at the National Clean Energy Summit on September 7. Pickens' participation in the event is noted along with his push for using natural gas and renewables to transition to a low carbon economy. The article also mentions that the Pickens Plan was included in legislation introduced by Senator Reid last month.

Highlighted Placements (Full Articles Below)

- **Reid Energy Summit Will Address Utility Investments Absent Carbon Price** – *Energy Washington Week* – 8/25/10

Print Placements (Full Articles Below)

- **Maine's Windmill Follies** – *Lewistown Sun Journal* – 8/24/10

Blog/Online Placements (Full Articles Below)

- **Pickens Laments That He Failed To Convince Bush And Obama To Take Iraq's Oil** – *Think Progress* – 8/24/10
- **Natural Gas: The Realistic Choice** – *Investing Daily* – 8/23/10

HIGHLIGHTED COVERAGE

Reid Energy Summit Will Address Utility Investments Absent Carbon Price – *Energy Washington Week* – 8/25/10

Senate Majority Leader Harry Reid's (D-NV) energy summit early next month will feature a key discussion of how the electricity sector can move forward on energy investments absent a price on carbon now that Congress is almost certain not to pass climate legislation this year, according to a senior source with the Center for American Progress (CAP), a leading Democratic think tank with close ties to the Obama administration that organized the conference.

CAP is also suggesting Reid's Sept. 7 National Clean Energy Summit will be a harbinger for legislative proposals, including clean energy tax packages, to be included for debate in the fall, according to the CAP source. The summit will be the third that Reid has hosted with CAP in recent years. The last two laid the foundation for legislation that was later introduced and passed, including the clean energy provisions of the economic recovery law and transmission legislation that was included in the Senate energy bill passed in June 2009, says the source.

Although declining to speculate on specific legislative proposals that might emerge from this year's summit, the source did say that clean energy finance and clean energy incentives under the 2009 American Reinvestment and Recovery Act (ARRA) would be the summit's focus, along with clean energy jobs. Within that scope will be the issue of how industry makes investments without the certainty of a carbon price, a key question the summit seeks to answer.

Reid wants the summit to address questions on finance and how the federal government can work with industry to continue to attract investment in clean energy as funding in the ARRA "winds down," the source says. At the same time, the summit may address extending key clean energy provisions in ARRA, such as the section 1603 grant program for renewable energy, which has been considered a huge success by lawmakers and clean energy proponents alike.

The CAP source adds that there is momentum to pass a new ARRA, or a tax bill that includes extensions to ARRA energy tax incentives and grants. The source says draft legislation is being circulated in the House by Ways and Means Chairman Rep. Sander Levin (D-MI) that includes several measures for significant ARRA extensions, which CAP supports. The Levin draft bill,

the "Domestic Manufacturing and Energy Jobs Bill of 2010," released on July 27 would extend the 1603 grant program.

The summit will include a panel discussion on clean energy finance with the president of the U.S. Chamber of Commerce Tom Donohue, Reid, the large utility company Pacific Gas & Electric, and members of the capital venture community, according to the source and a draft summit agenda.

Reid will also co-host a Clean Energy Town Hall meeting Sept. 7 with natural gas mogul T. Boone Pickens, who has been an advocate for using more natural gas alongside such renewables as wind to transition to a low carbon economy. An oil response bill that Reid introduced last month, but that did not make it to the floor before the recess, contains a program to encourage the use of more natural gas vehicles that parallels recommendations in the so-called "Pickens Plan" for clean energy.

The CAP source notes that the \$5 billion HomeStar program to promote efficient home appliances included in Reid's oil spill legislation emerged from last year's clean energy summit.

PRINT COVERAGE

Maine's Windmill Follies – *Lewistown Sun Journal* – 8/24/10

By Jean Arsenault

What is the rush to construct these windmills around small towns and on the mountains of Maine?

Some say it's to reduce our dependency on foreign oil. When all is said and done, they will not produce enough energy to make a dent in our needs, but it will make some investors very rich.

To top it off, the energy will be sold out of state. Our electric bills will not go down. Oh, the towns will get taxes, but is it worth it? The mountain landscape will be ruined for many years to come.

Oil baron T. Boone Pickens of Texas said natural gas is the way to go. It's non-polluting and a near endless supply.

If windmills are so wonderful and a big energy saver, I would suggest to the investors to put them on their estates. And, Wall Street? Put them on their high rises.

