

On Oct. 12, 2006, the Department of Energy and the Department of Agriculture cohosted a conference in St. Louis to highlight how the development of renewable energy can promote and significantly strengthen U.S. energy security. The following are President Bush's remarks at the conference:

THE PRESIDENT: Thanks for the warm welcome. I appreciate the chance to come and speak to the Renewable Energy Conference. I hope you're excited about being here, because I sure am. This is -- it's exciting to be with -- (applause.)

I view this as kind of a meeting of pioneers, people who are on the leading edge of change, and people whose research, thought, and production will all help this country become stronger and better. And so I appreciate you giving me a chance to come by and visit with you.

This is a -- energy is a subject dear to my heart -- as it should be for any President -- because you can't grow your economy without energy. And yet, it is apparent, and should be for most Americans, we got to change our habits if we want to remain the economic leader of the world.

Before I share some of my thoughts with you, I do want to recognize members of my Cabinet who have joined you: The Secretary of Agriculture, Mike Johanns; the Secretary of Energy, Sam Bodman; and the Administrator of the EPA, Steve Johnson.

I think it is interesting that when we -- we got an energy conference going on here, that we have the Secretary of Energy, which makes sense -- (laughter) -- but the Secretary of Agriculture, as well. And the man who runs the EPA, whose job it is to make sure our environment is clean, is with us. And the reason I find that interesting is because we've got an interesting confluence of national security concerns and environmental concerns that come together, probably unlike any other time in our history. And I want to share some thoughts with you about that in a minute.

I do want to thank the United States Senators from the state of Missouri -- both men believe strongly in the future of renewable energy -- and that would be Kit Bond and Jim Talent. Thank you for coming. (Applause.) I appreciate Congressman Todd Akin being here, and his wife, Lulli.

You know, I -- gasoline prices are down, and that's good news. (Applause.) Yes. I think everybody in America ought to be applauding. (Laughter.) It's like -- if you're driving a truck for a living, it helps you. If you're trying to put food on the table and you got to drive to work, it helps you. If you're a small business owner, it means you've got more capital to invest when the price of gasoline goes down.

My worry is, however, that a low price of gasoline will make it complacent -- make us complacent about our future when it comes to energy, because I fully understand that energy is going to help determine whether or not this nation remains the economic leader in the world. We're doing fine now. We've got a really strong economy, and in order to make sure it's strong tomorrow we need to make sure we work on how we use energy.

Energy is -- look, let me just put it bluntly: We're too dependent on oil. We are a -- (applause.) And see, low gasoline prices may mask that concern. So, first, I want to tell you that I welcome

the low gasoline prices, however it's not going to dim my enthusiasm for making sure we diversify away from oil.

We need to diversify away from oil for economic reasons. We live in a global world. When the demand for oil goes up in China or in India, it causes the price of crude oil to rise and, since we import about 60 percent of the crude oil we use, it causes our price to go up, as well, which means the economy becomes less competitive.

And then, of course, there's the national security concern for oil. Why? Well, we get oil from some countries who don't particularly care for us. They don't like what we stand for. They don't like it when we say, for the sake of peace, let us work in a way that we don't develop nuclear weapons, for example.

I spend a lot of time on national security issues, which you expect your President to do. And a lot of times those national security issues are involved with countries that have oil. They have something we want, and so there's a national security issue when it comes to the status quo. And then, of course, we have a great debate about the environment in America, and that's good. It's an important debate. We all want to be good stewards of our environment. We want to be good conservationists. And reliance upon oil and hydrocarbons has created some challenges when it comes to the environment.

And so this is one of the reasons why I believe so strongly that this country has got to use its talent and its wealth to get us off oil. And I believe we will do so, and I believe -- I know the best way to do so is through technological breakthroughs.

And the government has got a role to play. First, I understand there are some entrepreneurs here, some people that are investors, venture capitalists, and I welcome you here. I think it's a good sign for those of us who understand the need to diversify away from oil that private money is beginning to make investments into some of the technologies I'm going to be describing.

