the country. Since that time, 143 years ago, the descendants of slaves have observed this anniversary of emancipation as a remembrance of one of the most tragic periods of our Nation's history. The suffering, degradation, and brutality of slavery cannot be repaired, but the memory can serve to ensure that no such inhumanity is ever perpetrated again on American soil.

Throughout the Nation, we also celebrate the many important achievements of former slaves and their descendants. We do so because in 1926 Dr. Carter G. Woodson, son of former slaves, proposed such a recognition as a way of preserving the history of African Americans and recognizing the enormous contributions of a people of great strength, dignity, faith, and conviction—a people who rendered their achievements for the betterment and advancement of a Nation once lacking in humanity towards them. Every February, nationwide, we celebrate African American History Month. And, every year on June 19 we celebrate Juneteenth Independence Day.

I am happy to join with my colleagues, Senators DURBIN, REID, OBAMA, STABENOW, BROWNBACK, KERRY, LANDRIEU, CARDIN, LIEBERMAN, MCCASKILL, CLINTON, LEAHY, KENNEDY, DODD, SANDERS, MENENDEZ, BROWN, PRYOR, and LAUTENBERG, in commemorating Juneteenth Independence Day with the submission of S. Res. 231, which the Senate has just adopted, in recognition of the end of slavery and to never forget even the worst aspects of our Nation's history.

Mr. DURBIN. Mr. President, today I am pleased that, S. Res. 231, a resolution recognizing historic Juneteenth Independence Day, has passed the Senate.

June 19 is an ordinary day for many Americans, is a significant day for those who know its history. Juneteenth Independence Day celebrates June 19, 1865, when Union soldiers led by MG Gordon Granger arrived in Galveston, TX, with news that the Civil War had ended and that the enslaved were free.

Americans across the United States continue the tradition of celebrating Juneteenth Independence Day as inspiration and encouragement for future generations.

The legislation recognizes the significance of Juneteenth Independence Day and supports its continued celebration as an opportunity for the people of the United States to learn more about the past and to understand more fully the experiences that have shaped our nation.

As Americans, we must remember the lessons learned from slavery. Juneteenth is a day that all Americans, of all races, creeds, and ethnic backgrounds, can celebrate freedom and the end of slavery in the United States.

I am pleased to recognize historic Juneteenth Independence Day and proud that the Senate has passed this important resolution.

Mrs. MURRAY. Mr. President, I ask unanimous consent that the resolution be agreed to, the preamble be agreed to, the motion to reconsider be laid upon the table, and that any statements relating thereto be printed in the RECORD.

The PRESIDING OFFICER. Without objection, it is so ordered.

The resolution (S. Res. 231) was agreed to.

The preamble was agreed to.

The resolution, with its preamble, reads as follows:

S. RES. 231

Whereas news of the end of slavery did not reach frontier areas of the United States, and in particular the Southwestern States, for more than 2 years after President Lincoln's Emancipation Proclamation of January 1, 1863, and months after the conclusion of the Civil War;

Whereas, on June 19, 1865, Union soldiers led by Major General Gordon Granger arrived in Galveston, Texas, with news that the Civil War had ended and that the enslaved were free;

Whereas African Americans who had been slaves in the Southwest celebrated June 19, commonly known as ''Juneteenth Independence Day'', as the anniversary of their emancipation;

Whereas African Americans from the Southwest continue the tradition of celebrating Juneteenth Independence Day as inspiration and encouragement for future generations;

Whereas, for more than 140 years, Juneteenth Independence Day celebrations have been held to honor African American freedom while encouraging self-development and respect for all cultures;

Whereas, although Juneteenth Independence Day is beginning to be recognized as a national, and even global, event, the history behind the celebration should not be forgotten; and

Whereas the faith and strength of character demonstrated by former slaves remains an example for all people of the United States, regardless of background, religion, or race: Now, therefore, be it

Resolved, That—

(1) the Senate—

(A) recognizes the historical significance of Juneteenth Independence Day to the Nation;

(B) supports the continued celebration of Juneteenth Independence Day to provide an opportunity for the people of the United States to learn more about the past and to understand better the experiences that have shaped the Nation; and

(C) encourages the people of the United States to observe Juneteenth Independence Day with appropriate ceremonies, activities, and programs; and

(2) it is the sense of the Senate that—

(A) history should be regarded as a means for understanding the past and solving the challenges of the future; and

(B) the celebration of the end of slavery is an important and enriching part of the history and heritage of the United States.

Mrs. MURRAY. Mr. President, I yield the floor.

CONCLUSION OF MORNING BUSINESS

The PRESIDING OFFICER (Mr. CASEY). Morning business is closed.

CREATING LONG-TERM ENERGY ALTERNATIVES FOR THE NATION ACT OF 2007

The PRESIDING OFFICER. Under the previous order, the Senate will resume consideration of H.R. 6, which the clerk will report.

The legislative clerk read as follows:

A bill (H.R. 6) to reduce our Nation's dependence on foreign oil by investing in clean, renewable, and alternative energy resources, promoting new emerging energy technologies, developing greater efficiency, and creating a Strategic Energy Efficiency and Renewables Reserve to invest in alternative energy, and for other purposes?

Pending:

Reid amendment No. 1502, in the nature of a substitute.

Reid (for Bingaman) amendment No. 1537 (to Amendment No. 1502), to provide for a renewable portfolio standard.

Klobuchar (for Bingaman) amendment No. 1573 (to Amendment No. 1537), to provide for a renewable portfolio standard.

Bingaman (for Klobuchar) amendment No. 1557 (to Amendment No. 1502), to establish a national greenhouse gas registry.

Kohl amendment No. 1519 (to Amendment No. 1502), to amend the Sherman Act to make oil-producing and exporting cartels illegal.

Kohl (for DeMint) amendment No. 1546 (to amendment No. 1502), to provide that legislation that would increase the national average fuel prices for automobiles is subject to a point of order in the Senate.

Corker amendment No. 1608 (to amendment No. 1502), to allow clean fuels to meet the renewable fuel standard.

Cardin amendment No. 1520 (to amendment No. 1502), to promote the energy independence of the United States.

Domenici (for Thune) amendment No. 1609 (to amendment No. 1502), to provide requirements for the designation of national interest electric transmission corridors.

Cardin amendment No. 1610 (to amendment No. 1502), to provide for the siting, construction, expansion, and operation of liquefied natural gas terminals.

Collins amendment No. 1615 (to amendment No. 1502), to provide for the development and coordination of a comprehensive and integrated U.S. research program that assists the people of the United States and the world to understand, assess, and predict human-induced and natural processes of abrupt climate change.

Domenici (for Bunning-Domenici) amendment No. 1628 (to Amendment No. 1502), to provide standards for clean coal-derived fuels.

Bingaman (for Tester) amendment No. 1614 (to amendment No. 1502), to establish a program to provide loans for projects to produce syngas from coal and other feedstocks while simultaneously reducing greenhouse gas emissions and reliance of the United States on petroleum and natural gas.

The PRESIDING OFFICER. Under the previous order, there will be up to 2½ hours of debate with respect to amendment No. 1628, offered by the Senator from Kentucky, Mr. BUNNING, and amendment No. 1614, offered by the Senator from Montana, Mr. TESTER, with the time equally divided and controlled between Senator BUNNING, Senator TESTER or their designees.

The Senator from Montana is recognized.

Mr. TESTER. Mr. President, I wish to speak to amendment No. 1614, sponsored by Senators BYRD, ROCKEFELLER, LANDRIEU, SALAZAR, WEBB, and myself.

