**Transcript**

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**Speech before The Commerce Club of Atlanta - Our Energy Future: A Portfolio Approach**

Good afternoon. It's a pleasure to be here to share my views on energy for today and tomorrow.

What must we do to insure affordable, reliable supplies of energy for Georgia, for our country, and the world as a whole?

I'm optimistic. The key is to develop a portfolio of resources . . . I'll be returning to that theme in a moment, along with a discussion of the facts behind my prescription for the future and the critical need to open domestic reserves NOW in order to build American energy security.

First, however, let me say that I am grateful to the officers and directors of The Commerce Club for the opportunity to speak at today's Leadership Luncheon. I'd like to especially thank Mary Gilbreath, the Club's program director, for her assistance.

I want to acknowledge some of you in the audience who bring both expertise and commitment to planning for Georgia's energy needs. I'd like to mention, in particular, Jill Stuckey of the Georgia Environmental Facilities Authority, who serves as Governor Perdue's point person on ethanol and biofuels. . .and recognize Tony Flagg, the former CEO of First United Ethanol LLC, the investor group that's constructing Georgia's first large-scale ethanol production facility in Camilla. . . . and Harold Reheis, former director of the Georgia Environmental Protection Division, who now chairs The Clean Air Campaign here in Metro Atlanta. My thanks to all of you for being here today.

Energy is a key concern for Georgians. Yours is the ninth most populous state in the country. Current estimates predict that population will increase nearly 50 percent in Georgia over the next 25 years, with concurrent and comparable increases in energy demand.

Make no mistake: Energy serves the needs of people. You are my industry's reason for being. It should be clear to all that our investment in a sound energy future is necessary in order to engineer advances in medicines derived from petrochemicals, in transportation and transportation fuels, in job growth and quality of life.

Marathon has been an integral energy player in Georgia for many years. We are Atlanta's second largest wholesale supplier of cleaner burning low-RVP, low-sulfur gasoline to independent service station outlets. Roughly one out of every six gallons of gasoline sold in the greater Metro Atlanta area is supplied by Marathon.

We have a growing retail marketing presence as well, represented by more than 200 Marathon-brand stations across the state, and the independent Brand jobbers who supply them.

I should also note that we are among the leaders in investing to build the necessary infrastructure for ethanol blending …and encouraging the regulatory environment necessary to make that work. More on that later.

Marathon is an international oil company with operations around the world. We are the nation's fifth largest refiner. We've had experience in supplying and retailing compressed natural gas for fleet vehicles, supplying ethanol and retailing ethanol in both E-10 and E-85 blends, and in pursuing pioneering work in gas-to-fuels conversion. We have also been among the leaders in exploration and production in deep-water environments, and a driving force in linking Canadian oil sands resources with Midwest refining assets.

Marathon – and the industry I represent – operates on the technical frontiers of science . . . and the knife-edge of competition. Our retail margins are measured in pennies a gallon. Our markets are heavily influenced by variable demand, by geopolitics, by weather, and by commodity speculation, with the result that volatility is dramatic and the unexpected is now the norm.

Based on my more than 30 years of experience in the industry, I can tell you: "There are no 'silver bullet' solutions." That's not always appreciated by those selling sound bytes and bumper-sticker wisdom. For example, a national wire service story assures us that, "U.S. lawmakers have approved an energy bill to fuel the economy while reducing the need for oil." The tone suggests a done deal – nothing to worry about, just turn the page and move on.

That kind of easy reading of the facts is a mistake. Believe me, this is no time to be complacent. The job ahead of us is too big. All of us need to understand the 2007 energy bill for what it is – a much-debated give-and-take that produced a statement of policy preferences --- not a solution.

For example, in what sense has the need for oil been reduced?

Global energy demand will increase more than 50 percent between now and 2030. Roughly 80 percent of that demand will be satisfied by oil, gas, and coal, despite the fact that alternative fuel use will likely increase more than 400 percent. The percentage increase is great; the absolute volume is small. In our own country, we'll be challenged to be able to produce 36 billion gallons of alternatives in the annual fuel mix in 15 years. Right now, today, we're already using 320 billion gallons of oil a year.

I don't say that for dramatic effect. The International Energy Agency, the National Petroleum Council, the Department of Energy . . . all these sources and more support this conclusion. Our reliance on fossil fuel is not in doubt. This is reality.