And we can help you in Washington, and one way we can help you is to reward people for investing in research and development. There's a research and development tax credit that's on the books. The problem is, it expires every year, on a year-by-year basis, which means you've got to come back to Congress on a year-to-year basis; which also means there's unpredictability in the tax code, and that's not wise, if you're trying to encourage people to invest dollars in the long-term. And so in order to encourage private initiative and private investment in new energies, we ought to make the research and development tax credit a permanent part of the tax code. (Applause.)

And we need to continue what we're doing at the federal level, which is spend your money on research. I think it's a legitimate use of taxpayers' money, to spend on grants, to find new ways to power our economy, new ways to conserve, new ways to protect the environment through new technologies.

Since I've been President, we've spent about \$10 billion on research. A lot of goes through Sam's shop. He's the Energy man. (Laughter.) We will vigorously pursue new ways to power our automobiles. If you want to get off oil, the surest and quickest way to do so is to change how we power our automobiles. We consume a lot of oil, through gasoline. And the more inefficient our cars are, the more we drive old clunkers, the more gasoline we use, which means we're more dependent on oil.

And so we've got some interesting initiatives at the federal level to help change habits. One of them is, and it's probably the fastest way we can begin to change the consumer habits, is to

promote hybrid vehicles. You all know what hybrids are, it's a combination of gas and -- gasoline and electric battery that gets the driver a lot more miles per gallon.

And so one way to do this -- one way to encourage people to buy hybrids, one way to stimulate demand so that the production will follow -- is to provide tax credits. You can get up to, now, \$3,400 tax credit when you buy your hybrid automobile. In other words, the government is using the tax code to stimulate demand, which then should stimulate more automobile -- more production on the auto lines of hybrids. And the more hybrids we get on the road, the less oil we're going to be using.

Secondly, we're spending money on new battery technologies. See, we envision a day in which light and powerful batteries will become available in the marketplace so that you can drive the first 40 miles on electricity, on batteries, and your car won't have to look like a golf cart. (Laughter.) In other words, it will be a technology that will meet consumer demand and at the same time meet a national need, which is less consumption of gasoline. These are called plug-in hybrid vehicles.

And the battery technology is coming. In order to expedite it, Sam's shop, the Department of Energy, is putting out grants. In other words, we're using your money to expedite the arrival of a new technology that will enable folks to drive the first 40 miles on electricity.

That's not going to help rural Missouri or rural Texas, but it's certainly going to help those who live in the cities. Most folks in the cities don't drive more than 40 miles, so you can envision consumer habits beginning to change: You drive to work; you go home; you plug in your automobile. And you go -- ride to work and go home the next -- and you're still on electricity. It's going to change the consumption patterns. This new technology will change the consumption patterns on gasoline, which in turn will make us less dependent on crude oil, which meets a national security concern, an economic security concern, and helps us deal with an environmental concern.

Now, there's another technology that will enable us to help change our driving habits, and that's ethanol. See, I like the idea of promoting a fuel that relies upon our farmers. I happen to believe a good farm economy is important to a good national economy, and I also know it makes sense to have our -- (applause.) Sounds like we might have some farmers here. (Laughter.)

But I also know it makes sense to have our farmers growing the feedstock for new energy. The way I like to tell our citizens is Johanns is going to come in someday and say, "Mr. President, corn is up, which means we're less dependent on oil." And that's good news for the country and good news for our economy.

People are using ethanol. For those of you who are in the ethanol business, you're on the leading edge of change. It's coming, and government can help. That's why we enhanced and extended the 10-cent-per-gallon tax credit. We did that to stimulate production. We've extended a 51-cent-per-gallon tax credit for ethanol blenders. We provided a 30-percent tax credit for the installation of alternative fuel stations, up to \$30,000 a year.

In other words, I believe and Congress agrees that the proper use of tax credits will help stimulate a new industry that will help our economy and help us when it comes to national security. You know, we're up to now 5 billion gallons of ethanol sold this year. That's up from 1.6 billion gallons in 2000. Ethanol -- there are now 100 ethanol refineries which are operating. There -- it's anticipated there are going to be 40 more next year. In other words, we're just at the beginning stages of a new industry that is evolving. It's one of the reasons I'm excited to be here. For those of you on the cutting edge, I want to thank you, and just let you know we want you to succeed. It's in our interests that you do succeed.

