

So now what the new roadmap for the Republicans does is it says for these people who are 55 and in the industrial Midwest who have seen the diminishment of their wages over the last 30 years, while the top 1 percent was going up, they're saying now they want to take the Medicare program and just give some support to let the senior go out into the free market and buy their own Medicare.

So Medicare is "medi-gone." You are now going to be on your own. So now if you're a senior citizen in the United States under the Ryan roadmap—not this Ryan, the Ryan from Wisconsin—under his roadmap, the Medicare program will give you money, and it will not increase with the level of health care inflation, which is 10 to 15 percent a year. So they'll give you some money to support you to go out and get your health care. It won't keep up with inflation, and there will be nowhere else to go. These same people who over the last 20 or 30 years projected into the future, wages have been stagnant. So you're going to go into the seniors' pockets so that they have got to pay for your health care.

So we had this—

Mr. GARAMENDI. Tombstone.

Mr. RYAN of Ohio. Tombstone made up: "Medicare 1965–2011, created by LBJ, destroyed by the GOP."

Now is not the time for us to make these cuts and tell our seniors who have paid into this system, who have planned on this system and the people under 55 whom this will affect that they're on their own and do nothing to try to rein in the health care costs. And that's the real issue.

Mr. GARAMENDI. Thank you very much, Mr. RYAN.

I will first yield to the gentleman from Colorado, and then we are going to wrap this thing up, and I want to wrap it up on one of our major themes, that's rebuilding the great American manufacturing sector.

Mr. PERLMUTTER. Thank you, Mr. GARAMENDI.

The way I would wrap it up is that, yes, we are confronted with a budgetary issue that we have got to deal with. We can't run away from it.

We can't forget how we got here: tax cuts for millionaires and billionaires, prosecute a couple of wars to the tune of a trillion dollars, and then a crash on Wall Street—all under the Bush administration. But we're here. We've got to deal with it.

I ask my friends on the Republican side of the aisle that sacrifice has got to be shared, where is that shared sacrifice? It isn't just against early childhood education. It isn't just against medical research. It isn't just against Medicare and Medicaid or education or transportation. You can't just get this budget balanced on a very narrow slice of the budget. Let's share the sacrifice. Let's get this country back on track. Things are recovering. Let's keep it going.

Mr. RYAN of Ohio. If the gentleman will yield for a moment.

Mr. GARAMENDI. I yield to the gentleman.

Mr. RYAN of Ohio. Because one of the amendments last night in the hearing, in the budget markup, was to implement the framework from the Debt Commission, the Bowles-Simpson Commission, which said two-thirds of the savings should be cuts and one-third should be revenue primarily from the top 1 percent of the people who have had all these benefits over the last 30 years. Every single Republican on the committee voted against implementing that framework, which was HEATH SHULER's amendment, and it is to be noted that they had an opportunity to vote for that and they shirked their responsibility.

Mr. GARAMENDI. It also speaks to the fact that the Democrats are willing to put up shared sacrifice on both sides.

I want to just wrap up with this, and every time I come to the floor I want to make it clear that we need to rebuild the American manufacturing base. Twenty years ago there were 20 million-plus Americans in manufacturing. Today there are 11 million. A lot of reasons for it. But these are the kinds of investments you were talking about, Mr. RYAN, that we need to make. We really need to make sure that our policies on trade are fair, that they don't harm our manufacturing industry.

We've been talking about taxes here. We need to make those taxes encourage growth. A couple of examples on taxes: we put out a tax bill without any Republican support last year to end the tax breaks that corporations had to offshore jobs. And we gave corporations and businesses an immediate write-up of all capital gains. So we're serious about tax policy here to encourage manufacturing.

Energy is a huge issue, and there will be a discussion on another day.

Labor policies: let's understand that it was the labor unions that built the base, and you go down through the line—education, intellectual property, research, and, again, building the great infrastructure. These are things we can do. These are critical investments in our budget. We should be doing these things.

I am going to yield to my friend from Colorado (Mr. PERLMUTTER). You get the last word.

Mr. PERLMUTTER. I would just reiterate, if we make it in America, we will make it in America.

CONTINUATION OF THE NATIONAL EMERGENCY WITH RESPECT TO SOMALIA—MESSAGE FROM THE PRESIDENT OF THE UNITED STATES (H. DOC. NO. 112-16)

The SPEAKER pro tempore laid before the House the following message from the President of the United States; which was read and, together with the accompanying papers, referred to the Committee on Foreign Affairs and ordered to be printed:

To the Congress of the United States:

Section 202(d) of the National Emergencies Act (50 U.S.C. 1622(d)) provides for the automatic termination of a national emergency unless, prior to the anniversary date of its declaration, the President publishes in the *Federal Register* and transmits to the Congress a notice stating that the emergency is to continue in effect beyond the anniversary date. In accordance with this provision, I have sent to the *Federal Register* for publication the enclosed notice stating that the national emergency declared in Executive Order 13536 of April 12, 2010, is to continue in effect beyond April 12, 2011.