Note that this projected 50 percent increase in energy use already takes into account significant efficiency improvements like the ones in the policy laid out in the new federal energy act.

Remember, it's not just a question of gasoline at your local service station. My industry is charged with providing the raw materials for plastics, medicines, fuel and fertilizer to provide for the peoples of the world. Population continues to surge. We're going to add 1.5 billion more people between now and 2030. That's equivalent to adding another China and part of another Europe to the world's population.

Providing for those billions of people and the growing world economy in which they will live and work is a huge job. It will require billions of dollars in energy investment.

Hard-working Americans know what it takes to muster the financial resources for big jobs. Maybe it's buying a first home, maybe it's providing a college education for your kids. What do we typically do in this case? We put together an investment plan – what we're going to save, what we're going to invest – and where we're going to invest so that we minimize risk and maximize returns.

That's what's required to provide for future energy needs. We need a portfolio approach that expands all energy sources …coal, oil, nuclear, renewables, and unconventional hydrocarbons sources.

Here are some facts that will help us design our energy investment portfolio:

One: The cheapest and most plentiful form of new energy is energy efficiency and conservation. The U.S. economy has doubled since the 1970s, but our energy use has only increased about 25 percent – that's new technologies and enhanced efficiency at work. But more can be done. To give a sense of the potential impact, a six percent reduction in energy use would effectively reduce U.S. crude oil imports by a third.

I applaud the Governor's Energy Policy Council and their work in urging Georgians to aggressively pursue all cost-effective energy efficiency opportunities: In building technology, utility rate design, and transportation demand management. That's exactly what needs to be done.

Efficiency is important because it's an area in which every single American can contribute by making sensible energy use and lifestyle choices.

America's oil and gas companies have been on the forefront of meeting the efficiency challenge. Five years ago, we made a pledge to the American people that we'd improve energy efficiency in our refineries by 10 percent over 10 years. That's an extremely tough goal – simply because we've always stressed efficiency. After all, that's how you keep the business in the black. At Marathon, we've made very good progress. Over the last four years our refineries have been pacesetters for energy efficiency, closing in on the goal's midpoint and exceeding the norm for improvement among our peers.

In recognition of what we've done, the Environmental Protection Agency gave its Energy Star award for energy efficiency to four Marathon refineries -- in Texas, Ohio, Minnesota, and Louisiana. In fact, four of the first five Energy Star awards ever granted were given to Marathon facilities.

Second fact: Conventional reserves of energy are finite. But resource depletion is not the problem. It's resource access. Here's why I say that:

In back-of-the envelope terms, we've already discovered and produced 1 trillion barrels of oil equivalent energy since the dawn of history. We've discovered and are producing another trillion barrels currently. And we estimate there's another trillion barrels yet to be discovered. That undiscovered resource will be forthcoming, given appropriate access. But right now politics is a bigger hurdle than geology in unlocking that energy potential.

Oil is energy-dense, transportable, and flexible in its end-product applications. It is the go-to fuel of the future. But oil use entails the release of carbon dioxide – and that, in turn, raises the question of the potential impact on climate change.

This is a real concern. It needs to be recognized, and appropriate safeguards need to be engineered and put in place.

This is what we know now:

Air quality can be immeasurably improved by substituting clean-burning fossil fuels for the charcoal, silage, and animal waste frequently used in poor and developing economies. We cannot forget that climate change is a global issue that will require global solutions.

Improving energy efficiency in our own operations yields meaningful benefits in terms of greenhouse-gas emission reductions.

Finally, investment in appropriate technology may help us contain and mitigate emission problems. One promising technology is carbon capture and sequestration – or CCS. This technology is already available and well-understood, although more needs to be done to address application cost and scale. As the name implies, it captures and stores CO2 in underground reservoirs. Moreover, some storage applications can be designed to stimulate oil production in older reservoirs.

As big as our trillion barrel+ oil and gas reserves are, coal reserves are larger. And we have more coal reserves in this country than in the entire rest of the world. A portion of that is, in fact, in Georgia.