Today there are 900 stations selling E85. For those of you who don't know what that means, that's 85 percent ethanol. Look, a lot of Americans wonder whether or not this is feasible, what I'm talking about. A lot of folks aren't exposed to ethanol yet. In the Midwest you are, you've got a lot of corn. And it makes a lot of sense to have these plants where the feedstocks are. But ethanol is coming, and it doesn't require much money to convert a regular gasoline-driven car to a flex-fuel automobile. See, the technology is available. It takes about \$100-something to change a gasoline-only automobile to one that can use E85. And it works.

And in my judgment, the thing that's preventing ethanol from becoming more widespread across the country is the lack of other types of feedstocks that are required to make ethanol -- sugar works, corn works, and it seems like it makes sense to spend money, your money, on researching cellulosic ethanol, so that we could use wood chips, or switch grass, or other natural materials. (Applause.)

And we've got an aggressive effort to research new raw materials to be used in ethanol. I was down in Alabama -- I'm going to tell you an interesting story when I was down there the other day. But I talked to a fellow from Auburn, he's a Ph.D. -- just reminded me the difference between a Ph.D. and a C student; the C student is the President, and the Ph.D. is the advisor. (Laughter and applause.)

But he's telling me how optimistic he is that someday we're going to be able to take wood chips from those southern pine forests, and convert that raw material into ethanol. He said it's right around the corner, as far as he's concerned. It makes a lot of sense for the federal government to continue to invest taxpayers' money, because the more different raw materials that are practical in use, the more ethanol production facilities will spread around the country. And the more spread around -- the more production there is, the more likely it is that the entire industry will evolve quicker.

So you've got a lot of plants here in the Midwest. The vision has got to be for these plants to be able to spread throughout the entire country. And when it does, ethanol will become a primary source for the fuel people use, which will help us meet our national security and economic concerns and objectives.

The Department of Energy announced \$250 million in funding to establish and operate two new bioenergy research centers, all aimed at accelerating basic research into cellulosic ethanol and other biofuels. I suspect we've got some soybean growers here. I know you've got some in Missouri. (Applause.) I have been to a biodiesel plant in Virginia. And it doesn't take much capital investment to refine biodiesel from soy, soybeans; it just doesn't. Biodiesel is coming. It makes a lot of sense for us to continue to invest in biodiesel technologies to make the production process even more efficient. I have seen biodiesel poured into a new truck, and watched that truck crank right up, and realize it emitted no emissions. I know, because I put a handkerchief over the stack. (Laughter.)

These are exciting times, and people are beginning to take advantage of them. I told you I was down in Alabama. I went to the Hoover Police Department. They're using E85. Their people on the beat are filling up their cars with E85. I asked a guy, one of the policemen -- I said, "Why do you use it?" He said, "First of all, I like the fact that it keeps the environment clean" -- that's a good reason. He said, "By the way, when you fill it up with the 85 it gives you better get-up-and-go." (Laughter.) In other words, it works. That's a good sign when police departments begin to use E85.

I was over at a FedEx place, and they've got what they call the OptiFleet E700 -- it's a new vehicle, all aimed at reducing emissions by 96 percent. In other words, people are thinking

differently now. There's a whole new industry beginning to evolve. Users are beginning to understand the benefits of using ethanol or biodiesel. And these are exciting times.

And the federal government's job is to continue to research so that we provide our consumers, the American people, with more options. And one of the great options that's coming down the road is hydrogen. That's a longer-term project. If you notice, I kind of talk about hybrids that are on the road today and how we stimulate demand, hybrids that are coming with new batteries, ethanol which is now evolving into a significant industry. Ultimately, in my judgment, one of the ways to make sure that we become fully less dependent on oil is through hydrogen. And we're spending \$1.2 billion to encourage hydrogen fuel cells. It's coming, it's coming. It's an interesting industry evolution, to think about your automobiles being powered by hydrogen, and the only emission is water vapor.

