

Keynote Presentation By
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Back in the early glory years of Washington Redskin football, they had a coach by the name of George Allen who had a saying – “The future is now”. What he meant by that was, while you certainly have to plan for the future, those plans can’t help you today. You have to use the talent you have available today to win today. This year’s conference theme recognizes the wisdom of George Allen’s axiom. “NGVs: North America’s Transportation Future – *Today.*”

The media loves stories about panacea technologies that’ll transform America’s transportation system -- once they are commercial. The panacea technology in the 70s was methanol. Then it was electric vehicles. Earlier this decade, it was hybridization. Today it’s plug-in hybrids and, eventually, hydrogen.

But, if history has taught us anything, it’s that there are no panacea technologies for transportation. When technologies are over-the-horizon and not yet commercially available, all you hear are the glowing promises of the advocates. But, invariably, when -- and if -- they do make it to the marketplace – some never do – it turns out that they don’t fully deliver on all those promises. And worse, they also have some disadvantages that the advocates never mentioned. Some disadvantages are so bad that the technology disappears altogether. Methanol is one example. But most do find a commercially successful home in certain markets. However, they certainly don’t turn out to be panaceas.

Right now, the darling of media is the Chevy Volt and other plug hybrid vehicles - vehicles that should be entering the market next year and thereafter. I get calls from reporters and others all the time asking about them. I tell them that I think these are wonderful technology advances.

Then I tell them the story about the meeting Boone Pickens had with Senator Obama during the campaign. During that meeting, the Senator proudly told Boone that his goal was to get one million plug hybrids on the road within five years. Boone said that was laudable, and that a million plug hybrids lined up in the neighboring parking lot would certainly be impressive. But he then pointed out that we have 250 million vehicles on America’s roads, and asked him his plan for the other 99 and $\frac{3}{4}$ percent of those vehicles. He also asked the Senator how he planned to displace diesel fuel in tractor-trailers and other heavy and medium-duty vehicles since plug hybrid technology can’t power those vehicles. Senator Obama thought a minute, smiled and replied that he might have to rethink his plan - which brings me back to the theme of this conference. America’s transportation future today is *us* - natural gas-powered vehicles - certainly not all the future, but clearly a good part of it. Just look at all the advantages we offer.

First, we’re not “over-the-horizon”. Our technology is available, reliable and economic *right now*. For the big, class-7 and class- 8 applications, Kenworth, Peterbilt and Freightliner all have natural gas product offerings. In trash trucks and street sweepers, every major OEM offers an NGV option. In transit buses, all but one company makes natural gas models. In school buses, two of the three biggest OEMs sell NGVs. In the medium-duty truck market, there’s a whole raft of NGV options.

Even in the light-duty sedan market, where the Honda Civic is the only OEM offering right now, we now have aftermarket conversions available for the Ford Focus, the Ford Fusion and Crown Victoria and their Mercury equivalents, the Chevy Impala, and a long list of Ford and Chevy vans, pickup trucks and SUVs.

We rightly focus a lot on the bigger vehicles since they use so much fuel and that's where we can make the biggest impact fastest on oil displacement and greenhouse gases. But also I'm very excited about the future of light-duty NGVs. Honda is now making their Civic GXs in a new Indiana factory, and it looks like they'll be able to ramp up production. Mercedes Benz took the opportunity of this year's Detroit auto show to display their B-Class bi-fuel NGV. And, next year, a company called VPG will be making available a purpose-built natural gas taxi, the MV1.

I'm also cautiously optimistic about the possibility of NGVs from the new Chrysler-Fiat Corporation. Fiat makes more NGVs than any other OEM in the world. They're mostly bi-fuels because that's what the rest of the world demands. But these aren't gasoline vehicles that can also run on natural gas. On the contrary, they are designed from the ground up to be NGVs that can also run on gasoline. Fiat's policy is that every new model they introduce in Italy will also be available as a natural gas model. Last year, Fiat sold over 100,000 NGVs in Italy alone, and they expect to sell many more this year.

At a meeting last year between Sergio Marchionne, Fiat's CEO, and a group of NGV representatives, Marchionne said that he was interested in the American market, but that Fiat hadn't had a U.S presence since 1983 - no manufacturing, no dealers, no service. Now they will - watch Chrysler-Fiat.

A second big advantage is gas supply. There are two criticisms we historically have heard the most -- especially from policymakers -- about natural gas supply. The first is that there's just not enough natural gas in America, and, if we started using it for vehicles, we wouldn't have enough for the "higher priority" markets.

Well, that argument is being blown away by Chesapeake Energy, EQT, XTO Energy and other gas shale producers. AGA's Chris McGill will be giving us an in-depth report on the outlook for gas supply, so I won't steal his thunder. But let me just say that estimates now show that America has over 100 years of gas supply. Our gas supply can easily support both a growing NGV market and all the traditional gas markets, and more and more policy makers are starting to understand that that's true.