If we burned coal as they do in developing countries that would be a problem. But technology allows us to take an old coal resource and produce a new coal solution. Some call it “clean coal.” The technology, already in use, is integrated gasification combined cycle electricity generation. It gasifies coal powder …it doesn’t burn the coal. Instead, the molecules are consumed in ways in which the hydrogen content can be turned into synthetic gas very much like clean-burning natural gas.

Fact three: Just a short distance from where we are meeting today, researchers at Georgia Tech are at the forefront of examining the potential contributions of biofuels. They’re putting the investment of oil companies – yes, oil companies -- to work. The fact is that over the last five years in just the U.S. and Canada, the oil industry has poured $12 billion into renewable, alternative and advanced non-hydrocarbon technologies. In fact, if you add up all the various types of emerging energy technologies, over the last five years our industry has invested almost $100 billion. That’s more than two-and-a-half times as much as the amount spent by the federal government and all other U.S. companies combined!

But let’s get back to what Georgia science has to tell us.

Georgia Tech’s scientific work was among the first to raise concerns about the future price and availability of corn as a food crop if it’s being used to help meet energy needs. Today we know that food vs. fuel is a likely resource constraint, along with plant yield, available acres, and more.

Georgia researchers are also experimenting with forest products as an energy source – so-called cellulosic ethanol technology. After all, there are said to be more than five million tons of trees available for harvest each year in Georgia -- beyond what is needed for pulp mill and sawmill production.

The potential is there. No one can argue with that. Still, Georgia Tech's Strategic Energy Institute indicates that there are big hurdles. For example, significant amounts of water are required . . . and Georgia learned this year just how scarce a resource water can be. Researchers also note how difficult it is to ship the pulp and other biomass to factories for processing, and how complicated transportation of ethanol from plant to market can be, since ethanol cannot be transported in pipelines, the safest and most economical transportation means for liquid fuels.

Bottom-line: Georgia science says biofuels are not the silver bullet solution to the world's long-term fuel needs. They are, however, an important and necessary complement to conventional oil and gas. That is a position I endorse. Roger Webb, of the Strategic Energy Institute at Georgia Tech, says, "Energy issues are truly multi-disciplinary." I agree. And addressing these issues requires "a portfolio investment approach," where we organize means and opportunities just as you would if you were investing for your personal future.

Let's start with conventional energy reserves of oil and gas. Let's make those reserves available. There are more than 100 billion barrels of oil equivalent energy that we know of on the Outer Continental Shelf and on federal lands, but thanks to short-sighted public policy, there is no access to this oil and gas. We should change that.

And we should encourage the development of a strong U.S. refining industry or risk a dependence on product imports as great as the current reliance on foreign crude.

Marathon is doing its part. We are investing $1.9 billion to expand our Detroit Refinery, bringing another 400,000 gallons a day of clean transportation fuels to the American market -- increasing employment, generating tax revenue, and contributing to supply security.

More important to this audience, Marathon is investing $3.2 billion to expand our refinery in Garyville, Louisiana, which just happens to be the last grassroots refinery built in the United States. That was in 1976 – more than a quarter century ago. When we are finished with the Garyville expansion in the fourth quarter of 2009, we will have added 180,000 barrels of capacity per day. That takes the plant from 245,000 barrels per day to 425,000 . . . and makes it one of the five largest in the United States, as well as a major supply source for the Southeast.

What that means for the market is that we will be producing an additional 7.5 million gallons of clean transportation fuels each day in Garyville to help meet America's – and Georgia's --

growing need for energy. We'll also shift product yields to favor clean diesel over gasoline to prepare for growth in that market.

Let me remind you that we are making these investments at a time when there are calls to throttle back the fuel that has always powered cars, trucks, ambulances. . . even lawn mowers. Policy makers want to

limit conventional fuels in favor of mandated alternatives that, in point of fact, can't replace either the volume or the energy efficiency and flexibility of our existing fuels mix. Spending more than $5 billion dollars to make more hydrocarbon fuel when many people are saying "phase-out," may seem risky. We think it's responsible.

We know these fuels are going to be needed by American consumers, and we're making this investment because we believe it's the right thing to do. And I say this as a representative of a company that produces ethanol, blends ethanol, and sells ethanol.

Today, Marathon is among the largest blenders of ethanol in the United States. We have been working with these blends for more than 15 years. Marathon is a leader in quality testing of ethanol, and a pioneer in creating the infrastructure necessary to move ethanol into more and larger markets in the Midwest and – now – the Southeast.