Don't let these investors laugh all the way to the bank while we struggle to pay our energy bills.

Jean Arsenault, Mexico

BLOG/ONLINE COVERAGE

Pickens Laments That He Failed To Convince Bush And Obama To Take Iraq's Oil – *Think Progress – 8/24/10*

Oil tycoon T. Boone Pickens made headlines late last year as he openly advocated to members of Congress that the United States seize the oil fields of Iraq and use them for its own benefit, arguing that our country is “entitled” to the oil.

Speaking at the American Renewable Energy Day conference in Aspen, Colorado, last week, Pickens once again lamented the fact that the United States failed to take Iraq's oil, and even revealed that he personally lobbied former President George W. Bush and current President Barack Obama to seize the country's natural resources. The oil baron explained that President Bush, though interested in how such a plan would be structured, ultimately failed to agree to enact Pickens' scheme, fearing that it would make people “think we're there for the oil.” Pickens also said he told Obama to stay in Iraq to appropriate the country's oil fields, but failed to convince the president of the merits of his idea:

“I've heard people accuse President Bush of going to Iraq for their oil,” he began, in a public conversation with CNN founder Ted Turner and New York Times columnist Thomas Friedman. “That didn't happen. We didn't get the oil.”

Pickens argued that the American blood shed in the war was reason enough to take the oil. But, he said, Bush was too concerned about his image and appearing as if the war were a ploy to get the oil to follow Pickens' plan. [...]

The 82-year-old Texan recalled a conversation with President Bush as his days in office waned, in which Bush asked about how they could bring the oil to market and battle the public perception that Operation Iraqi Freedom was a war for oil.

“He said, ‘People will think we’re there for the oil.’ And I said, ‘That was eight years ago, a lot’s happened since then — a lot of money spent, a lot of lives lost.’ And he said, ‘How would you price it?’ I said, ‘Price it on the market every day.’”

Bush then asked more detailed questions about the pricing structure, and Pickens recalled pushing those concerns aside and telling the president, “That’s a high-class problem. We can figure out how to get it in the hands where it’d do best for America.” He made a similar plea to Obama, Pickens said, with similar results. “I went to Obama and said, ‘Don’t leave Iraq.’ Look where we are now.”

It is difficult to understand how Pickens squares his view that the United States should have continued to indefinitely occupy Iraq to take its oil with his much-touted “Pickens Plan” designed to “break America’s addiction to foreign oil.” If what Pickens says about his lobbying of two American presidents to try to seize Iraq’s oil is true, it calls into question his sincerity in pursuing his stated goal of energy independence.

Natural Gas: The Realistic Choice – *Investing Daily* – 8/23/10

By Elliott H. Gue

Natural gas prices have been depressed for more than a year, and stocks levered to the fuel have turned in a mixed performance. This weakness has lead many investors to the unfortunate conclusion that natural gas isn’t an interesting investment story.

Nothing could be further from the truth. Gas is an abundant and environmentally friendly fuel that’s already revolutionizing key global energy industries such as petrochemicals. And natural gas is a far more viable alternative to oil in the transportation sector than any of the widely hyped alternative energy technologies.

The Rise of the State: Profitable Investing and Geopolitics in the 21st Century, a book I co-authored with two longtime friends and colleagues, Yiannis Mostrous and David Dittman, analyzes these powerful trends and details specific stocks that stand to profit from the changes underway. Published by FT Press, the volume is now available on Amazon.com and at your local bookstore.

The excerpt below will give you a taste of what to expect.

Natural Gas: The 21st Century Fuel

The two main sources of demand for natural gas are electric power generation and industrial applications. The key question is why companies would choose to use gas to produce electric power, as an industrial fuel, or as feedstock rather than coal and oil.

In markets where natural gas competes with oil, gas's main advantages are that it's more readily available and cheaper. The following chart shows the price of crude oil compared to US and UK natural gas prices.

Natural gas is considered a regional fuel. The US, for example, has obtained its gas from a combination of domestic production and imports from Canada via pipeline. Although gas imported from further afield in the form of LNG has become a more meaningful component of North American supply in recent years, it's still a relatively small part of the supply mix. Similarly, Europe has traditionally obtained most of its gas from North Sea production and via pipeline from Russia.

As a result, natural gas prices can differ widely between regions of the world. To reflect this, the chart depicts prices for both US NYMEX-traded natural gas futures and UK-traded ICE futures. ICE futures are traded in terms of British pence per therm, while US gas futures are traded in US dollars per million Btu (USD/MMBtu); the chart converts ICE futures and oil prices to USD/MMBtu for ease of comparison.