Oh, I'm sure there are some people out there saying, well, you know, he's just dreaming. Well, I'm just listening to the dreamers who happen to be good, smart, capable people who know what they're talking about --

Since 2003, my administration has made hydrogen and fuel-cell technology a priority -- (audience interruption) -- and we will continue to research to make sure America is less dependent on foreign sources of oil. (Applause.)

As you can tell, I'm excited about new technologies. But I think we've got to be realistic about the timing. And in order to become less dependent on foreign sources of oil, we've got to explore for oil and gas in our own hemisphere in environmentally friendly ways. And one of the interesting technological developments is the capacity to find oil in unique places. I don't know if you followed recently the exploration in the Gulf of Mexico, where there was a well that was drilled five miles in depth in thousands of feet of water.

In other words, these new technologies enable us to go to new places, and they enable us to be wise stewards of the environment. I understand there's a big debate about whether or not you can explore for oil and gas and protect the environment. I believe you can. And I understand that as we transition to the ethanol era we must also -- or the hydrogen area, we must also find oil and gas in our own hemisphere if the objective is to become less dependent on foreign oil. (Applause.)

They estimate that the new discovery in the deep Gulf of Mexico could increase our reserves from 10 to 50 percent. In other words, this is a big deal. And Congress is debating an energy bill. They passed a good energy bill, by the way, in the past, that encourages conservation and encourages a lot of the research that I was talking about, understands we've got to diversify away from our current structure. But there's another bill out there, and they need to get the work done. They need to come together between the House and the Senate version to encourage exploration in the Gulf of Mexico in new areas to make sure that we transition to a new day when it comes to energy. (Applause.)

And I believe that states ought to share in the royalties because I know, in the state of Louisiana, for example, they have committed their share of new royalties in this new exploration to help protect their coastline. And I believe Congress needs to get the bill to my desk as quick as possible. So when you finish the elections, get back and let me sign this bill so the American people know that we're serious about getting off foreign oil.

And that's going to be important because we can find a lot of natural gas offshore, for example, and we need natural gas in order to make sure we meet our second objective, and that's how we protect the environment and power our society.

I don't know if you know this or not, but electricity is generated from natural gas, about 18 percent; coal, 50 percent; nuclear power, 20 percent; and then -- solar and wind. And the fundamental question is, can the federal government help make sure that we have energy so we can power our economy, protect the environment, and grow. And the answer is, we can, and we can spend money to help you.

One thing we don't need to spend money on but need to do is permit more liquefied natural gas terminals. LNG is a new technology that is -- it's not that new, but it's evolving technology. It means you can get -- buy natural gas from overseas in liquefied form and de-liquefy it. There's a lot of natural gas in the world, and it makes sense for us to be in a position to receive that natural gas in order to make sure you've got energy in your home.

A shortage of natural gas causes your electricity bills to go up. Supply of natural gas, increased supply, makes it more likely that you're going to have rational bills, more likely the economy will continue to grow. And natural gas protects the environment.

Secondly, on coal, we got a lot of coal. We got 250 years of coal. That's a lot, and yet coal presents us with an environmental challenge. And so we're spending quite a bit of money here at the federal level to come up with clean-coal technologies. If you want to be less dependent on foreign sources of energy, it seems like it makes sense to me that we use the energies we have here at home and do so in environmentally friendly ways.

We're spending \$2 billion to promote technologies that will enable our coal-fired plants to protect the environment. As a matter of fact, we got what's called the Future-Gen initiative. By the year 2012, we'll build the first clean-coal power plant that will remove virtually all pollutants and greenhouse gases from burning coal. In other words, there's a way coming that's going to enable us to use this plentiful resource. (Applause.)

A controversial subject is nuclear power. You might remember, we've had a time in our country where people liked nuclear power, thought it was a strong solution to energy independence, and then we just shut her down because of engineering concerns. I strongly believe that if we want to keep this country competitive, if we want to make sure we can compete globally, we must promote civilian nuclear power. We must have more energy coming from nuclear power. (Applause.)