The Energy bill we have been debating is going to bring us greater energy independence and clean up our energy supply to help combat climate change.

This bill is clean and green and it will make great strides in developing clean energy sources and increasing efficiency. But we must admit we have done little in the bill to address America's largest energy resource and also one of our largest polluters—coal.

Coal supplies over half of our electricity generation, it drives our economy and manufacturing and can be turned into a liquid transportation fuel to replace foreign oil. Coal is relatively cheap and easily accessible. We now have enough coal for 250 years if we keep using it at the same rate we are using it now.

Not only are we going to keep using coal, but most energy experts predict we are going to use more of it into the future. We have to start doing better when it comes to greenhouse gas emissions from coal.

I do not believe the Government has been providing the right incentives to move the coal industry in the right direction. The amendment that I—and others I spoke of earlier—am offering today will provide Government grants for engineering and design of coal-to-liquid and coal gasification facilities.

It will authorize direct loans for facilities if they reduce their greenhouse gas emissions by 20 percent over the petroleum equivalent, which, by the way, is the same requirement we use for biofuels. To qualify, a facility must show that it can and will both capture and store 75 percent of its carbon dioxide. We need these parameters because we need to start doing things better than we have done in the past if Government is going to be supporting these projects.

There has been a lot of discussion in the last couple of days about coal-to-liquid fuels. I would rather get our energy from States such as Montana, Ohio, West Virginia, or Colorado than from the oil cartels in the Middle East. Unfortunately, the production of coal to liquids without capturing carbon dioxide emits over twice the amount of carbon dioxide than does petroleum, and climate change is as big a threat as the unstable countries where we buy our oil. When carbon is captured and safely stored, coal-to-liquid facilities and coal gasification plants can achieve carbon dioxide levels that are closer or better than a petroleum equivalent. If you combine the coal with biomass at the same facilities, you can reach emission levels that are far less than petroleum.

The National Mining Association recently ran an editorial in the New York Times identifying the benefits of clean coal technologies and its implications for national security. The editorial is on this chart. In a nutshell, what Kraig Naasz, president and chief executive of the National Mining Association, said was that a coal-to-liquid facility with carbon capture and sequestration combined with the use of biomass could achieve life-cycle greenhouse gas emissions 46 percent below a petroleum equivalent. That is good news indeed.

I believe our fuel sources are a national security concern, and we need to explore all safe and clean energy options to help break our addiction to foreign oil. Coat-to-liquid fuel is a part of that equation, and this amendment makes coal cleaner than petroleum when it comes to greenhouse gas emissions.

Climate change is an issue I take very seriously. I want to leave this world for my children and grandchildren in as good of shape or better than my parents left it for me.

Climate change is real. Our oceans are rising, our glaciers are melting, and wildly shifting weather patterns are causing more frequent hurricanes, dramatic snowstorms, and prolonged drought. I am a dryland farmer, and I have spent my entire life on the same piece of ground in Big Sandy, MT. As a farmer, you notice every little detail about the weather—moisture, temperature, when the plants bud, when they are ready for harvest. In recent years, something hasn't been right. The climate we have today is not the one that was there when I was a kid. We plant earlier than we used to, we harvest earlier, rain comes at different times, and the summers have become so hot and dry in Montana that the sky is filled with smoke from forest fires hundreds of miles away.

Steps can be taken to reverse the effects of climate change and improve the energy options we have available. Coal is cheap, we have a lot of it, and I think we should use it. But we must learn lessons from how we have developed coal in the past. The Department of Energy says that there are 151 new or proposed coal powerplants on the way by 2030, and some of those are coal gasification facilities. I am committed to finding ways to make the next generation of coal plants better than the last.

This bill encourages research and development of carbon capture and storage technologies. Carbon capture and storage may be our best option to reduce carbon emissions from coal. We even include a cost-share provision for carbon capture equipment that I sponsored with Senator BINGAMAN in the Energy Committee.

But we have done little to give industry the incentives to employ these technologies on a large scale. Wall Street really has no interest in loaning money for clean coal facilities because there is no economic incentive to reduce emissions. This amendment provides direct loans for 100 percent of the equipment used to reduce greenhouse gas emissions and up to 50 percent of the total project cost.

Coal gasification technology is our best opportunity to prove the capture of CO_2 on a massive scale and safely store it through an industrial process that gives us the products we need, such as fertilizers, plastics, electricity, and fuel. Carbon dioxide can be captured at a gasification facility, then compressed, piped away, and stored in geological formations, including oil and gas fields where they can increase the production of petroleum or CO_2 can be used in products that facilities produce, such as fertilizers, chemicals, plastics, and fuel.

The Syntroleum plant in North Dakota has been capturing their CO_2 for 20 years and piping it 205 miles into Canada for enhanced oil recovery. They capture 5,000 tons of CO_2 a day and sell the carbon to produce more oil. In Colorado, one company actually mines CO_2 from carbon deposits in the ground and pipes it to Texas for enhanced oil recovery, and, I should add, this is done for profit.

The amendment being offered today is a technology driver to move this industry into the next phase and help get the first few new generation facilities on the ground.

Government should only provide backing to the best technologies to help spur a clean industry that can demonstrate an overall societal benefit.

To be clear, industry will move forward with coal gasification projects and coal-to-liquid projects regardless of congressional actions, and plants have already been announced. But this is our opportunity to encourage these facilities to be clean and push the development of carbon capture and storage on a commercial and industrial scale.

Coal-to-liquid projects have been proposed for Illinois, Ohio, Wyoming, Montana, North Dakota, West Virginia, and the list goes on. These companies have proposed these projects without Government financing, but the emissions from these facilities are yet to be determined.

The timing of this Energy bill and this amendment is critical because designs could be modified to fit the parameters of this amendment, and we can be assured that these projects move forward with the cleanest technology available. Industry will benefit if we set clear guidelines as to the standards we expect to be met for Government backing.

Luckily, we have the science to back up our goals. A recent study from the Idaho National Labs proves that coal to liquids, when produced with carbon capture and biomass, can achieve life-cycle greenhouse gas reductions of over 40 percent from a petroleum equivalent. We see the bar graph with petroleum diesel being the baseline. If we look across at the fourth column, if we combine coal with 30 percent biomass to perform coal to liquids, we can see a tremendous reduction in CO_2.

Coal gasification with carbon capture and biomass is a vast improvement over our current use of coal. Congress is at a crucial point where we can help drive these facilities toward the best

technology available. This amendment is a challenge to industry, but it is a challenge that is technologically available and can and should be met.

Rentech, one of the strongest advocates of coal-to-liquid technology, proved my point in front of the Senate Finance Committee last April when they showed the members of the committee the potential of the technology on which they are working. What they said was that they agree that as carbon capture reaches the levels we spell out in this bill, combined with biomass, coal to liquids is far better than what we are doing currently.

I believe this amendment will drive a new, clean, and green coal-to-liquids industry toward startup and help offset our foreign dependence on imported oil. Besides fuel, it will make cheaper fertilizers, chemicals, and plastics.

Adopting this amendment will be a technology driver that is good for industry and is good for this country. I urge this body to support clean and green coal development.

Mr. President, I yield the floor to Senator BYRD.

Mr. DOMENICI. Mr. President, if it is in order or appropriate, I ask unanimous consent, to establish my position following Senator BYRD, when he is finished, that the Senator from New Mexico will be recognized for his comments.

The PRESIDING OFFICER. Without objection, it is so ordered.

The senior Senator from West Virginia.