For most of the period covered by this chart, oil and US/UK natural gas prices were closely correlated, though crude typically traded at a slightly higher price than gas. But starting around 2006 the close correlation completely broke down—oil has consistently traded at a much larger premium to natural gas and, in some cases, the two commodities don't even move in the same broad direction. This shift is largely structural rather than temporary. Global oil supplies are likely to remain constrained as older, mature fields see declining output and producers turn to more remote, technically complex and expensive-to-produce fields to fill the supply gap.

Supply bottlenecks in the global gas market are far less onerous. The rapid development of unconventional gas reserves has vastly improved the supply picture in the US. Meanwhile, several large LNG projects have come on-stream in recent years, adding to global supply and allowing consuming countries to diversify their supply from traditional pipeline sources.

The greater availability and reliability of supply mean natural gas prices will remain relatively cheap compared to oil. From 1996 through 2006 the ratio of US oil to US natural gas prices on an energy-equivalent basis averaged 1.2-to-1. From 2006 through the end of the decade, the ratio jumped to nearly 2-to-1. It's likely that the recent experience will continue and the oil/gas ratio will remain high for years to come, encouraging the substitution of gas for oil where possible.

Enterprise Products Partners LP (NYSE: EPD) is one of the largest operators of natural gas processing and fractionation facilities in the US. When raw natural gas is produced, it consists primarily of methane but also contains a large number of other hydrocarbons collectively known as natural gas liquids (NGL). Some gas, known as "wet" gas, is naturally higher in NGLs, while other fields produce almost pure methane, known as "dry" gas. NGLs include propane, butane, and ethane.

Toward the end of 2009 and into early 2010, US petrochemical companies were retooling their facilities to allow them to produce more ethylene from gas-derived ethane and propane rather than oil derived naphtha. As of the end of 2009, Enterprise Products estimated that petrochemicals producers had added 100,000 barrels a day (bbl/d) of new capacity to crack ethane and propane to make ethylene; in many cases this was done by modifying their naphtha equipment.^[i]

Ethylene is among the most important and most fundamental petrochemicals. The fact that chemical manufacturers are spending the money needed to revamp their plants to use ethane

rather than naphtha strongly suggests that the higher crude-to-gas ratio is seen as a fundamental shift in the market, not a temporary change.

None of this means natural gas will completely replace oil in industrial markets. However, it is likely to gain market share, particularly in markets with plentiful supply. This list includes the US, where strong production growth from unconventional natural gas fields will sustain a large cost advantage for gas over oil for the foreseeable future.

Also, the Middle East is projected to see a large increase in industrial natural gas demand. Petrochemical production is far and away the dominant source of industrial demand for gas in the Middle East, and ethane-based ethylene and propylene from countries like Saudi Arabia and Kuwait have massive cost advantages over ethylene produced from naphtha in Asia. Total Middle East ethylene capacity is expected to grow from 16.9 million metric tons per year in 2008 to 28.1 million in 2012, while propylene capacity will increase from 3.5 million tons per year to 7 million over the same period.[ii]

Much of that chemicals production is destined for Asian markets. While natural gas looks likely to gain significant share from oil in the industrial market, the transportation market is more complex. Compressed natural gas (CNG) is routinely used to power vehicles, including passenger cars, buses, and taxis. Alternatively, larger vehicles can run efficiently on LNG; liquefying gas allows vehicles to carry more fuel and increase their range. But transportation is currently a tiny market for the fuel in the US. The American transportation sector consumes around 0.04 trillion cubic feet (tcf) of natural gas per year compared to the 4.77 tcf consumed in residential applications, 6 tcf for industrial uses, and 6.9 tcf for electricity generation.[iii]

Globally, it's estimated that there are more than 7 million vehicles running on natural gas either in the form of CNG or LNG, up from less than 2 million in 2001.[iv] This represents a tremendous rate of growth and sounds like a lot of vehicles until you consider that there are more than 200 million passenger vehicles in the US alone and an estimated 600 million to 700 million globally.

Although the US has an abundance of natural gas, it's not a leading market for natural gas-powered vehicles. Argentina is the world leader with 1.7 million natural gas vehicles, while neighboring Brazil has 1.56 million; South America accounts for nearly half the world's natural gas vehicle market, with many operating as taxis in major metropolitan areas.