Nuclear power is renewable, and there are no greenhouse gases associated with nuclear power. One of the problems we've had is that nobody wants to build any plants. They're afraid of the costs of regulation and the litigious nature that surrounds the construction of nuclear power plants -- litigious problems surrounding the construction of the nuclear power plants.

And so, in the energy bill that I signed, the Congress wisely provided incentives and risk insurance for nuclear power plant construction. Last year only three companies were seeking to build power plants -- nuclear power plants. Today 14 have expressed new interest in construction. In other words, there's a new industry beginning to come back.

I think it's very important for us to spend dollars on how to best deal with the waste, in other words, research new ways to be able to assure the American people that we'll be able to deal with the nuclear waste in a smart way. And that's why we're teaming up with France, and Japan, and Russia to spend money -- \$250 million from the United States' perspective, and they're matching it -- on what's called the Global Nuclear Energy Partnership, all designed to research reprocessing and fast-burner reactors.

The idea is to take the nuclear industry, take the spent fuel, reprocess it, put it into a fast-burner reactor, which will yield about 90 percent less of the waste than under the current system. What

I'm telling you is, is that the engineering is much safer today than it has been in the past, and we're spending money to make sure that we can deal with the waste in a sane way, so that we can with confidence say to the American people, now is the time to accelerate the expansion of nuclear power for the sake of national and economic security. (Applause.)

I believe that with the proper amount of research, whether it be public or private, we will have solar roofs that will enable the American family to be able to generate their own electricity. And it's coming. (Applause.)

I believe wind power has got the opportunity to help. All we need is to put a couple of windmills right there in Washington, D.C., and we'll be -- (laughter) -- less dependent on foreign sources of energy. (Applause.)

What I'm talking about is a comprehensive approach to solving a national issue, which is dependence on oil, and how best to protect this environment. You know, it's time to get rid of the old, stale debates on the environment and recognize new technologies are going to enable us to achieve a lot of objectives at the same time. (Applause.)

Technology will enable us to be able to say we can grow our economy and protect our environment at the same time. It's not a zero-sum game anymore. (Applause.) These technological breakthroughs are going to say to our farmers, you're energy producers. And that's good for America. It's going to say to those entrepreneurs that are risk-takers, this is a good place to try to make a good return on capital.

There's a lot of smart money in the United States going into energy diversification and to research. And for those of you here, thanks. I hope you make a good return. I think you will. There is no question in my mind that we're on the verge of significant breakthroughs, and so what I wanted to come and tell you is, one, thanks for your interest, thanks for showing up at a conference like this. You're the beginning of what's going to be a new environmental debate, an economy based upon new technologies, a new way to power our automobiles, and a way that says by making good decisions now and researching now, we'll leave behind a better world for our children.

Some day, some -- the 56th President will be standing up here saying, I appreciate the fact that there was some pioneers back in America in those days; I can't spent too much time because I've got to go get my limousine filled up by hydrogen -- (laughter) -- but I appreciate the fact that the solar panels are working so you can see me. (Laughter.) In other words, it's coming, and I'm excited to be a part of it. And I hope you're excited, as well.

Thanks for letting me come by. God bless. (Applause.)

THE PRESIDENT: Thanks for the warm welcome. I appreciate the chance to come and speak to the Renewable Energy Conference. I hope you're excited about being here, because I sure am. This is -- it's exciting to be with -- (applause.)

I view this as kind of a meeting of pioneers, people who are on the leading edge of change, and people whose research, thought, and production will all help this country become stronger and better. And so I appreciate you giving me a chance to come by and visit with you.

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Before I share some of my thoughts with you, I do want to recognize members of my Cabinet who have joined you: The Secretary of Agriculture, Mike Johanns; the Secretary of Energy, Sam Bodman; and the Administrator of the EPA, Steve Johnson.

I think it is interesting that when we -- we got an energy conference going on here, that we have the Secretary of Energy, which makes sense -- (laughter) -- but the Secretary of Agriculture, as well. And the man who runs the EPA, whose job it is to make sure our environment is clean, is with us. And the reason I find that interesting is because we've got an interesting confluence of national security concerns and environmental concerns that come together, probably unlike any other time in our history. And I want to share some thoughts with you about that in a minute.