The second criticism of gas supply is that natural gas is a fossil fuel. Well, that's not entirely true, and it will even be less true in the future. Because complementing our *natural* gas supply is the potential of renewable natural gas - biomethane - from landfill gas, sewage, animal waste and energy crops. If you listen to policymakers and the media, you'd think that there were only two transportation biofuels -- ethanol and biodiesel. That's wrong. There are three, and biomethane, in fact, is the best.

For example, you hear a lot about cellulosic ethanol being made from wood waste, switchgrass or other cellulosic materials. In Europe, Sweden is leading the way in showing that making biomethane from these materials is far more energy productive and far less expensive than turning it into any other transportation energy. We'll be hearing a report from CALSTART's John Boesel on what's happening in biomethane worldwide, and what it might mean for us.

A third big advantage concerns greenhouse gases. When critics say "you're just a fossil fuel," what they're really worried about is climate change and greenhouse gases. But even as a fossil fuel, natural gas has a very good story to tell. I think everyone here now knows that the California Air Resources Board commissioned a study on the greenhouse gas benefits of all the transportation alternatives, and then rank ordered them. They

concluded that NGVs produce 22 percent less greenhouse gases than diesel and 29 percent less than gasoline. And that's a real measure. That's a full cycle measure – from well to wheels.

Are we the answer to climate change? Of course not - but we're better than gasoline and diesel, and we're even better than some renewable fuels, like corn ethanol, and we can make an impact right now. Importantly, when CARB did their rank ordering of fuels and technologies, among the very best greenhouse gas options was biomethane from waste. As more biomethane is produced and blended with natural gas, that 22-to-29 percent can steadily improve.

Yet another of our big advantages is the price of natural gas. Now, follow me on this. It's a little complicated but it's important. As we all know, the price of gas in the US right now is very, very low – at or below \$3 per thousand cubic feet. That's 38 cents per gasoline-gallon-equivalent in the field. Now, this low price is an aberration, and, when the recession ends and demand increases again, the price will go back up. But the question is - to what level? Here's where all that gas shale is a game changer.

Producers say that gas from shale becomes economic to produce in the \$6 – 8 range. Since gas from shale can supply more gas than we can use for as far out as we can see, this means that we can have as much gas as we want in this country at \$6 to 8. The US Energy Information Administration forecasts that, even in 2030, natural gas will be priced at no greater than \$8 per thousand cubic feet, which translates to only \$1 per gasoline-gallon-equivalent in the field.

Meanwhile, we all know what's going to happen to oil prices when the recession is over. Oil is at \$70 a barrel right now – and we're still in the recession. It's only a matter of time when it again will grow to \$150 a barrel or more. Historically, the ratio of oil per barrel to gas per thousand cubic feet was about 8 or 9 to 1. They almost always traded in that range. Gas from shale has broken that linkage. When oil is \$150 per barrel and gas is \$8 per thousand cubic feet, that ratio is over 18 to 1.

What all this means to *us* is that the historic price advantage we've had over gasoline and diesel will get bigger – a lot bigger. Now, some naysayers reply to this by saying that since the world price for LNG is expected to be much greater than \$6 or 8, we'll just export more of our gas, and that'll drive the price higher. The good news for the NGV industry as well as all of America's gas consumers is that we *can't* export to the world. When it comes to oil, America is a price taker. There's a world clearing price for oil, and that's what we have to pay. But for natural gas, it's very different.

Yes, there is a world clearing price for natural gas set by the growing world LNG trade, but that really doesn't affect us because, except for one LNG export terminal in Alaska, there are no LNG export terminals in the US, and I can't believe Congress would approve any. So, there's no way for gas producers to sell American gas outside of North America - and Canada doesn't need our gas, while Mexico only needs a little.

What that means is that the price for natural gas in North America is only a function of gas supply and demand in North America – not the world. And that'll help ensure that the historic price advantage we've had over gasoline and diesel will get bigger – a lot bigger.

So... we have a growing number of light-, medium- and heavy-duty NGVs to sell -- today. We have a growing natural gas resource base – today. And we have a growing price advantage over gasoline and diesel fuel – today. We have a really great story. The question is -- Are we getting anyone's attention? The answer -
- You bet.

Let's start with Congress, the Administration and other policymakers. While you couldn't tell it from the gridlock on climate change and health care legislation, many of the new folks in Washington – both in Congress and the Executive agencies – actually want to get things accomplished in moving America away from foreign oil and reducing greenhouse gases.

While they certainly want to continue to invest in over-the-horizon technologies, they don't want to wait to move the country forward. They want to see oil displacement and greenhouse improvements now. Which technology can provide those improvements today? NGV...and our national decision-makers increasingly are aware of that.

Let me digress here for a minute, and recognize Boone Pickens and his Pickens Plan campaign because he's made a huge difference in Washington for NGVs. While NGVs have all these real advantages, Washington policy-makers aren't born knowing any of it, and here's where Boone has been incredibly effective.

