



T. Boone Pickens Media Coverage 2.6.10-2.8.10

Total of 9 Placements

- Print: 2
- Blog/Online: 2
- Broadcast: 5

Coverage Summary:

Dylan Ratigan highlighted some of the key points Pickens made on his show last week during a discussion about the costs of staying on foreign oil, saying Pickens has a precise plan that integrates our own natural resources and green resources. He also quoted Pickens' line that we are fighting both sides of the war.

The video can be viewed here: <http://www.msnbc.msn.com/id/31510813/#35263019>

Print Placements (Full Articles Below)

- **Only Natural: Bi-Fuel Conversion with Compressed Natural Gas "Is the Wave of the Future."** – *Tulsa World* – 2/7/10
- **V-Vehicle Plant Plans on Track Despite Call for Environmental Study** – *New Orleans Times-Picayune* – 2/5/10

Blog/Online Placements (Full Articles Below)

- **Why Natural Gas Vehicles Won't Decrease Oil Dependence** – *Seeking Alpha* – 2/7/10
- **Why Natural Gas Vehicles Won't Decrease Oil Dependence, Part II** – *Seeking Alpha* – 2/8/10

PRINT COVERAGE

Only Natural: Bi-Fuel Conversion with Compressed Natural Gas "Is the Wave of the Future." –
Tulsa World – 2/7/10

By Rod Walton

Bill Winters puts his keys where he thinks the future is.

The fleet and commercial sales manager at Jim Norton Ford in Broken Arrow drives a Ford F-250 pickup — but not just your typical truck— every day. This F-250 is a bi-fuel conversion, alternately motored by both compressed natural gas and regular refined petroleum gasoline, completed in the Jim Norton service garage.

"If you believe in something and want to do it right, that's what we did," Winters said. "This is the wave of the future."

Tulsa Gas Technologies owner Tom Sewell also is a convert to CNG. Well, of course, it's his whole business, either building stations or converting Chevrolet Impalas, Mercury Milans and other vehicles to bi-fuel or dedicated CNG vehicles.

But Sewell takes CNG personally, too. He has allowed his daughter to drive a conversion since she was 16.

The move for fleet vehicles is well known, and business is good and getting better for producing personal vehicles that run on CNG. Oklahoma State University is moving much of its car fleet to dedicated or bi-fuels. Other employers and even private individuals are anticipating that the ultimate payoff in fuel savings and environmental impact is worth the \$13,000 price tag to convert to CNG.

"I tell Mom and Dad Consumers to look at bi-fuel cars," Sewell said.

Compressed natural gas has an octane rating approaching 130 and powers the same engine more efficiently than gasoline or diesel engines, proponents say. The cost is between \$1 and \$1.50 per gallon of gas equivalent; the greenhouse gases emitted through the exhaust pipe are nearly zero; and much of the fuel can be produced in Oklahoma or at least on this continent.

"It's a good win-win for us," Sewell added.

Nationwide, now, business and political leadership are starting to take notice. Congress may vote on the NAT GAS Act — to provide tax incentives for producing CNG vehicles—this spring, while groups such as the Tulsa-based National Energy Policy Institute contend that CNG could be a "bridge fuel" to help whittle down U.S. dependence on oil imported from hostile nations.

The pricing and pollution pluses already have been noted. Another key is availability: America has historic volumes of natural gas stored and potentially reserved due to high-tech drilling.

Downsides exist, of course. The conversions are expensive and places to fuel up are few and far between.

"The biggest challenge is infrastructure not only in the state but throughout the U.S.," Chris Hoffman, Oklahoma State University's manager of transportation services, said. "And there's going to be a payback on fuel costs, but not a total payback."

The OSU fleet recently added 10 Impalas converted to dedicated CNG vehicles along with five Honda Civics and nine transit buses, Hoffman said. Within five years, the Stillwater school hopes to convert about half of its 800 vehicles.

Tulsa Gas Technologies and Jim Norton Ford are not the only local firms taking up the CNG mantle. Crane Carrier already builds chassis for convertible trash trucks.

CNG bi-fuels also are easier to switch on and off than in past eras, Sewell added. Nowadays the bi-fuel Impala and its brethren can go from gasoline to CNG or back without much of a hitch, compared to forced stops when changing fuel sources years ago.

Winters, of Jim Norton Ford, vowed that he barely notices when shifting his Ford F-250 from one to the other.