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And so this is one of the reasons why I believe so strongly that this country has got to use its talent and its wealth to get us off oil. And I believe we will do so, and I believe -- I know the best way to do so is through technological breakthroughs.

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patterns on gasoline, which in turn will make us less dependent on crude oil, which meets a national security concern, an economic security concern, and helps us deal with an environmental concern.

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In other words, I believe and Congress agrees that the proper use of tax credits will help stimulate a new industry that will help our economy and help us when it comes to national security. You know, we're up to now 5 billion gallons of ethanol sold this year. That's up from 1.6 billion gallons in 2000. Ethanol -- there are now 100 ethanol refineries which are operating. There -- it's anticipated there are going to be 40 more next year. In other words, we're just at the beginning stages of a new industry that is evolving. It's one of the reasons I'm excited to be here. For those of you on the cutting edge, I want to thank you, and just let you know we want you to succeed. It's in our interests that you do succeed.

Today there are 900 stations selling E85. For those of you who don't know what that means, that's 85 percent ethanol. Look, a lot of Americans wonder whether or not this is feasible, what I'm talking about. A lot of folks aren't exposed to ethanol yet. In the Midwest you are, you've got a lot of corn. And it makes a lot of sense to have these plants where the feedstocks are. But ethanol is coming, and it doesn't require much money to convert a regular gasoline-driven car to a flex-fuel automobile. See, the technology is available. It takes about \$100-something to change a gasoline-only automobile to one that can use E85. And it works.

And in my judgment, the thing that's preventing ethanol from becoming more widespread across the country is the lack of other types of feedstocks that are required to make ethanol -- sugar works, corn works, and it seems like it makes sense to spend money, your money, on researching cellulosic ethanol, so that we could use wood chips, or switch grass, or other natural materials. (Applause.)

And we've got an aggressive effort to research new raw materials to be used in ethanol. I was down in Alabama -- I'm going to tell you an interesting story when I was down there the other day. But I talked to a fellow from Auburn, he's a Ph.D. -- just reminded me the difference between a Ph.D. and a C student; the C student is the President, and the Ph.D. is the advisor. (Laughter and applause.)

But he's telling me how optimistic he is that someday we're going to be able to take wood chips from those southern pine forests, and convert that raw material into ethanol. He said it's right around the corner, as far as he's concerned. It makes a lot of sense for the federal government to continue to invest taxpayers' money, because the more different raw materials that are practical in use, the more ethanol production facilities will spread around the country. And the

more spread around -- the more production there is, the more likely it is that the entire industry will evolve quicker.

So you've got a lot of plants here in the Midwest. The vision has got to be for these plants to be able to spread throughout the entire country. And when it does, ethanol will become a primary source for the fuel people use, which will help us meet our national security and economic concerns and objectives.

The Department of Energy announced \$250 million in funding to establish and operate two new bioenergy research centers, all aimed at accelerating basic research into cellulosic ethanol and other biofuels. I suspect we've got some soybean growers here. I know you've got some in Missouri. (Applause.) I have been to a biodiesel plant in Virginia. And it doesn't take much capital investment to refine biodiesel from soy, soybeans; it just doesn't. Biodiesel is coming. It makes a lot of sense for us to continue to invest in biodiesel technologies to make the production process even more efficient. I have seen biodiesel poured into a new truck, and watched that truck crank right up, and realize it emitted no emissions. I know, because I put a handkerchief over the stack. (Laughter.)

These are exciting times, and people are beginning to take advantage of them. I told you I was down in Alabama. I went to the Hoover Police Department. They're using E85. Their people on the beat are filling up their cars with E85. I asked a guy, one of the policemen -- I said, "Why do you use it?" He said, "First of all, I like the fact that it keeps the environment clean" -- that's a good reason. He said, "By the way, when you fill it up with the 85 it gives you better get-up-and-go." (Laughter.) In other words, it works. That's a good sign when police departments begin to use E85.