By the middle of this year, we will be able to receive, store and blend ethanol in every one of our markets, from the Canadian border to the state of Florida. In fact, we would already be blending here in Atlanta if state regulations had made it possible for us to do so and be assured of regulatory compliance. You see, state regulations here and in some other Southeast states were designed, not in the age of ethanol – but the age of carburetors -- with volatility standards that hoped to protect drivers against hot weather vapor lock and similar drivability issues. Our extensive experience with hot weather use of ethanol elsewhere has demonstrated that this is no longer a problem. We are actively working with the states in question – including Georgia -- to develop uniform, comprehensive, and driver-sensitive standards that will accommodate ethanol blends. I urge state regulators throughout the Southeast to act expeditiously to adopt the fuel standards that will allow us to bring ethanol-blended fuels to this region.

Finally, I want to say a word about the energy reserves which the industry terms "non-conventional" – because they are mined, manufactured and ultimately refined using technology that the wildcatters of old West Texas wouldn't recognize—steam-assisted gravity drainage, onsite thermal upgraders, and on the drawing board – nuclear assist.

The world's supply of heavy non-conventional oil resource from tar sands is extremely large….Middle East size. Canada's reserves alone are larger than any country's conventional energy resources, with the exception of Saudi Arabia. Marathon is a partner in a project there that is producing about 150,000 barrels a day, on its way to more than 300,000 barrels in a few years.

We're currently modifying our Detroit Refinery to process our share of the bitumen from this vast resource. We intend to review similar opportunities wherever, in our refining system, they make sense for the market. And I believe, in this, we are among the pacesetters in the industry.

Appropriately using a mix of conventional, unconventional and renewable fuel sources is a matter of prudence, of commonsense. Others, however, prefer to bet the future on a single solution. This is the "silver bullet syndrome." In my view, it is risky and unwarranted.

For example, the new energy act mandates that 36 billion gallons of renewable fuels be blended by 2022, including 15 billion gallons of corn-based ethanol, up from approximately 6 billion today. To get to 15 billion gallons will require nearly 30 percent of the current corn crop, putting tremendous pressure on food, feed and export uses.

This is one of the most ambitious dictates ever issued to American business. It creates four different renewable fuel standards – a total requirement, an advanced biofuel standard which includes bio-based diesel and cellulosic, and then separate standards for those components of bio-based diesel and cellulosic.

It relies on increased acreage and increased yields available on the corn side; it depends on a favorable resolution of food vs. fuel issues, and it bets on a technology for converting cellulose to fuel that is not yet commercial.

This legislation is fraught with uncertainty. The technology is immature, the economics are uncertain, and the potential for unintended consequences is high.

As I mentioned earlier, Marathon has been a leader in biofuels and taking both ethanol and biodiesel to market.

But even Marathon is struck by how the Energy Act focuses on one item of the necessary energy portfolio –renewables -- to the exclusion of others.

Here's what I'd recommend: a policy that makes it possible for all energy sources: solar, wind, nuclear, biofuels and hydrocarbons to contribute without penalty, prejudice or undue favoritism.

For biofuels, this means removing the state regulatory standards that hamper the blending of ethanol with conventional gasoline. That will make a huge difference for Georgia and the Southeast.

But we should do more.

In particular, we should acknowledge the elephant in the living room – the fact that conventional hydrocarbons are going to be the world's leading source of energy for the foreseeable future.

We should work to open up access to energy resources onshore and in shallow coastal waters, as well as the Outer Continental Shelf.

We should vigorously defend the industry against tax and regulatory policies that handicap our ability to fund energy recovery on the expensive high-stakes frontiers of the future – deepwater production, energy recovery from oil sands, clean-coal development, liquefied natural gas transport, refinery expansion, and more.

Ours is not an industry asking for bailouts or tariff protection or manufacturing preference. We welcome the contribution of all energy sources in meeting America's needs. We view that as a necessity in a world where population and energy demand continue to grow rapidly. What we want is commonsense policies that acknowledge the realities of economics and technology.

With the right combination – the right portfolio – of efficiency, technology, and fuel diversity – the energy challenges of the future are within our collective power to resolve.

As I said at the outset … I'm optimistic! Thank you.