The Jim Norton dealership's transition hardly has been seamless or painless when it comes to CNG. Customer interest waxes and wanes, depending on the price of gasoline, but the company initially committed about \$150,000 to research and training years ago.

"We started doing the research in 2006, because we felt like we wanted to be on the cutting edge of technology," Winters added. "When gas was \$4 our phone rang off the hook."

Winter's office is now getting 10 to 12 calls per day about CNG vehicles. Jim Norton has state and city contracts on converting fleet vehicles and is spending more each year in its faith that demand for CNG cars is going to stick around.

"We surely have invested a lot of money into thinking that," he said. "Now everyone is wanting to get on board."

Tulsa-area CNG fuel stations
Tulsa Gas Technologies
4809 S. 101st East Ave.

ONG Midtown
5848 E. 15th St.

ONG North Tulsa
4821 E. 66th St. North

ONG West Tulsa
7002 S. Union Ave.

ONG Broken Arrow
2421 S. First Place

ONG Sapulpa
410 S. Hawthorne St.

Note: Most of these stations are 24-hour public access, unattended facilities that require credit cards to use.

V-Vehicle Plant Plans on Track Despite Call for Environmental Study – *New Orleans Times-Picayune* – 2/5/10

By Robert Travis Scott

The mysterious V-Vehicle car manufacturing plant proposed for Monroe is still on track to meet a key March 1 financing deadline despite the federal government's announcement of the need for an environmental study of the project, Louisiana's top business recruiter said Friday.

Company investors have been awaiting word on whether the U.S. Department of Energy will back \$320 million in two loans through its Advanced Technology Vehicles Manufacturing program. A timely decision appeared to be in doubt last month when the energy agency notified local officials that it was conducting an environmental assessment that could take six to nine months.

At risk is the majority of an \$87 million incentive package the state has pledged to the project if investors can demonstrate they have raised at least \$350 million in capital by the end of February. The company already has assembled \$100 million from private investors, but the hoped-for federally backed financing is supposed to provide the main boost to reach its goal.

"Our sense, as we follow the process closely, is that they are very close to the finish line," Louisiana's economic development secretary, Stephen Moret, said Friday.

The environmental study is near its end, he said. Even if the study is not completed in time, he said, the energy department can grant a conditional approval that would qualify the company to meet the state's requirements.

An energy department spokeswoman declined to comment on the V-Vehicle project and said the agency has no deadlines for its decisions. However, the agency can grant conditional commitments to projects before the completion of an environmental assessment, she said.

"A conditional approval for both of those loans would certainly be sufficient to meet the (state) requirement," Moret said.

The capital financing goal would trigger the state's pledge to provide its main grant, which would be used to help prepare the plant site, as well as \$15 million in support from Ouachita Parish.

If the energy department does not come through, additional private investors could be brought into the deal to make it work, Moret said.

A V-Vehicle spokesman did not return phone calls Friday. V-Vehicle chief Executive Frank Varasano met with energy department officials last month about the project.

Varasano, a former executive with software company Oracle Corp., founded V-Vehicle in 2006 and has been joined in the effort by the venture capital firm Kleiner Perkins Caufield and Byers and billionaire T. Boone Pickens.

The plant is scheduled to go into production next year to produce an economy-size car with low fuel consumption aimed at mainstream consumers. The design and power source for the car is kept secret, although Gov. Bobby Jindal has seen a working model. The company recently said it is testing a prototype.

The vehicle could be distributed through major retail stores rather than through traditional car dealerships.

BLOG/ONLINE COVERAGE

Why Natural Gas Vehicles Won't Decrease Oil Dependence – *Seeking Alpha* – 2/7/10

By Eamon Keane

Natural gas is the fossil fuel du jour. At Davos, BP CEO Tony Hayward described unconventional natural gas as a 'complete game changer'. The rest of the panel agreed. In December Exxon Mobil (XOM) bought XTO Energy for \$41bn to access its resource base of 45tcf (trillion cubic feet) of unconventional natty. Some see this as Exxon pivoting away from difficult to find oil into where the future fossil fuel growth will be. America is now apparently awash in a 100 year supply of nat gas. Why not use that for transport and stop the annual outflow of some \$300bn out of the American economy, much of it to supposed enemies, all while creating those elusive green jobs?