Mr. BYRD. Mr. President, during my half century of service in this great body, I have seen too many energy shortages and too many half-hearted efforts by the Federal Government to respond. A geopolitical crisis erupts and oil prices rise. All too quickly, our economy is destabilized. Our national security is undermined. Americans become alarmed. Politicians promise solutions. Once the crisis passes, oil prices decline, public attention fades, and nothing happens to cushion the Nation from the next energy shock. All the while, our dependence on foreign oil grows with ever-worsening implications for our economic and national security.

About 40 percent of the energy we use in the United States comes from petroleum. The majority of this oil is imported from chronically unstable countries. It is shocking to think that our transportation system and so many sectors of our economy are dependent on a constant flow of energy from these dangerous and politically unstable lands. The very security of this great and powerful Nation is vulnerable to the whims of fanatical despots. The well-being of our country is always in threat of a government coup in Nigeria, a typhoon in the Persian Gulf, or a terrorist attack on oil shipments in the Middle East.

We must reduce our dependence on foreign oil. In a speech I made more than two decades ago in this Chamber, I warned the Reagan administration against cutting back on our energy programs. I pointed out that there is no national security without energy security and that we have neither as long as we are dependent on foreign oil. It seems as though some things never change. As we should have learned too many times during the past quarter century, leaving the security of our country so dependent on the vagaries of the free market is too simplistic, too unrealistic, and too dangerous.

Our dependency on foreign oil strikes at the very heart of our national security. Indeed, oil dependence is the Achilles' heel of our Armed Forces. The Pentagon itself has pointed out that our military's ever-increasing reliance on oil makes its ability to respond to crises around the world ''unsustainable in the long term.'' The Air Force pays about $5 billion per year for its fuel, with the Army and Navy close behind. Even more troubling, the United States now spends an estimated $44 billion per year safeguarding oil supplies in the Persian Gulf.

The money we spend on foreign oil too often finds its way into the pockets of terrorists determined to attack the United States. As former CIA Director James Woolsey put it, in buying foreign oil, ''we are funding the rope for the hanging of ourselves.'' Saudi Arabia, Iran, and Sudan have experienced a boom in oil revenues as the price per barrel of oil has gone through the roof. Reports are that some of these profits have been used to finance training centers for terrorists, pay bounties to the families of suicide bombers, and buy weapons and explosives for the groups attacking U.S. soldiers and marines. For years now, we have spent hundreds of billions of dollars fighting terrorists while at the same time we have provided countless sums of money to our enemies through our foreign oil purchases. This is sheer madness. It must end.

It is no longer acceptable for Congress to seek piecemeal, short-term solutions that become irrelevant as soon as the price of oil declines. We need a long-term strategic commitment to the development of clean, domestic-based energy technologies. We must dedicate ourselves to the developing of sources of energy that will move us away from oil dependence and provide better energy options. Chief among those must be coal, our Nation's most abundant source of energy. The United States has 27 percent of the world's coal reserves. We are the Saudi Arabia of coal, and then some. Thirty-three States have recoverable coal reserves. This means 66 Senators have a vested interest in promoting the use of coal. Our coal supplies are large enough to last for generations, fueling the electricity needs of our homes and our businesses. We don't have to ask someone else for this cheaper and abundant energy source; it is right here, like acres of diamonds, under our feet. It is there, there in the ground, for the taking. Coal can be burned cleaner and coal can be more efficiently burned today than at any time in our previous history. With the right kind of investments in clean coal technology, coal can become our lifeline. Coal can save us from foreign oil, from OPEC, from volatile summer gas prices, and from a disastrous foreign policy that revolves around protecting our oil interests abroad.

Through Federal funding, Federal research and development projects, and tax incentives, we have made great strides—great strides—both in increasing the efficiency of our coal-fired powerplants and reducing their emissions. Even with our currently underfunded clean coal technology programs, we will continue to make progress.

I know that a vocal minority would have us believe differently. They are the oil and natural gas producers who try to convince the American public that coal is not the answer. Don't believe it. No, don't believe it. They want Americans buying their more expensive oil and gas, not cheaper coal. They are interested in their profits and not the prices you and I pay at the pump or for our home energy bills.

The vast majority of Americans already use the cheap electricity provided by coal. They demand it. But with the proper support, coal could be providing other forms of cheap energy. The American military recognizes the hope that coal offers, which is why the Air Force is experimenting with using coal-to-liquids technology to fuel their aircraft. Coal has to be part, coal must be part of our energy strategy if we are ever, ever, ever to break our dependence on foreign oil. The American military recognizes it, the American people recognize it, and it is time that the Congress recognized it.

For several months now, I have been engaged in serious discussions with a bipartisan group of Senators to develop a program to promote the use of coal for transportation fuels and as a feedstock for our chemical industry. I thank those Senators and their staffs for their hard work in an attempt to reach our own version of a grand compromise on the future use of coal in this country. I particularly thank Senator BINGAMAN and the majority leader for their assistance with this proposal.

Even though there are significant challenges to the development of a coal-to-liquids industry in the United States, our dependence on foreign oil and the resulting cost to the country have created an economic environment that is favorable—favorable—for the industry to blossom. With a combination of tax incentives, loan guarantees, and regulatory support, along with technology-driven advances in environmental protection, we can reduce the risks associated with the construction of coal-to-liquid plants and stimulate private investment. We can and we must create a vibrant domestic marketplace for alternative fuels.

The added advantage of this proposal would be that the production of this

clean-burning fuel would provide opportunities to commercialize carbon capture and storage technologies. I believe that carbon capture and storage can help advance clean coal technologies, but we must provide both considerable funding and the key Federal guidance to hasten the arrival—in the ground—of carbon capture and storage projects that begin to implement the technology.

I hope my fellow Senators will stop, stop, stop and give serious thought to this proposal. I hope we have finally learned the lessons from the past, and that we will now seize the moment by the forelock.

Our Nation confronts an enormous challenge in breaking our dependence on foreign oil. For all too many years, we have denied—we have denied—the problem. We have delayed taking action. We have conducted endless studies—endless studies—and largely kicked the problem on down the road. We have separated it along regional and political lines and done and said everything but solve the problem.

Of course, the Senate is performing its constitutional function by debating these issues, and making sure the interests of the people and the States we represent are being protected. When the debate is over, however, it is also the responsibility of the Senate to find a workable solution. It is here that regional interests must blend into the national interest.

We have studied the matter, we have debated the issues, we have talked about the solutions, and now we must act. Now we must act. True energy independence at a time when our Nation no longer is dependent on the energy resources of unstable areas and rogue regimes will require give and take from all sides. In fact, in this most significant national quest, there can be no single winner, whether it be coal, whether it be oil, whether it be natural gas, or any environmental interest. If any one special interest wins, then the American people will lose. The American people will win if, and only if, we put aside our parochial interests, our partisan politics, and our petty differences and work together and compromise together for the national good. The time for bold action is here. Let us start to put American ingenuity to work for the benefit of America's future.

Mr. President, I yield the floor.

Mr. DOMENICI. Mr. President, is it appropriate for the Senator from New Mexico to speak now?

The PRESIDING OFFICER. The Senator may proceed.

AMENDMENT NO. 1628

Mr. DOMENICI. Mr. President, I have a few remarks as ranking member of the committee. I am going to speak first in favor of amendment 1628, the Bunning amendment, with reference to coal to liquids. Later on today—later on today, Senator BYRD—and I don't say this because you need to be on the floor or anything like that, but later in the day, when some other people have finished speaking in favor of this amendment, I will speak against your amendment and be very specific and precise as to why.