I was over at a FedEx place, and they've got what they call the OptiFleet E700 -- it's a new vehicle, all aimed at reducing emissions by 96 percent. In other words, people are thinking differently now. There's a whole new industry beginning to evolve. Users are beginning to understand the benefits of using ethanol or biodiesel. And these are exciting times.

And the federal government's job is to continue to research so that we provide our consumers, the American people, with more options. And one of the great options that's coming down the road is hydrogen. That's a longer-term project. If you notice, I kind of talk about hybrids that are on the road today and how we stimulate demand, hybrids that are coming with new batteries, ethanol which is now evolving into a significant industry. Ultimately, in my judgment, one of the ways to make sure that we become fully less dependent on oil is through hydrogen. And we're spending \$1.2 billion to encourage hydrogen fuel cells. It's coming, it's coming. It's an interesting industry evolution, to think about your automobiles being powered by hydrogen, and the only emission is water vapor.

Oh, I'm sure there are some people out there saying, well, you know, he's just dreaming. Well, I'm just listening to the dreamers who happen to be good, smart, capable people who know what they're talking about --

Since 2003, my administration has made hydrogen and fuel-cell technology a priority -- (audience interruption) -- and we will continue to research to make sure America is less dependent on foreign sources of oil. (Applause.)

As you can tell, I'm excited about new technologies. But I think we've got to be realistic about the timing. And in order to become less dependent on foreign sources of oil, we've got to explore for oil and gas in our own hemisphere in environmentally friendly ways. And one of the interesting technological developments is the capacity to find oil in unique places. I don't know if you

followed recently the exploration in the Gulf of Mexico, where there was a well that was drilled five miles in depth in thousands of feet of water.

In other words, these new technologies enable us to go to new places, and they enable us to be wise stewards of the environment. I understand there's a big debate about whether or not you can explore for oil and gas and protect the environment. I believe you can. And I understand that as we transition to the ethanol era we must also -- or the hydrogen area, we must also find oil and gas in our own hemisphere if the objective is to become less dependent on foreign oil.
(Applause.)

They estimate that the new discovery in the deep Gulf of Mexico could increase our reserves from 10 to 50 percent. In other words, this is a big deal. And Congress is debating an energy bill. They passed a good energy bill, by the way, in the past, that encourages conservation and encourages a lot of the research that I was talking about, understands we've got to diversify away from our current structure. But there's another bill out there, and they need to get the work done. They need to come together between the House and the Senate version to encourage exploration in the Gulf of Mexico in new areas to make sure that we transition to a new day when it comes to energy. (Applause.)

And I believe that states ought to share in the royalties because I know, in the state of Louisiana, for example, they have committed their share of new royalties in this new exploration to help protect their coastline. And I believe Congress needs to get the bill to my desk as quick as possible. So when you finish the elections, get back and let me sign this bill so the American people know that we're serious about getting off foreign oil.

And that's going to be important because we can find a lot of natural gas offshore, for example, and we need natural gas in order to make sure we meet our second objective, and that's how we protect the environment and power our society.

I don't know if you know this or not, but electricity is generated from natural gas, about 18 percent; coal, 50 percent; nuclear power, 20 percent; and then -- solar and wind. And the fundamental question is, can the federal government help make sure that we have energy so we can power our economy, protect the environment, and grow. And the answer is, we can, and we can spend money to help you.

One thing we don't need to spend money on but need to do is permit more liquefied natural gas terminals. LNG is a new technology that is -- it's not that new, but it's evolving technology. It means you can get -- buy natural gas from overseas in liquefied form and de-liquefy it. There's a lot of natural gas in the world, and it makes sense for us to be in a position to receive that natural gas in order to make sure you've got energy in your home.

A shortage of natural gas causes your electricity bills to go up. Supply of natural gas, increased supply, makes it more likely that you're going to have rational bills, more likely the economy will continue to grow. And natural gas protects the environment.