Seeking Alpha author Michael Fitzsimmons has for a long time been passionately advocating natural gas as a panacea for the prospective peak oil problem. Many here agree, decrying Secretary Chu's "agnostic" stance towards its use for transport. T. Boone Pickens, in his Pickens' Plan redux, suggests that by transferring 18 wheelers and buses to natural by 2020 we could cut OPEC import dependence in half. I decided to take a quick look under the hood myself. My straw man will be that the US can stop all oil imports by 2035.

I find graphs are a powerful way to cut through the rhetoric and get down to the quantitative basics so I'll try supply a few here.

Let's start with the crude facts. Figure 1 shows the current and projected crude oil situation. While one should never make predictions, especially about the future, the EIA Annual Energy Outlook 2010 has figures for projected US oil production and imports out to 2035 in its reference scenario. The historical data is here.

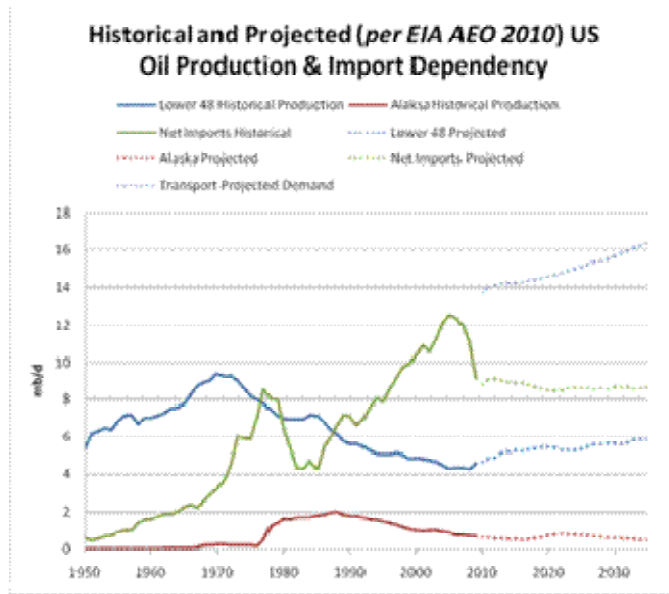
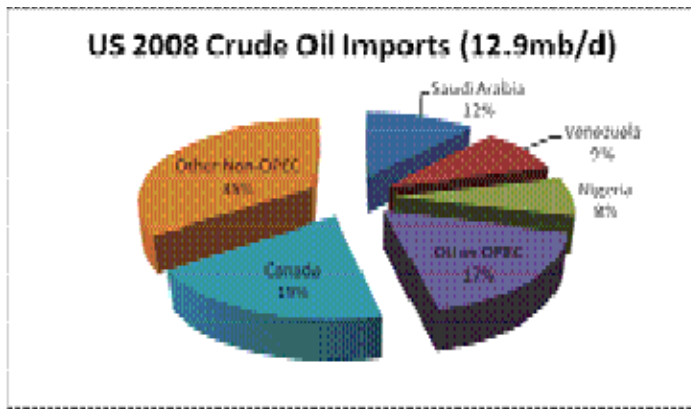


Figure 1 shows net imports of 8.5mb/d in 2035. Perhaps more remarkably, the EIA reckon production from the continental US (on and offshore) will halt its almost 40 year decline and rise from 4.5mb/d to 6mb/d. Anyone have any thoughts on the accuracy or otherwise of that? It also shows that transportation oil demand will grow to 16mb/d, indicating that, as a first order approximation, 55% of US transport energy would have to come from natural.

Figure 2 shows US 2008 crude gross oil imports by country of origin.



So the US gets about half its imports from OPEC, the other half from not OPEC. No prizes for guessing which half is projected to get relatively bigger and which half will decline. Most Canadian oil sands production is ecologically, environmentally, perhaps politically, and perhaps financially unsustainable. Shell (RDS.A) recently cancelled plans to go from 0.26mb/d to 0.7mb/d in oil sands production. This was on the back of shareholder environmental activism but there was also the suggestion that its balance sheet could not take the capital intensive budget required.

The other 35% Non-OPEC is in decline. Saudi Arabia, Venezuela and other OPEC countries have been lying about their reserves since the '80s, their oil is becoming more sour, their water cut is increasing fast, and their domestic consumption is rising, leaving less for export. At a guess, though, the import countries in 2035 would probably be more weighted towards OPEC than non-OPEC.