I do say to you and your very excellent staff that I think you will be interested in my reasoning, because I am not trying to be vindictive or pick one over another, but I think your amendment, when we finish talking about it, you ought to be worried about whether you have set standards in it that will never commit coal to be turned to liquids.

Mr. BYRD. I hope not.

Mr. DOMENICI. I think you have done that, by mistake or otherwise. The environmental requirements are too high for it to be achieved.

So the money can be used for things other than coal to liquid. That is what it will go for over time, because you cannot achieve the environmental standards. I don't know how I can do it later, but I will talk with you seriously about it.

For now I am going to speak to the Bunning amendment, and later I will do that other one, and if I have to do it in writing, because of my great admiration for Senator BYRD, I will write it up and show it to you, because I do not think you are going to get coal to liquid the way someone has drawn the standards for you. I do not know who drew those.

I rise today, in the absence of Senator BUNNING—I hope everyone in the Senate and those who are wondering why this distinguished Senator, who is so strongly in favor of this coal to liquids, is not here, let's make sure everybody knows that what is going on right now is a very important aspect of this energy bill. It is the tax portion, and Senator BUNNING is on the Finance Committee. They are writing the tax portion, Senator BYRD. So Senator BUNNING can't be here because he is there writing this giant tax provision that is going to be affixed to this bill.

First, I ask unanimous consent that the letter Senator BUNNING and I received this morning in support of this amendment that we have be printed in the RECORD.

There being no objection, the material was ordered to be printed in the RECORD, as follows:

HEADWATERS INCORPORATED,
South Jordan, UT, June 19, 2007.

Hon. PETE DOMENICI,
U.S. Senate,
Washington, DC.

Hon. JIM BUNNING,
U.S. Senate,
Washington, DC.

DEAR SENATORS DOMENICI AND BUNNING: Headwaters Incorporated supports adding your coal-to-liquid (CTL) transportation fuel amendment to energy legislation currently being debated on the Senate floor (H.R. 6).

Headwaters is a New York Stock Exchange company with deep roots in CTL technologies. Our company has licensed direct coal liquefaction technology to facilities currently under construction in China and we are conducting feasibility and engineering studies in The Philippines and India. In the United States, we are actively developing a project in North Dakota in concert with North American Coal Company and Great River Energy. We are also conducting feasibility studies with CONSOL Energy Inc. in several other states.

Your amendment strikes the appropriate balance between enhancing our nation's energy security and advancing technologies to deal with climate change. To accomplish the greenhouse gas emissions standards required in your amendment, CTL providers will utilize carbon capture and storage technologies at a scale not previously deployed. This will do much to develop capabilities that will be used by many industries in the years to come.

It is time for America to keep more of its energy dollars at home, creating jobs making clean fuels from America's most abundant energy resource—coal. These fuels will work in our existing distribution systems and vehicles and will create a more secure bridge to the next generation of transportation fuels.

Sincerely,

JOHN N. WARD,
Vice President,
Marketing & Government Affairs.

Mr. DOMENICI. Now I would look to repeat once again my opposition to the Tester-Bingaman amendment on coal to liquid fuels. I believe it does little to advance the domestic coal to liquid fuels industry, and could, in fact, harm that effort. But I will return to the floor later today and speak to it in more detail.

I wish to provide some context for my colleagues as we move forward to vote this afternoon on the issue of coal to liquids, because it is so important for our country that we create a situation which will generate incentives so those who will invest money and try innovative technologies will do so for coal to liquid.

We have an abundance of coal. We have an abundance of need for liquefied coal. We have a lot of people who do not want to see this happen because they are fearful of the environmental consequences of this transition.

First, we must increase our national energy security by decreasing our reliance on foreign resources of crude oil. Second, we must ensure that the fuels available to American consumers are affordable. Third, we must seek to improve the environmental performance of the energy resources we consume.

I believe coal to liquid fuels will allow us to accomplish all three goals, and that the Bunning amendment puts us on the right path to get there. In terms of the opportunities for increased energy security that are created by coal to liquids, the case to be made is a convincing one. Our country accounts for 26 percent of the world's proven reserves, 26 percent of the coal.

We have enough coal right here in America to meet our needs for more than 200 years. In every authoritative forecast of domestic and world energy consumption, coal use is projected to increase, not decrease. No matter what people say, you know they don't want coal because it is not clean, every projection says there will be more coal used, not less, in the next 10, 20, 30 years.

What we have to do is be sure that since we have so much in America, we are pushing that and pursuing that with a hand on the accelerator, that makes sure what we come out with is a fuel that is clean enough to sustain itself among the fuels we are permitted to use, where it is as good as any we are promoting for the American people for their future.

Here in the Energy and Natural Resources Committee, we often talk about our Nation's increasing reliance on foreign sources of crude oil. We have included provisions in this bill that represent significant progress toward reversing this trend. I believe we should go further, however, and make better use of coal as our most abundant, secure, and affordable resource.

The facts in support of coal to liquid as a path to greater energy security don't only rely on the sheer abundance of this resource within our borders. It is because of this secure supply, but also due to the characteristics of coal to liquids as a fuel that the Department of Defense has undertaken an aggressive program to test, certify, and ultimately transition to meeting much of their demand with coal-to-liquid alternatives.

I want to repeat what I have just said about the fact that we are so abundantly blessed, and it is here and it is ours, and it is to be used by us. Because of this, the Department of Defense has undertaken an aggressive program to certify, ultimately to test and certify, to meet much of their demand with coal-to-liquid alternatives.

Last year the Air Force went through over 3 billion gallons of aviation fuel. That amount represents more than half of the fossil fuels consumed by the Federal Government. That is amazing. Half of all the fossil fuels consumed by the Federal Government was the 3 billion gallons of aviation fuel.

The goal of the Air Force is to certify their entire fleet by 2010, with a 50–50 mix of jet fuel with coal-to-liquid fuels and meet 50 percent of their demand for fuels with coal to liquids by the year 2016.

We must be encouraging progress along these lines, and the Bunning amendment is a step in the right direction. Coal is affordable. If we consider historic price trends, based on nominal dollars per million Btu's between 1980 and 2005, the cost of petroleum fluctuated between $6 and $16; natural gas fluctuated between $2 and $10; retail electricity fluctuated between $14 and $24; and coal between $1 and $3.

Is that not incredible? Now, if we can find a way through our technological advances and technological genius to make more coal usable, think of that, we will inject into this stream of usable resources that are used in the place of energy a fuel that is the cheapest and most stable fuel we have. I told it to you in incredible numbers. These are accurate. Coal, between $1 and $3 during the same period that retail electricity has been $14 to $24. You got that, my good friend from Montana? Incredible.

Petroleum fluctuated from $6 to $16, and here is that good old coal, $1 to $3. The problem is, we haven't figured out ways to use it for enough of the uses for which these energies I ticked off are used. Coal is secure. But it represents one of our most stable and affordable energy sources.

It should be our policy to ensure that this feedstock shares an equal footing with others that are available for production of alternative fuels. Of course, we must ensure that we continue to reduce the environmental impacts associated with energy resources we consume. Here, too, the ability of coal-to-liquid fuel to achieve this significant improvement is impressive. By virtue of the process coal must undergo in producing a liquid fuel, nearly all of the criteria pollutants are removed by virtue of the processes coal must undergo in the process of liquid fuel. I am repeating it. Nearly all the criteria pollutants are removed.

This represents a significant improvement relative to conventional diesel and includes a reduction in unburned hydrocarbons, carbon monoxide, nitrous oxide, particulate matter, and others.