The deterioration of the security situation and the persistence of violence in Somalia, and acts of piracy and armed robbery at sea off the coast of Somalia, which have repeatedly been the subject of United Nations Security Council resolutions, and violations of the Somalia arms embargo imposed by the United Nations Security Council, continue to pose an unusual and extraordinary threat to the national security and foreign policy of the United States. For these reasons, I have determined that it is necessary to continue the national emergency with respect to Somalia and related measures blocking the property of certain persons contributing to the conflict in Somalia.

BARACK OBAMA.
THE WHITE HOUSE, April 7, 2011.

□ 1620

MARCELLUS SHALE NATURAL GAS

The SPEAKER pro tempore. Under the Speaker's announced policy of January 5, 2011, the gentleman from New York (Mr. REED) is recognized for 60 minutes as the designee of the majority leader.

Mr. REED. Mr. Speaker, I rise today with many of my colleagues on both sides of the aisle to talk about an issue that I believe is a game changer when it comes to America's future.

As we deal with the issue of dependency on foreign energy supplies and we come up with—hopefully in this Congress—a national energy policy that once and for all will put us on a path that will lead to our independence from our dependency on foreign energy supplies across America, one issue I would like to talk about tonight in particular is the exploration and development of our natural gas supplies right here on our domestic lands.

As I come and hail from the great State of New York, we have located under our great State a formation known as the Marcellus shale natural gas formation. That natural gas formation has been identified by many experts across the field as to contain one of the world's largest supplies of natural gas. That supply of natural gas is located within our continent, within our borders, and will take off the table those risks to our future that are demonstrated by the upheavals that we see

in the Middle East that supply our energy supplies on a constant basis. So I am proud to be joined tonight with colleagues from the great State of Pennsylvania on both sides of the aisle to talk about the issue of Marcellus shale natural gas.

At this point in time, I would like to recognize my good friend from Pennsylvania (Mr. THOMPSON) to offer some comments in regards to this issue.

Mr. THOMPSON of Pennsylvania. I thank my friend and colleague from the great State of New York, where our congressional districts adjoin at that New York-Pennsylvania border. I am really proud to be with you on the floor today to talk about this game changer, as you referred to.

Mr. Speaker, we are facing critical times—record debt, \$14 trillion; skyrocketing gas prices, in some places over \$4 a gallon and climbing; energy dependence and addiction to Middle Eastern oil; and a volatile Middle East. All those things tie together. And, frankly, we're here to talk about something that is a part of the solution on how to get out from underneath each one of those critical issues that is just piling on this Nation, the United States of America, and that is the Marcellus shale natural gas. We are proud to also have Marcellus shale underneath much of Pennsylvania. We have New York and Pennsylvania, West Virginia, parts of Ohio, parts of Virginia.

The Marcellus is just a tremendous natural gas play. It's something that we have known has been there for a very, very long time, but the technology to access it is more of a recent advent, and it is just so exciting. I'm glad we are here to talk about all aspects of this tonight.

Over the last month, the development of the Marcellus shale natural gas play has been given national attention, in particular, a technical industry term known as "hydraulic fracturing," or "fracking," a process utilized in oil and gas production for almost a century and regulated now for decades. Oil and gas workers have completed nearly 1 million fracking jobs nationally, safely and without adverse environmental impact. Over the years, these technologies have been refined and improved for more efficient and environmentally safe use. In fact, Mr. Speaker, I find that the rapid increase of technology as it comes from the natural gas industry right now is just incredible. This is an industry that is literally very solid but is always looking for that new opportunity on how to do things even better.

Recently, the New York Times attempted to discredit the wealth and experience employed by the industry over the years and the successful work of government officials to properly regulate natural gas development. Through half-truths and, frankly, calculated quote shopping, the New York Times made unsubstantiated claims regarding fracking and its impact on water qual-

ity and the environment. They repackaged old stories with sensational new headlines, and they rehearsed allegations against development of natural resources vital for our country's energy future.

Now immediately following these stories, the Pennsylvania Department of Environmental Protection—which has, frankly, jurisdiction over the drilling of natural gas in the Keystone State—responded, releasing tests that show that water supplies downstream of Marcellus shale gas drilling are safe. This testing has addressed misinformation related to water quality in the Commonwealth and validated with scientific data that municipal drinking water is safe.