As an aside, Figure 3 shows the exports of finished petroleum products from the US. The US is a key exporter of refined oil to the Americas. Exported oil is commonly left out of the calculation for independence, with the implicit assumption that the US would stop any exports if a crude crunch materialised. This would leave a lot of countries twisting in the wind, which is a fairly dystopian vision that I'm not sure would be politically acceptable.

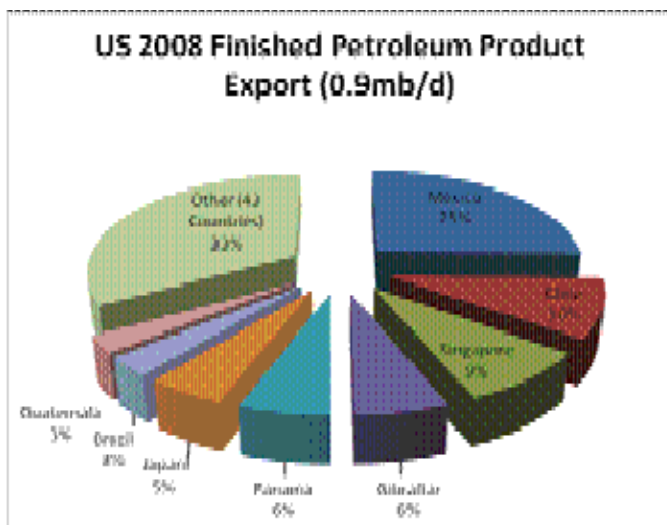
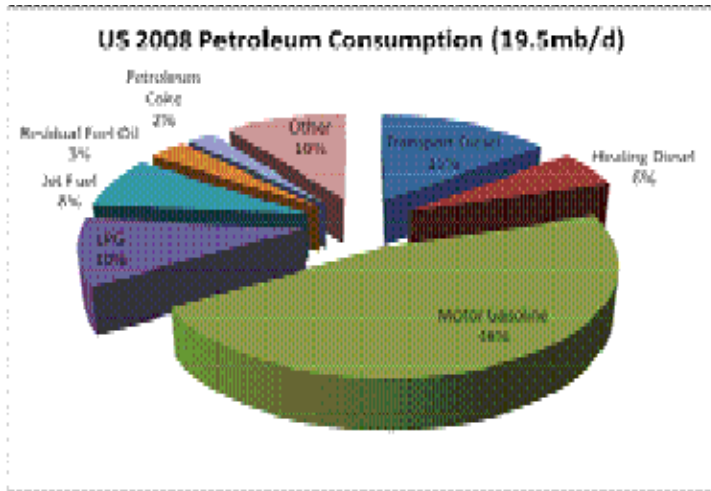


Figure 4 shows 2008 US petroleum consumption.



The refinery golden rule is to either maximize gasoline output or distillates (heating diesel, transport diesel & jet fuel). The winter heating season sees them attempt to maximize heating diesel while gasoline is maximised during the summer driving season. Even on full driving season mode, where refineries change the crude slate and reorient the refineries to produce gasoline, there is only a 2% drop in distillate production.

Despite being the most complex in the world, this indicates that, were demand for transport diesel to drop precipitously (per Pickens' Plan), US refiners would not be able to simply stop producing the transport diesel. Only 4% of US vehicles run on diesel, they just happen to be heavy duty 18-wheelers. To avoid the import of a barrel of crude, then, *ceteris paribus*, because the average barrel yields three times as much gasoline as transport diesel you would need to:

- (a) decrease passenger car gasoline consumption threefold (by efficiency, hybrids & reduced use) per unit diesel avoided or
- (b) have a twofold increase in passenger cars using diesel (diesel cars are more efficient)
- (c) increase passenger car natural gas use threefold

The problem with (a) is that it's unlikely to happen because people still don't get it. The problem with (b) is that only 40% of gas stations sell diesel which creates the classic catch 22 situation. The problem with (c) is the infrastructure and time needed to develop natural gas stations. There are about 550 public natural gas stations in the US versus over 200,000 regular gas stations.

The likely result of Pickens' plan being successful would be that by 2020 heating diesel and jet fuel would get cheaper (distillates are made with the same molecules) or else the diesel would be exported. The exposure to crude oil wouldn't change.