I wish to direct the attention of my colleagues to the chart behind me which represents an average of the findings on the national renewable energy laboratories and other Government entities. It shows the percentage reductions achieved in the categories I have mentioned, by using coal-to-liquid fuels instead of conventional diesel.

Fuels are virtually sulfur free and dramatically reduced the emissions of other harmful pollutants. There it shows it to you right on the chart. Environmentally, what remains is a concern about the emissions of greenhouse gases. This too can be effectively addressed by coal-feeding biomass, utilizing a plant's carbon dioxide for enhanced oil recovery or through future efforts to achieve reliable and safe geological sequestration.

Those seeking to build coal-to-liquid fuel plants believe they can meet the same standard of 20 percent better than gasoline that is included in the underlying bill for ethanol. I believe no single one of the priorities I laid out as important to the consideration of the fuels legislation should overshadow the other. Coal to liquid meets all three priorities.

On this basis alone, I believe the Bunning amendment is the right approach. Now, some may ask, if this alternative fuel is such a good idea, why have we not already begun to produce it? The Department of Energy has testified that as long as the price of oil remains above roughly $50 to $60 a barrel, the first few gallons of coal-to-liquid operations will be economically viable. So as long as energy remains at that high price, from there, commercialization will further improve the competitiveness of coal-to-liquid fuels. It is a concern that oil-producing nations will increase production to lower oil prices, thereby undercutting the viability of alternative fuel production. That has created an unwillingness in the private sector to finance these plans.

I believe the most proven approach to addressing concerns of alternative fuel developers is to provide a guaranteed market and assurances that the market for these fuels will remain present. This is what the Bunning amendment does. This is all it does. This is all we need to do. Specifically, and starting in the year 2016, it will require that three-quarters of a billion gallons—that is all, three-quarters of a billion gallons—are produced a year. That gets us to a level of 6 billion gallons by 2022. Now, I would remind my colleagues that biofuels are mandated at a level of 36 billion gallons that same year under the base bill. We have required that coal-to-liquid fuels have lifecycle greenhouse gas emissions that are at least 20 percent better than gasoline. That is how we make sure that greenhouse implications are not something we need to worry about.

This is the same standard required of biofuels in the base text of the legislation that is currently before the Senate. We have seen the utility of a mandate in the current success of ethanol. In fact, currently the use of ethanol has even exceeded the mandates set forth in the Energy Policy Act of 2005. I believe the time has come to embark upon a similar success story in coal-to-liquid fuels.

If the environmental obligations are the same as the mandate for biofuels—and the coal-to-liquids mandate is one-sixth the size of a biofuel mandate—there is no reasonable basis to vote no on the Bunning amendment. The choice given by the amendment is coal from Wyoming, West Virginia, Connecticut, and North Dakota versus oil from the Middle East or Venezuela. The choice is an easy one. I encourage colleagues to vote for amendment No. 1628. It is not a huge amount of production we are going to assure the use of, but it will push producers and inventors, technocrats and people with money that they will all be working toward a new way to do it because by that point in time, they want to be able to say: Ours is ready. Please buy it. That is what the law says you are supposed to do.

I yield the floor.

The PRESIDING OFFICER. The Senator from Wyoming.

Mr. ENZI. Mr. President, I rise to speak on the two amendments before us. I have some grave concerns. I am afraid this Energy bill could easily turn into an antienergy bill. If it does, we will have decreasing supplies of fuel and ever-increasing prices. I don't think that is where we intend to go.

I rise to give strong support to amendment No. 1628 offered by my colleagues, Senator JIM BUNNING and ranking member PETE DOMENICI. The amendment establishes a fuel mandate

program for coal-to-liquid fuel that is identical to the renewable fuel standard we are implementing with this legislation. I know originally the two amendments had some similarities and were being worked on as one with a bipartisan group. That is what we ought to do. But somehow it got polarized and shifted into two separate amendments. One could have phased into the other and wound up with much stronger requirements. That was where I was hoping it would go, on a phased-in basis, so that we could actually have coal-to-liquid technology and that infant industry could then grow into one that would meet the strict standards that technologically cannot be met at the present time.

If we discourage all development of coal to liquids, we will not have clean coal to liquids. We will not have an adequate fuel supply or we will have a fuel supply that is very expensive, and that will curtail the economy.

I ask unanimous consent to have printed in the RECORD a letter from the Governor of my State, Dave Freudenthal, who talks about a glidepath we need to get the infant industry started and into place.

There being no objection, the material was ordered to be printed in the RECORD, as follows:

THE STATE OF WYOMING,
OFFICE OF THE GOVERNOR,
Cheyenne, WY, June 18, 2007.

Hon. JEFF BINGAMAN,
Chairman, Energy and Natural Resources Committee, Hart Senate Office Building, Washington, DC.

DEAR SENATOR BINGAMAN: I want to commend you and your committee for taking up the matter of Coal-to-Liquids technology as part of the consideration of national energy policy. As you know, if we can construct the proper policy framework for this technology, the benefits are many. The country will be able to make use of an abundant fuel source to begin to mitigate our dependence on imported fuels. Capital investment and job creation will also be a significant benefit for America.

My view is that with the exception of operations in South Africa, CTL is an emerging technology. Clearly not all the design, engineering and performance issues are determined as would be expected in the case of a mature industry. There is much work to be done with respect to environmental behavior and operational efficiency.

Given the emerging nature of this promising technology, it seems prudent and appropriate to set goals that stretch the technology, represent a step forward and would result in a better environment. However, setting requirements that are likely not achievable in the near term with the first plants may only serve to discourage the kind of technical and financial investment required to bring the CTL technology forward to commercialization.

A 'glide path' that would require continuous improvement of environmental performance with a starting point better than existing alternatives seems a reasonable position for the first CTL plants. This would allow policy makers to keep the ultimate targets intact but acknowledge the evolving nature of the technology. It seems this would be a much better signal to send to the country. This should serve to stimulate rather than discourage the kind of market behavior on the part of cleaner energy entrepreneurs and technologists we need to help us solve these complex energy and environmental challenges.

Thank you for your consideration.

Best regards,

DAVE FREUDENTHAL,
Governor.

Mr. ENZI. I have listened for the past week as my colleagues have discussed the importance of domestic fuels. They argue that it is essential for us to reduce our dependence on foreign energy barons and that the mandate that this bill lays out for 36 billion gallons of biofuels is an important step in being energy independent. I agree with my colleagues and their assessment that we need to produce more domestic fuel, and the amendment I am speaking in support of does just that. By mandating that we use 6 billion gallons of fuel derived from coal, we will use our Nation's most abundant energy source to help break America's addiction to oil.

Coal-to-liquids technologies are not new. The technology has been around since the 1940s. There is no question that it can be used today in transportation markets that currently exist. It can be transported in pipelines that currently exist. Because it comes from coal, our Nation's most abundant energy source, it can be produced at home by American workers without some of the international interference. Coal-to-liquid plants are being developed in China. They understand the need for the economy to have the fuel to operate on. They are buying up resources. In Canada, they tried to buy resources in the United States. They know the future of their country depends on having sufficient fuel, particularly for transportation.

Coal-to-liquid plants are already being developed in China. They are being developed in other major industrialized nations. But they are not being developed in the United States. I am concerned that as we sit on the sidelines, other nations will take advantage of our inaction, and our economy will suffer. That is why I am speaking in support of the amendment offered by my colleagues from Kentucky and New Mexico. The amendment they have introduced is the right approach to moving this issue forward in a way that will truly help the coal-to-liquids industry. In doing so, it will truly benefit the American people.