It's hard to find anyone in Washington -- or in the rest of the country, for that matter -- who hasn't seen the Pickens Plan commercials or otherwise heard about the Plan, and Boone has personally met with almost every member of the Senate and a large percentage of members of the House.

In every one of those meetings, he's hammered home the arguments for natural gas supply and NGVs, and that message has sunk in. NGVAmerica has been lobbying Congress and five Administrations since the NGV Coalition was formed – over 20 years ago. We had some great accomplishments – like the passage of the Energy Policy Act in 1992 and the passage of the NGV incentives in 2005. But the wind was always in our face. This year, it feels different. The wind seems to be at our back, and, I think a good part of the credit for that goes to Boone.

A stand-alone NGV R&D authorization bill passed the House by a vote of 393 to 35. An amendment to another bill to appropriate money for NGV R&D passed the House by 429 to 4. Our number one legislative priority, the NAT GAS Act, now has 82 co-sponsors in the House. The Majority Leader in the Senate, Harry Reid, is an original co-sponsor of the Senate version of the Nat Gas Act and, at a recent energy conference, said he's been converted to the "Church of the Pickens Plan." NGVs have never seen that kind of support in Washington in the past. We now have a receptive audience, and we're capitalizing on it.

So...that's Washington. How about customers? Last year at this time, when gasoline and diesel prices were peaking, I asked this audience how many of you were getting more customer calls than you could handle. Almost every hand went up. We, at NGVAmerica, were certainly getting tons of calls.

Since then, gasoline and diesel prices have come down. And with them, many of those customer calls. Fortunately, what's gone away are those calls from guys named Bubba who wanted to convert their '32 Ford pickup trucks. Still very strong, however, are the calls from fleets. Fleet owners realized that, at \$4 gasoline and \$5 diesel, they came close to being put out of business last year. And they've been using this hiatus period of lower petroleum prices to make plans for when the recession ends and petroleum prices again really turn upwards. For a growing number of those fleets, that means NGVs.

The AT&T announcement earlier this year was big, but, it was just the tip of the iceberg. We'll be hearing a lot more like that. This afternoon we'll be hearing from a customer panel who'll talk to us about what we've been doing right and what we can do better.

Let me mention one more very positive trend. When the NGV Coalition was formed, the entire membership was made up of gas utilities and pipelines companies. Over time, our membership expanded to include companies from all parts of the NGV industry. But, for a number of reasons, many gas utilities walked away from the NGV market during the 1990s. Now we're seeing a resurgence in interest by gas utilities. Atlanta Gas light, Alabama Gas and DTE Energy – all charter members of the Coalition – have rejoined and have significantly expanded their NGV marketing programs.

Meanwhile, because of all this renewed interest in NGVs by utilities, the American Gas Association, which once had an NGV marketing committee, has set up a new NGV Task Force. So you can be sure that 2010 will see even more rejuvenated utility NGV marketing efforts.

At the other end of the pipeline are the producers. Historically, gas producers were not involved in growing *any* markets for natural gas. They left that up to the utilities. However, that's changing, and changing fast. The independent natural gas producers have come together and formed the American Natural Gas Alliance. The goal of the Alliance is to grow demand for natural gas, and NGVs are a key market for them. NGVAmerica never had any producer members. That's changing, too. We now have three, and I see that number growing significantly over the next 15 months. Understanding that you have to lead by example, many of these gas producers are phasing NGVs into their own fleets, and they're opening NGV fueling stations. All this is happening because these sophisticated companies have done their homework and strongly believe that the NGV industry is on the threshold of an era of unprecedented growth.

What kind of growth? Well, we estimate that in 2007, the amount of natural gas used for NGVs in the US grew by about 30 percent – to about 31 billion cubic feet or about 250 million gasoline gallons equivalent. Last year, we estimate that our volumes grew by another 25 percent to 37 billion cubic feet or 300 million GGEs. And, I think we'll see another 25 percent growth this year.

Over the next 15 years, if we grew by only *10* percent per year, we'd be at one and a quarter trillion cubic feet or 10 billion GGEs. That's 33 times the gas we used last year. And that means real growth for every segment of the industry.

With all the oil displacement, greenhouse gas reduction and other advantages we offer; with our huge domestic gas supply; with policy-makers now coming on-board the NGV bandwagon; with fleet and other customers now increasingly excited about switching to NGVs; and with many more allies helping to expand the market, I've never been more optimistic or excited about the future of NGVs.

When I talk to the media and policy-makers, I always reiterate one key point: There is no silver-bullet panacea technology or fuel that'll replace petroleum. The market has many options, but we don't have choices. If America is really going to move away from foreign oil, we have to use every option available – in the applications and in the parts of the country that makes sense. For high fuel use urban fleet vehicles -- light-, medium- and heavy-duty --that means natural gas.

As George Allen said, the future is now, and NGVs truly are America's transportation future – *today*.