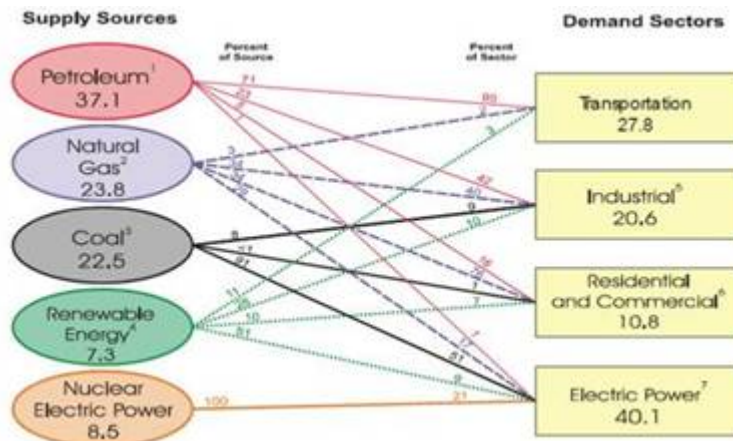
I had meant to include the natural gas production projections to see if there will actually be enough natural produced to meet additional transport demand. I'll come to that in the next article, as this article is getting a bit long. Are there any inaccuracies so far? Perhaps a refining expert could weigh in.

Why Natural Gas Vehicles Won't Decrease Oil Dependence, Part II – *Seeking Alpha* – 2/8/10

By Eamon Keane

My [other article](#) discussed how the Pickens' Plan would affect the crude oil picture. Here I'll take a look at whether the natural gas would be available to convert cars and trucks to natural gas.

Figure 1 shows the where the US got its energy from [in 2008](#):



This shows that, even if all transport were natural gas, there would still be a demand for 30% of the energy from oil, principally for industry. There would be (more expensive) workarounds for most of that though.

The petroleum inputs to the transport sector in 2008 broke down into [approximately](#) 3mb/d transport diesel, 9mb/d gasoline and 1.5mb/d jet fuel.

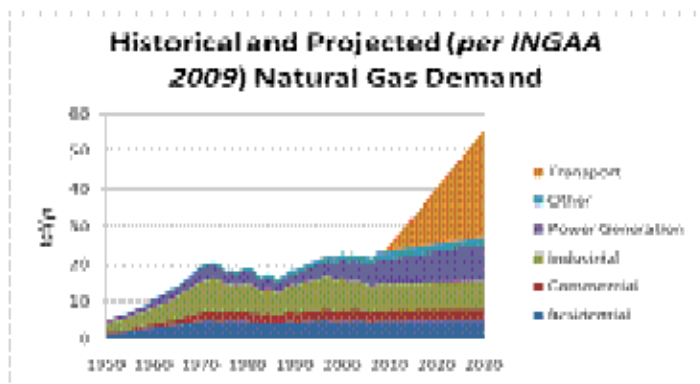
Compressed natural gas has the same [fuel economy](#) (.pdf) as gasoline. 1mb/d gasoline contains the same energy as 2tcf (trillion cubic feet) per year, which indicates that in 2008 all gasoline would have required 18tcf.

According to [this study](#) (.pdf) liquefied natural gas for trucks has 60% of the fuel economy of diesel. 1mb/d diesel is equivalent to 2.1tcf/yr. Since the majority of diesel is used in trucks, this indicates that in 2008 natural gas for diesel would have required 10.5tcf (3*2.1/0.6).

So, in 2008, road transport required about 28.5tcf. The DOE's 2010 Annual Energy Outlook (AER) has this transport demand pegged at about the same level of demand out to 2035.

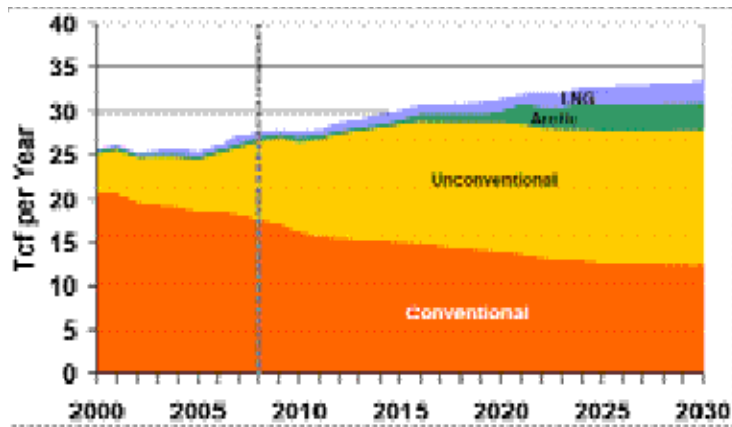
There are a number of projections for future natural gas demand, such as the DOE, but the October 2009 [study](#) (.pdf) from Interstate Natural Gas Association of America (INGAA) has the most detail. Using historical data for natural gas from the [DOE](#), and the INGAA projections for other sectors, we can put the size of this 28.5tcf in context. In 2008 natural gas used in transport was a rounding error, at [0.03tcf](#).