There is a competing proposal from my colleague from Montana that I will discuss in a moment, but I first want to discuss why this is the right approach, if we are to spur investment in the coal-to-liquids industry. Simply put, if our goal is to create a market for a new energy source, mandates work. We have seen it with other current renewable standards. Since passage of the RFS as part of the Energy Policy Act of 2005, we have seen a dramatic rise in the number of ethanol plants that exist, and there is no sign that industry is slowing down. That was the mandate we placed. It is being met. We have an opportunity to do so today for coal to liquids. However, we will do so on a smaller scale, requiring just 6 billion gallons of coal-derived fuel as opposed to 36 billion gallons mandated for biofuels in the bill. We will do so with additional environmental standards.

Like the underlying legislation, we require the 20-percent life cycle greenhouse gas reduction language. However, unlike the underlying bill, the amendment requires coal-to-liquid plants to operate with technology to capture carbon dioxide emissions. In general, I am not a fan of mandates. I have struggled with this issue. However, if our goal is to reduce our Nation's dependence on foreign energy sources and to produce more fuel domestically, the current renewable fuels mandate has proven that it is an approach that works. In direct contrast to the success of a mandate is the failure of the loan guarantee programs which have issued exactly zero loans almost 2 years after the program was created in the Energy Policy Act. The approach of the Senator from Montana of a direct loan program is different than the approach taken in the Energy Policy Act. Although that is the case, I am concerned that his legislation will simply create another loan program that never happens. A direct loan program requires that the Federal Government loan taxpayer money to private companies to move forward. In the very tight appropriations climate we are currently experiencing, my colleagues are kidding themselves if they think we will spend the kind of money it takes to build one of these plants through a direct loan.

How do I know about that? There is one proposed in southern Wyoming. The company is a coalition of companies to put the money together for one of these plants. It is a huge refinery. That is what a coal-to-liquids plant is. It changes our low-sulfur coal into diesel, and that is what we are requiring trucks to use now, diesel without coal. It is going to be between the little town of Hannah and Medicine Bow. Hannah was a coal mining town. The coal was deeper so it wasn't useful or economical for them to mine it anymore. It shut down. People are there with houses they can't sell and jobs they don't have. They are retired. But this plant is coming into that area.

The reason it is coming to that area is, first, there is the coal resource but, more importantly, there is a pipeline there. This is one of the fuels, unlike ethanol, that can be put into a pipeline and transported. They have already sold all of the fuel they can build. They put $2 or $3 billion worth of money together to build what will be the first refinery built in the United States in 30 years. It will solve a huge economic problem in that part of the State. I have to say, the requirements in the amendment of the Senator from Montana will probably stop this because the technology isn't there. People

aren't going to venture $2.3 billion on the possibility that the technology might be there. I would hope we would put some research money into technology on carbon sequestration and carbon capture. I have encouraged the University of Wyoming to do that with some of the abandoned mine land money. But that is down the road and should be phased in so that plants like this can be built.

In addition to my concerns about the loan program, I am also concerned that the amendment of the Senator from Montana sets forth environmental standards that are technologically unachievable. We have devoted an entire title of this bill—title III—to the research and development of carbon sequestration technologies. I have faith that this research will help us to advance carbon sequestration efforts, but I don't believe we are there yet. As such, the Tester amendment's requirement for 75 percent sequestration—and it is not phased in—seems unreasonable. I am not a technical expert. I have spoken to the people who are planning the coal to liquids facilities. None of the developers I have questioned have suggested they can achieve the 75 percent mandated by the Tester amendment. Both of the Democratic and Republican proposals will reduce greenhouse gases in a major way. Both of these amendments require a 20-percent improvement, but the Democratic proposal goes too far and sets standards that aren't technologically achievable.

My colleagues are faced with a choice. The amendment offered by Senators BUNNING and DOMENICI takes a proven approach of mandating that we use a domestic fuel. It adds responsible and reasonable environmental standards, and it will work to spur development of a domestic coal to liquids industry. I wish the bipartisan group could have gotten together and actually worked out something, but there are some other things playing in this whole process. Sometimes we get so wrapped up in making a political point that we wipe out progress for the United States. I hope that something can be done on that yet, but we will vote on two different amendments. The Bunning-Domenici one has the potential for actually providing some facilities and additional fuels. If we truly want to see coal to liquids plants built in the United States, only one of the approaches before the Senate works. That approach is the one offered by Senators BUNNING and DOMENICI. I hope all of us will support that amendment and see that coal to liquids and fuel independence happens.

I yield the floor and suggest the absence of a quorum.

The PRESIDING OFFICER. The clerk will call the roll.

The bill clerk proceeded to call the roll.

Mr. BOND. Mr. President, I ask unanimous consent that the order for the quorum call be rescinded.

The PRESIDING OFFICER. Without objection, it is so ordered.

Mr. BOND. Mr. President, I rise today to speak on behalf of the Bunning coal to liquid fuel amendment. This was an amendment cosponsored and championed by our dear late friend, Senator Craig Thomas. If we could adopt this amendment and pass it into law, I think it would be a fitting tribute to the memory of this very fine servant of the people of Wyoming and of the United States.

We have plenty of Members of the Senate who would like to reduce our involvement in the Middle East. Maybe they supported our gulf and Iraq wars; maybe they did not, but they would sure like us to reduce our current involvement, and they certainly would like us not to have to go over there every time there is trouble. Count me in as one of that broader group.

There is another group of Senators, and I would be included in those as well, that would like us to improve the environment by reducing greenhouse gases. They support reducing the lifecycle greenhouse gases emitted during the production of fuels. Indeed, we are considering provisions to require biofuels produce 20 percent less lifecycle greenhouse gases during their production.

So I ask those Senators—all of you who support reducing our dependence on Middle Eastern oil, all of you who support requiring fuels to produce less greenhouse gases—please support the Bunning-Domenici coal to liquid fuel amendment that will do both.

Domestically produced fuel made from coal will reduce our dependence on Middle Eastern oil. Every barrel of oil we produce from America is a barrel of oil we do not need to import from Saudi Arabia, Kuwait, Iraq or Venezuela. Every barrel of oil we produce from America will reduce our need by that much to intervene in local Middle Eastern disputes.

Domestically produced fuel made from coal will improve the environment. Coal to liquid fuel, with its sequestration of pollutants, will be lower in acid rain-causing sulfur and soot-producing particulate matter. The Bunning amendment will also cut greenhouse gas emissions compared to gasoline production by mandating 20 percent less lifecycle greenhouse gas emissions. No coal to liquid plant will receive a cent of Government money unless it can meet this greenhouse gas reduction requirement.

Domestically produced fuel from coal will improve our health. Too many children and elderly suffer from asthma, an acute condition caused by air pollution. Coal to liquid fuel is lower in ozone-causing nitrogen oxides, soot-producing particulate matter, as I mentioned, and toxic emissions from volatile organic compounds.

Domestically produced fuel made from coal will improve the performance of our military. Coal to liquid fuel provides significant performance advantages for military jets and aircraft. The Air Force is most interested in signing long-term supply contracts that will enable them to provide a market for the clean coal to liquid fuel which is envisioned in this amendment. CTL fuel burns at a lower temperature, burns cleaner, and performs better at both lower and higher temperatures. That is good for our war fighters who need every advantage they can get.

Domestically produced fuel made from coal is good for our existing infrastructure. Coal to liquid fuel can go right into our existing pipelines, gas tanks, and engines without any cause of problems. We will not need new pipelines, new storage or new pumps as with biofuels.