Outside South America, Italy is the leader in Europe, while CNG and LNG are also relatively popular in Russia, Iran, and India. The US, by comparison, has only around 120,000 such vehicles on the road today.[v]

Transport is a huge potential growth market for natural gas. The US consumes around 9 million bbl/d in the form of motor gasoline alone. On an energy-equivalent basis that's more than 50 billion cubic feet (bcf) of natural gas equivalent per day. When you consider that total current US consumption is around 60 bcf per day, replacing even a small part of the gasoline market with natural gas would imply an enormous increase in total natural gas demand.

There are more than 200 million passenger vehicles on the road in the US alone; replacing or retrofitting even a small percentage of that total would be expensive and take years. Similarly, refueling infrastructure in the US, EU, and other major gasoline-consuming markets is set up to distribute liquid fuels through a vast network of gas stations. There are well over 100,000 stations in the US alone.

Converting these stations to offer CNG fuel would be a mammoth undertaking. There are only 339 CNG fueling stations in the US open to the public.[vi]

Nevertheless, it's likely there will be greater use of gas as a transport fuel in coming years. The first markets to be penetrated significantly are fleet vehicles such as buses, taxis, and garbage trucks. Refueling such vehicles requires building only one or a handful of centralized refueling stations in a particular area. In 2006 about 15 percent of US transit vehicles were powered by natural gas, and that was estimated to save around 109 million gallons of diesel fuel annually. Penetration of fleet vehicles in other countries such as Argentina is even higher.[vii]

Besides cost, another advantage of using CNG in fleet vehicles is emissions. The US Environmental Protection Agency (EPA) estimates that vehicles using CNG cut carbon monoxide emissions by 90 to 97 percent, nearly eliminate particulate emissions, cut nitrogen oxide (NOX) emissions by 35 percent to 60 percent, and reduce carbon dioxide (CO2) emissions by 25 percent.[viii]

Cutting emissions of NOX and particulate matter provides significant near-term benefits such as reducing smog. Reducing pollution isn't just a developed world issue, as some of the world's most polluted cities are found in emerging markets; reduction of inner-city pollution caused by diesel engines has been a major motivation for countries such as India and China to encourage natural gas vehicles.

The true game-changing market for natural gas vehicles isn't personal passenger cars or fleet vehicles but freight trucks. Building out infrastructure for truck refueling is a simpler matter than for passenger cars; a handful of stations located along key routes would suffice.

And this is a far larger potential market than fleet vehicles. It's estimated there are around 8 million trucks on US highways burning around 2.5 million barrels of oil per day.[ix]

The most direct play on rising use of natural gas as a transportation fuel is Clean Energy Fuels (NSDQ: CLNE), the largest provider of LNG and CNG in the US and Canada. Clean Energy builds CNG and LNG fueling stations on behalf of fleet operators and then earns an ongoing revenue stream by selling the CNG and/or LNG fuel needed to power those fleets. The company was founded by billionaire T. Boone Pickens, and the oil magnate remains on Clean Energy's board of directors.

[i] Enterprise Product Partners Fourth Quarter 2009 Conference Call February 1, 2010.

[ii] "Looming Mideast Olefin Production May—or May Not—Spell Oversupply," Oil & Gas Journal, March 23, 2009, <http://www.ogj.com/index/article-display/356853/articles/oil-gas-journal/volume-107/issue-12/processing/looming-mideast-olefinproduction-maymdashor-may-notmdashspell-oversupply.html>.

[iii] Annual Energy Outlook 2010, http://www.eia.doe.gov/oiaf/aeo/aeoref_tab.html (accessed February 27, 2010).

[iv] Nina Rach, “Special Report: Natural Gas Vehicles Gain in Global Markets,” February 16, 2009, Oil & Gas Journal, <http://www.ogj.com/index/article-display/353339/articles/oil-gas-journal/volume-107/issue-7/general-interest/specialreport-natural-gas-vehicles-gain-in-global-markets.html>, (accessed February 14, 2010).

[v] Ibid.

[vi] Ibid.

[vii] Ibid.

[viii] NaturalGas.org, “Natural Gas and the Environment,” <http://www.naturalgas.org/environment/naturalgas.asp#pollution> (accessed February 17, 2010).

[ix] Bob Tippee, “TIPRO Uses Convention to Push Increased Gas Use,” Oil & Gas Journal, February 25, 2010 (accessed February 25, 2010).