Figure 2 shows this:



I assumed all road transport in 2030 was natural gas fueled, and used linear growth to ramp it up from 2010. The INGAA reference case has power generation increasing by a couple tcf with most of the rest holding steady. The result is that transport has over half the natural gas market.

Figure 3 shows the amount and type of natural gas supply the INGAA thinks there will be in 2030 for the reference case:

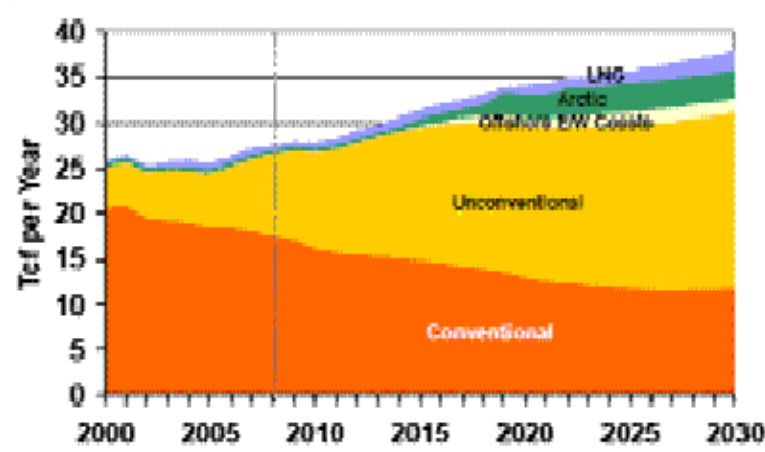


A couple of things are readily seen from this. The first is that conventional supply will decline by about 6tcf, which means unconventional has to ramp up just to keep even. The INGAA state:

"Natural gas producers must work harder to develop additional deliverability as decline rates increase and reserves-per-well fall below past levels."

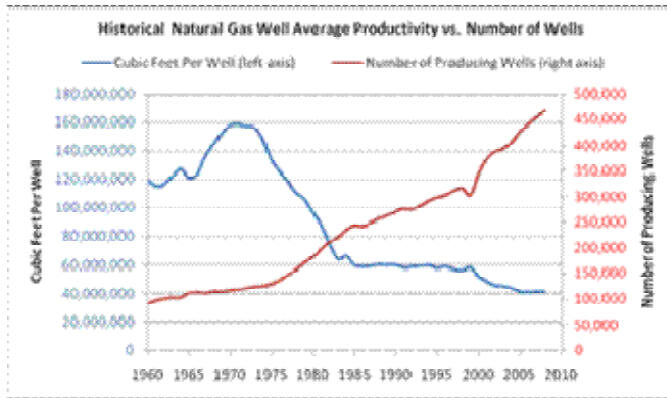
The second thing that is noticeable is that supply is nowhere near the 55tcf needed for current uses and transport.

The INGAA also undertook a high gas growth rate scenario. Here was what supply would be in that case:



Again, nowhere near the 55tcf.

Figure 5 shows that well productivity has been steadily declining over the past 40 years, and that the number of gas wells has to rise rapidly in response. 50% of gas produced today comes from wells drilled only [3.5 years ago](#). Data [here](#).



Seeking Alpha author [Charles Huges Smith](#) reveals a source which says it costs \$5-\$6m per well that is brought on stream. He also cautions that no one really knows the decline rates or indeed the costs.

In the high gas growth rate case the INGAA estimates that 52,500 annual well completions would be required, versus about 38,500 today. 52,500 unconventional gas wells at \$5m per well would cost \$260bn per year. Put another way, assuming a 45,000 average annual well completion out to 2030, that would require investment from now until then of \$4.5trn.

That's to get to 32tcf, to get to 55tcf or even the 25tcf base case and the 10.5 tcf for the diesel fleet would require more. Which is not to say the investment wouldn't be forthcoming but it would require sustained high prices. If we tried to ramp up natural gas to cover all diesel in say 10 years, you would have serious inflation for drilling rigs and natural gas prices.