Domestically produced fuel made from coal is also good for consumers. Coal to liquids offer long-term supply guarantees without the fear of supply shocks from external forces in other countries. Do you ever wonder why gas prices jump up every time some Middle Eastern radical shoots off a rocket in his neighbor's territory? That would not happen to the fuel we are producing from coal to liquids.

Domestically produced fuel made from coal is also good for taxpayers. Coal to liquids offers the ability to lock in long-term price cut guarantees. I think all of us realize that Southwest Airlines used this long-term fuel supply hedging to save billions of dollars and avoid bankruptcy. Other airlines lost millions and fell into bankruptcy paying for high-priced fuel on the spot market. At the same time, Southwest produced profits in part from the savings from their long-term contracts to buy fuel. We can use this same strategy to benefit all Americans with coal to liquids and specifically by supplying that fuel to the Air Force and other Government users. I would hope the other users of fuel would realize the advantage, but we can do something now to start that market and to assure that technology goes into production.

So I urge my colleagues to give a hard look to the Bunning-Domenici coal to liquid fuel standard amendment. I would say, I would add Craig Thomas's name to that list as well. Sponsors have trimmed back the amendment to require more modest and realistic amounts of CTL fuel. Sponsors have also included the same 20-percent lifecycle greenhouse gas reduction mandate and a requirement for coal to liquid plants to operate with technology to capture carbon dioxide emissions.

We can use the carbon dioxide, so captured, to pump into previously depleted oil wells to generate more production or we can pump it into substructures, geological formations, which will capture and keep that CO_2 sequestered.

I urge my colleagues to support the Bunning-Domenici amendment. Our future in terms of energy independence, our future in terms of a cleaner environment depends on it.

I thank the Chair and yield the floor.

The PRESIDING OFFICER. The Senator from North Dakota.

Mr. DORGAN. Mr. President, I ask unanimous consent to use 12 minutes of Senator TESTER's allotted time.

The PRESIDING OFFICER. Without objection, it is so ordered.

Mr. DORGAN. Mr. President, this is the right subject, this issue of alternative fuels. I commend all my colleagues for being here to talk about this important issue.

I have mentioned often on the floor of the Senate, we live on this little planet of ours, and on this planet we circle the Sun, and we happen to live on a little patch on this planet called the United States of America. A substantial amount of oil is used here. We use one-fourth of all the oil that is pulled out of this planet every single day. About 84 million gallons of fuel is pulled out of this planet every day, and we use one-fourth of it in this country.

Unfortunately, much of the resources—the oil resources—exist elsewhere. Over 60 percent of that which we use in oil comes from off our shores, much of it from very troubled parts of the world: Saudi Arabia, Kuwait, Venezuela, Iraq, Iran, and so on. In a circumstance where we have such a prodigious appetite for energy—oil in this case—and so much of it exists off our shores, it makes us very vulnerable—extraordinarily vulnerable.

If tomorrow, God forbid, terrorists should somehow interfere with the pipeline of oil to the United States of America, we would be flat on our back. Our economy would be flat on its back because we get up every single morning in this country and we pull the switch, we start the engine, we do all these things that heat the water for the shower and air-condition our home. We have such an unbelievable appetite for energy.

With respect to oil itself, we are held hostage by having so much of it coming from off our shores. Therefore, the question is, how do we become less dependent or how do we become independent of the Saudis or the Kuwaitis or others who have so much oil?

Is it a good thing for us to try to become independent? I think it is. So how do you do that? Well, you do that in a lot of ways, one of which—an important ''one of which''—is to develop renewable alternative fuels.

So we are talking about the biofuels. We are talking about ethanol. We are talking about a lot of different issues—cellulosic ethanol. Today on the floor of the Senate, we now talk about coal to liquid. Coal to liquid means taking coal and producing from it diesel fuel. That coal to diesel is another way of producing alternative fuels.

It is very important, however, for us, as we proceed down this road, to do this the right way. There is, perhaps, an easy way and a harder way to do it or a right way and a wrong way to do it, but all of us who come here talking about alternative fuels, I think, are talking about the right subject.

This issue of coal is very important. Coal is the most abundant resource that exists in this country. It is our most abundant. It is our most secure. It is here. It is the lowest cost American resource. It is estimated we have over 600 billion barrels of oil equivalent in coal. Compare that, for example, to the largest oil reserves in the world, which are held by the Saudis, estimated at about 260 billion barrels of oil. Again, the Saudis have the largest repository of oil we know of, estimated at about 260 billion barrels. Our coal has an oil equivalent of about 600 billion barrels.

Well, the question is: How do we use coal? Because coal has a carbon footprint, it has an impact on our environment. I am chairing the Energy and Water Subcommittee on Appropriations. In the accounts I am now working on with my colleagues, I am going to put a great deal of money into clean power and into clean coal technology so we can unlock the mysteries and find ways to continue to use our coal, our most abundant resource, without in any way injuring our environment. I believe we can do that. I am going to tell you in a minute an example in North Dakota that is occurring that holds great promise, in my judgment.

But we have a lot of experience in burning coal for electric generation to produce electricity. We have a good understanding of the challenges we face as a result of that with respect to carbon reduction in those plants, the coal-fired electric generating plants. We also have some experience turning coal into synthetic natural gas. The only plant in the United States in which lignite coal is taken out of the ground—coal is extracted from the ground and put in a processing plant to turn coal into synthetic natural gas the only circumstance in the country where that occurs is on the prairies of North Dakota. It is interesting that the coal gasification facility is really a technical marvel—a technological marvel, I should say. It is producing synthetic gas in a way that is exceeding expectations. It produces very valuable byproducts, and it does, in fact, produce CO_2.

So in this coal gasification plant, with the production of CO_2, which we don't want to admit in great quantities into the atmosphere because of climate change, we have done something that is really pretty interesting. We capture 5,500 tons a day of CO_2 in that plant, put it in a pipe, and in that pipeline it is transported 205 miles north into Canada, where it is invested into the ground in Canadian oil wells to make marginal oil wells more productive. So we have beneficial use of sequestration of CO_2 by piping it to Canada and investing it into the ground to essentially make their oil wells more productive. It has sequestered about 7 million tons of CO_2 into the Weyburn Field since the start of the project in the year 2000. It has doubled the field's oil recovery rate and extended the life of the oilfield by 15 to 20 years. So you talk about beneficial use of CO_2—first of all, capturing it, keeping it from escaping into the atmosphere, and second, using it for beneficial use. I think this is the largest example—the largest demonstration of that—in the entire world.

Now, the question before us today will be a couple of different presentations on coal to liquid. I support coal to liquid. I believe it is part of an alternative fuel strategy that makes sense for this country. But we come to an intersection with energy and climate change, energy and the environment. It is an intersection a lot of people would prefer not to approach, but nonetheless we are there. We can't pretend one doesn't exist. They both exist. They coexist. They have an impact on each other. The question of how we do coal to liquids is a very important question in the context of how we continue to use our abundant coal resource.

Some say the most beneficial use of coal is coal to synthetic natural gas. I have just described how that is being done. Some say another beneficial use of coal is coal to plastics. There are many ways and many approaches to use coal for beneficial use at the same time as we protect the environment.