Mr. Speaker, each day in my district there is news regarding the Marcellus shale worthy of a national headline. Through this resource and these technologies, 70 million homes and thousands of small businesses are paying the lowest gas prices in years to heat their homes. The lowest. Let me repeat that. When you have gas prices, petroleum gas prices that are at record highs, volatile highs for our vehicles, natural gas prices at the same time are at a record low. That's where they have a national headline. That is all because of one thing. Natural gas in this country is largely domestically produced. It is produced by American workers, and it doesn't have that volatility that you see when you become reliant on countries such as in the Middle East.

Thousands of jobs are being created. I have two counties in particular at the epicenter. Actually, one of them adjoins your congressional district. The lowest unemployment numbers probably in history, much lower than national and State averages. There's nothing better that you can do for a person than create an environment that provides them a good-paying job, and that is happening as a result of the natural gas industry.

Each day, the local economy in my district gets a little better, and every moment the notion of an energy secure America is easier to grasp. For me, I define "energy security" as shutting off the pipeline from the Middle East.

I recognize that the largest amount of our oil that we import is from Canada, and Canada is a good ally. I don't see any threats from Canadians other than maybe when we get around to hockey season between the teams. But when it comes to the Middle East, I think when we look at the volatility in the Middle East today, in Egypt and obviously Libya and Yemen, I mean, we should end that addiction immediately to Middle Eastern oil, and that achieves energy security.

Now, when it comes to safety, there can be no shortcuts, no loopholes, and no exceptions, but sensationalism fails to serve any good for anyone. Scare tactics are dangerous when dealing with such complicated and technical matters as this. And that is what we see with many of the headlines that we

have been reading, articles written with half-truths.

I am so very pleased that you are hosting this hour today because we can talk about facts and put the facts out there. The same goes for dealing with our Nation's energy security. We need to talk about facts. So I am pleased to be with you, and I yield back at this time.

Mr. REED. Reclaiming my time, I thank the gentleman for his comments and I thank the gentleman for participating in this this evening.

When I first came to Congress back in November of last year, after we took office after our special election, one of the issues, and a priority issue to our office, is the Marcellus shale natural gas development. One of the things that I noted back in my district back at home is that there is a lot of misinformation, as the gentleman identified in his comments.

One thing that we sought to do is to establish the Marcellus Shale Caucus, a caucus of Members of Congress who represent districts that overlay the Marcellus shale formation, so that we could come together as a body, as a representative body, and bring the best scientists and bring the best data and bring the best information, not only to the floor of the House, but back to our districts.

I am pleased to be joined tonight as cochair in that caucus as we have established in this Congress, my good friend from Pennsylvania (Mr. CRITZ), who I believe has some comments that he would like to share on this issue before we get into the presentation of the facts in the development of the Marcellus shale.

Mr. CRITZ. Well, thank you, Mr. REED. And, yes, serving as cochair for the Marcellus Shale Caucus is truly an honor because we do have such an opportunity before us. As Mr. REED mentioned earlier, Mr. Speaker, this isn't a Democrat or a Republican issue. This is a bipartisan issue because it's about economic opportunity for all of our regions.

Mr. Speaker, I am joining my colleagues to discuss the significant economic potential that the Marcellus shale natural gas play has for our country. As you may know, the Marcellus shale is the largest unconventional natural gas formation in the United States. The shale is estimated to hold almost 500 trillion cubic feet of extractable natural gas currently valued at nearly \$2 trillion.

As with most economic activity, the impacts of the natural gas affect more than just specific firms directly involved in the industry. There are also important employment and income effects on local businesses who supply the industry, such as oilfield service companies, restaurants, retailers and hotels, in addition to effects that result from employees spending their wages locally.

In Pennsylvania, 75 percent of the natural gas it uses every day is imported currently. This is just Pennsylvania. The Marcellus shale formation that runs along the Appalachian Mountains—so it goes up into New York, comes down through Pennsylvania, into Virginia and West Virginia, as G.T. THOMPSON, Mr. THOMPSON from Pennsylvania, mentioned earlier, goes into eastern Ohio and down through the Appalachian Mountains—is really an opportunity for this country. Because, as Mr. THOMPSON mentioned, as we watch the unstableness in the Middle East, we're talking about the natural gas industry, which is just booming in our region of the world.

□ 1630

It's sort of interesting because, in a conversation with some of the folks from industry about a decade ago, the natural gas industry was told that they'd better start building processing plants at ports and on the shorelines because there was going to be a need for this country to import natural gas. Well, now that equation has flipped, and this country is really on the verge of producing so much natural gas just through the Marcellus shale that we will exceed the needs of this country, and we actually could be on the verge of becoming an exporter of natural gas to foreign economies.

It's incredible. The high-paying jobs available today in the Marcellus shale gas industry are expected to multiply in the future, meeting the needs of gas companies' efforts to increase drilling and production across the region. In Pennsylvania alone, it is estimated that more than 110,000 new jobs have been created because of the development of this shale.