To conclude, it seems to me that it would be very difficult to reach even the natural gas production level to cover diesel. If there is literature which goes through the numbers and reaches the opposite conclusion, please provide a link.

BROADCAST COVERAGE

1. Cavuto (Rebroadcast)

Fox Business Network, National | DMA: 0
02/06/2010, 06:00 PM - 07:00 PM

[CC] 00:46:40 --. Charles:-- I don't that's fair. President Bush had a stimulus spending program also and I don't think you would accuse him of not believing in free markets. Charles: let's get Liz into this, guys. Voice of reason. That is why -- might be overstatement. What about me? I will shut up now. Chivalry, Charles. Both, President Bush and, all stimulus plans are the wrong way to go. And, you're right, let's trust free markets. I think the American people are sick and tired of this groundhog type of debate they keep hearing over and over again. Sort of like you listen to it your blood pressure goes up. Like chewing tinfoil. They want ideas action how to do it, how do you fix it? Payroll tax holiday and freeze government spending across the board. Exactly. Sell the U.S. Post office to Fedex. Sell the, sell Amtrak to choo-choo, Burlington-Northern and sell congress to a **wind** farm run by **T. BoonePickens**. I'm joking about the last one. Charles: this is your topic. Tell me, Gary B. Is there anything that can happen like a sweep in November that might get the administration to change their mind or go against their nature? Well, you know, you would hope so. You would hope another whole Scott Brown Thing. Here's the problem though, I will agree, you pointed out that Bush did the whole stimulus thing. Also did that huge medicare prescription program....00:48:48

Audience: N/A Spot Cost: N/A

2. Cavuto (Rebroadcast)

Fox Business Network, National | DMA: 0
02/06/2010, 06:00 AM - 07:00 AM

[CC] 00:47:23 --. Charles:-- I don't that's fair. President Bush had a stimulus spending program also and I don't think you would accuse him of not believing in free markets. Charles: let's get Liz into this, guys. Voice of reason. That is why -- might be overstatement. What about me? I will shut up now. Chivalry, Charles. Both, President Bush and, all stimulus plans are the wrong way to go. And, you're right, let's trust free markets. I think the American people are sick and tired of this groundhog type of debate they keep hearing over and over again. Sort of like you listen to it your blood pressure goes up. Like chewing tinfoil. They want ideas action how to do it, how do you fix it? Payroll tax holiday and freeze government spending across the board. Exactly. Sell the U.S. Post office to Fedex. Sell the, sell Amtrak to choo-choo, Burlington-Northern and sell congress to a **wind** farm run by **T. BoonePickens**. I'm joking about the last one. Charles: this is your topic. Tell me, Gary B. Is there anything that can happen like a sweep in November that might get the administration to change their mind or go against their nature? Well, you know, you would hope so. You would hope another whole Scott Brown Thing. Here's the problem though, I will agree, you pointed out that Bush did the whole stimulus thing. Also did that huge medicare prescription program....00:48:30

Audience: N/A Spot Cost: N/A

3. Cavuto

Fox Business Network, National | DMA: 0
02/05/2010, 06:00 PM - 07:00 PM

[CC] 00:47:40 --. Charles:-- I don't that's fair. President Bush had a stimulus spending program also and I don't think you would accuse him of not believing in free markets. Charles: let's get Liz into this, guys. Voice of reason. That is why -- might be overstatement. What about me? I will shut up now. Chivalry, Charles. Both, President Bush and, all stimulus plans are the wrong way to go. And, you're right, let's trust free markets. I think the American people are sick and tired of this groundhog type of debate they keep hearing over and over again. Sort of like you listen to it your blood pressure goes up. Like chewing tinfoil. They want ideas action how to do it, how do you fix it? Payroll tax holiday and freeze government spending across the board. Exactly. Sell the U.S. Post office to Fedex. Sell the, sell Amtrak to choo-choo,

Burlington-Northern and sell congress to a **wind** farm run by **T. BoonePickens**. I'm joking about the last one. Charles: this is your topic. Tell me, Gary B. Is there anything that can happen like a sweep in November that might get the administration to change their mind or go against their nature? Well, you know, you would hope so. You would hope another whole Scott Brown Thing. Here's the problem though, I will agree, you pointed out that Bush did the whole stimulus thing. Also did that huge medicare prescription program....00:48:48