We have examples in amendments being offered today of the requirement of not only life-cycle reductions in emissions—and I believe both of the amendments have equivalent life-cycle reductions in emissions, but only one has a carbon capture requirement, which I think, frankly, is going to be required as we move forward with coal to liquids. We might debate about where that carbon capture requirement ought to be established, under what conditions can it be met, but I don't think there is much choice that we, as we proceed with coal to liquids, establish a carbon capture standard. I believe the Tester amendment does that in a way that says, I think for many of us, we fully support coal to liquids. We also support all of the other technologies that provide for the beneficial use of coal, which includes, as I have just described, coal to plastics and coal to synthetic natural gas, and so on. But as we proceed with coal to liquids, it is very important that we capture and sequester CO_2, just as we do in North Dakota with this synthetic natural gas plant.

Let me also point out that we have other ways of using coal—biomass cofed with coal to produce liquids. We can actually take CO_2 out of the atmosphere with that process. The plants would capture the CO_2 as they grow, and that CO_2 would be captured in the gasification process, along with the CO_2 from the coal. So it could be permanently sequestered in that circumstance. As a result, the overall carbon footprint for coal biomass to liquids would be better, for example, than with petroleum.

So there are so many different applications and different ways that I believe coal can play a very important

role in this country's future. As I indicated, I am going to be adding substantial funding with respect to clean coal technology and the research that is necessary to unlock the capability, the scientific capability, and technology to be able to continue to use our abundant coal resources long into the future.

It makes little difference if we have the equivalent of 600 billion barrels of oil in coal resources if we can't use them. To say we have reserves equivalent to 600 billion barrels of oil, if you can't use that coal, it means very little to this country's future. I believe, when you take a look at the most abundant resource, we need to be able to use it, but I also understand and believe we need to be able to use it in circumstances where we can produce in the future a coal-fired electric generating plant that is a zero-emission plant. I believe that is possible. Now, can we do it tomorrow? Probably not. But I believe that through technology, we can accomplish these things.

The same is true with respect to coal to liquids. I don't believe the debate among those of us who have spoken on this subject today is whether coal to liquids makes sense. It will contribute as a part of our alternative fuels to make us less dependent on foreign sources of oil, and that is something we should all aspire to have happen. But it will also, as we proceed in this direction, require us to have carbon capture and sequestration in a manner that is meaningful.

One of the amendments today will establish a 6-billion-gallon requirement. I believe essentially the same amendment a couple of weeks ago said it should be 21 billion barrels as a mandate or requirement. I don't know where those numbers come from. I just believe, as I think most who have spoken believe, that we have to move in the direction of making coal to liquid work in a way that is compatible with this country's environmental needs.

So I am going to support the Tester amendment. I hope that at the end of the day, we will have received a message here from the debate in this Congress that says: Yes, alternative fuels make sense; coal to liquids makes sense; so, too, do carbon sequestration and carbon capture.

Mr. President, I yield the floor.

The PRESIDING OFFICER. The Senator from Ohio is recognized.

Mr. BROWN. Mr. President, I ask unanimous consent to use Senator TESTER's time for up to 5 minutes.

The PRESIDING OFFICER. Without objection, it is so ordered.

EMPLOYEE FREE CHOICE ACT

Mr. BROWN. Mr. President, I rise to speak for a moment on the Employee Free Choice Act, the legislation we will be considering this week and legislation which will, frankly, help to build the middle class. That is something I know the Presiding Officer spoke about in Pennsylvania often in the last year, as I did in Ohio.

We know what has happened to manufacturing jobs in this country, many of them good-paying union jobs. In my State, we have lost literally hundreds of thousands of them—more than 3 million in the last 5 years nationally. We know what has happened as profits and wages have gone up in this country—excuse me—as profits and top executive salaries have gone up. We know that for most Americans, their wages have been stagnant. Part of that is the decline of unionization. Poll after poll after poll shows that most people in this country, if presented with the opportunity, would like to join a union, but most are denied that opportunity because of the kind of workplace they are in oftentimes but oftentimes simply because management—employers—is able to beat back any kind of unionization effort.

That is the importance of the Employee Free Choice Act. Let me illustrate by an example. The Presiding Officer and I sit on the Agriculture Committee together and one day back in February, our first month on the job—roughly the first month—we heard from a woman from southwest Ohio who came and testified on food stamps. The food stamp benefit in this country on the average is $1 per person per meal. She and her son, as a result, get about $6 a day in food stamps. She works full time. She is a single parent with a 9-year-old son. She is the president of the local PTA of her son's school. She teaches Sunday school, and she volunteers for the Cub Scouts for her son. She works full time making about $9 an hour. She is a food stamp beneficiary. She occasionally makes her son pork chops, which he likes to eat once or twice at the beginning of the month. During the first couple of weeks, she takes him to a fast-food restaurant once or twice. Almost invariably, the last couple of days of the month, she sits at the kitchen table with her son, just the two of them, and she says she doesn't eat.

He says: Mom, what is wrong?

She says: I am just not feeling well today, son.

She has run out of money. It happens almost every month. She is playing by the rules. She works hard. She is doing almost everything we ask. She is involved in the community.

My belief is that, through talking to people like her, if she had the opportunity to join a union, she would see several things happen. She would see a higher wage. She would be more likely to have health insurance to build toward a pension. All the things everybody in this institution has, everyone who sits in the U.S. Senate—everyone who works in this institution, on that side of the Capitol or on this side of the Capitol, has health care, has a decent wage, and has a decent pension.

The single force that gives people an opportunity for health care, a decent wage, and a decent pension is unionization. We know that. If you trace the numbers of people joining unions and you draw a graph about wages in this country, the lines are almost parallel. We are a more productive workforce than we have ever been. Yet wages have not kept up with productivity. When you measure, for decades and decades in our country, as productivity went up, wages went up. But during the last few years, as productivity has gone up sharply, wages have continued to remain stagnant. That is in large part because of the decline of unionization.

That is the importance of the Employee Free Choice Act. That is why it matters to our country. That is why it matters for building a strong middle class. That is why the Senate this week should pass the Employee Free Choice Act.

Mr. President, I ask unanimous consent that at 2:15 today, there be 60 minutes remaining for debate with respect to the Bunning and Tester amendments, that the time be equally divided and controlled, and that the remaining provisions of the previous order remain in effect.

The PRESIDING OFFICER. Without objection, it is so ordered.

RECESS

Mr. BROWN. Mr. President, I ask unanimous consent that the Senate stand in recess under the previous order.

There being no objection, the Senate, at 12:41 p.m, recessed until 2:15 p.m. and reassembled when called to order by the Presiding Officer (Mr. CARPER).

CREATING LONG-TERM ENERGY ALTERNATIVES FOR THE NATION ACT OF 2007—Continued

The PRESIDING OFFICER. There are 60 minutes equally divided under the Bunning and Tester amendments.

Who seeks time?

The Senator from Kentucky is recognized.

AMENDMENT NO. 1628

Mr. BUNNING. Mr. President, I rise to talk about the Bunning, et al., fuel amendment No. 1628. Senator HATCH has asked to be listed as a cosponsor. I ask unanimous consent that he be added as a cosponsor.

The PRESIDING OFFICER. Without objection, it is so ordered.

Mr. BUNNING. Mr. President, for too long America has ignored its energy security. Many of us can remember the energy crisis in the 1970s. We were held ransom by a monopolistic oil cartel and forced to endure shortages, gas lines, and high prices. In the early 1980s, just as America began to invest in alternative fuels, the oil-producing states of the world crashed prices to make new technology uncompetitive. During most of the last 25 years, we have enjoyed low prices and plentiful supplies. But we have had to pay a price. Today, we find that America is addicted to oil.

September 11, 2001, and the hurricanes in the gulf region have shown the