Secondly, on coal, we got a lot of coal. We got 250 years of coal. That's a lot, and yet coal presents us with an environmental challenge. And so we're spending quite a bit of money here at the federal level to come up with clean-coal technologies. If you want to be less dependent on foreign sources of energy, it seems like it makes sense to me that we use the energies we have here at home and do so in environmentally friendly ways.

We're spending \$2 billion to promote technologies that will enable our coal-fired plants to protect the environment. As a matter of fact, we got what's called the Future-Gen initiative. By the year 2012, we'll build the first clean-coal power plant that will remove virtually all pollutants and

greenhouse gases from burning coal. In other words, there's a way coming that's going to enable us to use this plentiful resource. (Applause.)

A controversial subject is nuclear power. You might remember, we've had a time in our country where people liked nuclear power, thought it was a strong solution to energy independence, and then we just shut her down because of engineering concerns. I strongly believe that if we want to keep this country competitive, if we want to make sure we can compete globally, we must promote civilian nuclear power. We must have more energy coming from nuclear power. (Applause.)

Nuclear power is renewable, and there are no greenhouse gases associated with nuclear power. One of the problems we've had is that nobody wants to build any plants. They're afraid of the costs of regulation and the litigious nature that surrounds the construction of nuclear power plants -- litigious problems surrounding the construction of the nuclear power plants.

And so, in the energy bill that I signed, the Congress wisely provided incentives and risk insurance for nuclear power plant construction. Last year only three companies were seeking to build power plants -- nuclear power plants. Today 14 have expressed new interest in construction. In other words, there's a new industry beginning to come back.

I think it's very important for us to spend dollars on how to best deal with the waste, in other words, research new ways to be able to assure the American people that we'll be able to deal with the nuclear waste in a smart way. And that's why we're teaming up with France, and Japan, and Russia to spend money -- \$250 million from the United States' perspective, and they're matching it -- on what's called the Global Nuclear Energy Partnership, all designed to research reprocessing and fast-burner reactors.

The idea is to take the nuclear industry, take the spent fuel, reprocess it, put it into a fast-burner reactor, which will yield about 90 percent less of the waste than under the current system. What I'm telling you is, is that the engineering is much safer today than it has been in the past, and we're spending money to make sure that we can deal with the waste in a sane way, so that we can with confidence say to the American people, now is the time to accelerate the expansion of nuclear power for the sake of national and economic security. (Applause.)

I believe that with the proper amount of research, whether it be public or private, we will have solar roofs that will enable the American family to be able to generate their own electricity. And it's coming. (Applause.)

I believe wind power has got the opportunity to help. All we need is to put a couple of windmills right there in Washington, D.C., and we'll be -- (laughter) -- less dependent on foreign sources of energy. (Applause.)

What I'm talking about is a comprehensive approach to solving a national issue, which is dependence on oil, and how best to protect this environment. You know, it's time to get rid of the old, stale debates on the environment and recognize new technologies are going to enable us to achieve a lot of objectives at the same time. (Applause.)

Technology will enable us to be able to say we can grow our economy and protect our environment at the same time. It's not a zero-sum game anymore. (Applause.) These technological breakthroughs are going to say to our farmers, you're energy producers. And that's good for America. It's going to say to those entrepreneurs that are risk-takers, this is a good place to try to make a good return on capital.

There's a lot of smart money in the United States going into energy diversification and to research. And for those of you here, thanks. I hope you make a good return. I think you will.

There is no question in my mind that we're on the verge of significant breakthroughs, and so what I wanted to come and tell you is, one, thanks for your interest, thanks for showing up at a conference like this. You're the beginning of what's going to be a new environmental debate, an economy based upon new technologies, a new way to power our automobiles, and a way that says by making good decisions now and researching now, we'll leave behind a better world for our children.

Some day, some -- the 56th President will be standing up here saying, I appreciate the fact that there was some pioneers back in America in those days; I can't spent too much time because I've got to go get my limousine filled up by hydrogen -- (laughter) -- but I appreciate the fact that the solar panels are working so you can see me. (Laughter.) In other words, it's coming, and I'm excited to be a part of it. And I hope you're excited, as well.

Thanks for letting me come by. God bless. (Applause.)