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

4. The Dylan Ratigan Show
MSNBC, National | DMA: 0
02/05/2010, 04:00 PM - 05:00 PM

[CC] 00:53:29 America's veterans fighting along with **T. BoonePickens** to fight our dependence on foreign **oil**. You heard it from **T. Boone**. We are fighting both sides of the war Our kids are over there fighting, we just talked to Miklaszewski, or Mick, about the war. Meanwhile, we're sending our money for **oil** to Middle Eastern countries. Who then try to kill us. That's genius. We can stop that one if we just talk about it...00:55:55

[EC] 00:58:18 **Energy** debate. Yesterday we talked to **T. Pickens** about how we get off of **oil**. Today we talk about the costs of staying on it. The largest group of progressive veterans in this country demanding a comprehensive **energy** bill. Terrorists, they're trying to kill Americans at home, and our troops abroad. And who's footing the bill for the attacks against us? **Oil** money. Filtered through secret organizations. Joining us, John Soltz of Votevets.org, **T. BoonePickens** was here with a plan to get off foreign **oil**, uses **naturalgas, wind**, solar, anything you can come up with, yet we sit here exporting hundreds of millions to countries that fund terror and we end up having to send our veterans to go to war with. What kind of a resistance are you getting to the campaign in congress? The problem we have is big **oil** money obviously is bought off some senators who don't support **energy** independence. The ad is running in seven different states. Our message is very clear. If you're going to go ahead and support big **oil**, and, you know, \$5 a barrel, you know, **oil** goes up by \$5, that's like \$17 billion more to iran. Weapons systems flow into Iraq to penetrate our armored vehicles. And we have dead U.S. Troops. There's a debate because of the **oil** money, and are you with big **oil** or the American veterans who support this legislation.... **Boone Pickens** has rolled out such a precise plan that integrates our own natural resources on fossil **fuel** and integrates green resources, it's pretty hard for them to hide. Yeah. I mean, look, they're going to hide because that's where their political dollars are at. We feel that everybody in the United States supports the men and women who fight for this country. That's why veterans are getting out in such strong force. Not just with the \$2 million ad buy, but we have bus tours all over the country, big rally in Las Vegas tomorrow. And so you think how we fight on this debate is really important. We get into the **energy** debate and into the **energy** legislation that's going to be in the United States senate , the Kerry- Boxer bill, we think that can carry the independence from **oil**. I'm happy to have you here. ... 01:00:57

Keywords:TZ; **Energy**; **TBoonePickens**; Foreign **Oil**; VoteVets.org; Ad Campaign; **Energy** Bill; Congress; Big **oil**; Republicans; **Oil** Money; Iran; Iraq; Boxer Bill; Operation Free; Las Vegas;
Visuals:Ad Campaign from VoteVets.org;
Speakers:John Soltz, VoteVets.org;

Audience: 478,543 **Spot Cost:** \$4,512

5. Good Morning West Texas
KMID-TV (ABC) CH 2, Odessa/Midland | DMA: 155
02/05/2010, 06:00 AM - 07:00 AM

[CC] 00:33:44 Even though all the signs show 2010 to be a good year for our local economy, there's still one thing at the back of people's minds, Washington, and the current administrations push for alternative **energy**. But according to the experts, it doesn't look like we don't need to worry anytime soon. "There's some things to be concerned about. But when you peel back the rhetoric though, there's some basic

facts. Here's something for the US Dept. of **Energy**, they believe that for the next 25 years, US **energy** supply will mainly be from **oil**, coal and **gas**. The US **Energy** Information Administration expects the price of west Texas intermediate crude, which averaged 62 dollars a barrel in 2009, will average roughly 80 dollars this year, and then 84 dollars a barrel in 2011. And as long as the demand for **energy** keeps growing, our local **oil** industry should remain strong. Chevron believes that the **energy** demand is growing around the world. And for an **oil** basin, such as the Permian Basin, it speaks very well." The big 2 **energy** report will continue to air every Friday morning on good morning west Texas. You can also check it out every Thursday at ten o'clock. Next week, we'll speak with **energy** expert **T. BoonePickens** about his new push for **naturalgas** to cut down on foreign **oil** imports, and how it could effect business here in the basin.00:37:19

Audience: 1,943 **Spot Cost:** \$20