Mr. REED mentioned earlier and Mr. THOMPSON reiterated that this is a game-changer. As I said, this isn't a Democrat or a Republican issue. It's not a New York or a Pennsylvania issue. This is an issue for our country. This is an issue that bodes well for the future of economic development in this country. I am so excited to be co-chair with Mr. REED. I use a lot of football analogies. I think, by game-changing, what we're doing is we're moving our economic football down the field. We're making progress. There is an opportunity here, and I think we need to take care of it.

One of the things that was alluded to earlier was environmental concerns. Let me tell you that, in growing up in western Pennsylvania, we grew up with the steel industry and the coal mining industry. We had a lot of problems as those industries wound down as, in years past, there was not a lot of environmental protection. We had streams that were fouled. We had huge, what we call gob piles, of the slag that comes off of steel production. Let me tell you that, over the last 20, 25 years, Pennsylvania has done some incredible work in cleaning up those slag piles and in cleaning up the streams so that, in the

streams that had been dead for decades, you can now fish, and now we have trails throughout western Pennsylvania.

So, from a Pennsylvania standpoint, what I can say is that, in government's working with industry, working with local officials, working with people on environmental interests, we have all come together in Pennsylvania and are moving our way forward, and we do a very good job of it in Pennsylvania. This Marcellus shale has created an opportunity for us that is really second to none, which is just from a Pennsylvanian's perspective, but I can't end with saying it's just Pennsylvania, because, as we've talked about, it goes through New York.

There is so much opportunity for the future of this country and for the economic development of this country that I want to thank Mr. REED for inviting me to be his co-chair on the Marcellus Shale Caucus, because, in working together, we can get a lot done for this country. I applaud him for his efforts, and I look forward to working with him, with Mr. THOMPSON, and with the 17 other members of this caucus in making sure that we do the right thing for this country and for this country's future.

So, with that, I yield back, Mr. REED. I appreciate the time to be able to talk.

Mr. REED. I thank the gentleman for his comments, and I reclaim my time.

As both of my colleagues have articulated, this is a game-changer, but at the same time it's a game-changer, I think everybody in this Chamber and everyone across the Nation realizes that the development of this precious resource needs to be done in a safe and responsible manner. Nobody I've talked with in my travels on this issue has ever expressed a desire to just drill at any cost. What we have to do is have responsible, safe drilling. That's what we're all about, and that's what this caucus is all about. It's about bringing together both sides of the aisle. In Washington here, we get chastised quite often about being partisan, about dividing, and about not coming together to solve our Nation's problems.

I see this as a game-changer for an additional reason in that we can come together on both sides of the aisle to promote this issue, to come up with a commonsense regulatory basis at the State level, to promote that at the State level, and to develop this precious resource domestically so that we can have energy that is projected to last over 90 years. There are 90 years of domestic supplies of energy coming from this natural gas formation that is located, not only in Marcellus shale, but across the Nation in various shale formations. What I'd like to do at this point in time is to just go through a little history of what we're talking about here when it comes to natural gas in America.

Many people think that oil and natural gas in America is something that's relatively new. I'll tell you that, in the

western portion of my district, I'm proud to have located there the first natural gas well that has ever been drilled. That well was located, I think it was, in the late 1800s, just outside the district in Fredonia; and then there is an oil well in the Pennsylvania area that, I believe, is located in my great colleague's district right across the Pennsylvania State border. It was located sometime in the late 1800s or in the early 1900s. Andrew Carnegie was able to generate a great amount of wealth in developing those oil fields that are right here in America.

So natural gas and oil production in America is not something that's new. It has been around for many, many years. Actually, the first commercial frac job—or the job of developing a natural gas well with the technology and concept that we call “hydraulic fracturing” and which a lot of people have said in association with the Marcellus shale formation, which is a new technology and a new venture in natural gas development—has actually been around for quite some time. The first commercial frac job occurred in Velma, Oklahoma, on March 17, 1949. As my colleague from Pennsylvania had indicated, since that time, over 1 million wells have been fracked right here in America without an identified problem. That's over 60 years of success.

What has happened with the Marcellus shale and the new shale formation development potential is that they've taken that hydraulic fracturing, and they've created an update to it. They've kind of come up with a new technology of using those existing technologies and combining them in order to come up with new techniques that combine the concepts of horizontal drilling and hydraulic fracturing into one combined technology that makes the development of our North American shale/natural gas formations economically viable. That includes the Marcellus shale formation here in Pennsylvania, West Virginia, Ohio, New York, and across the Northeast area.

Now that we've heard about this issue, I see we are joined by another colleague from the great State of Pennsylvania. I yield to my colleague from Pennsylvania.

Mr. ALTMIRE. I thank my friend, and I thank my neighbor from Pennsylvania as well. It's good to have a bipartisan discussion on an issue that is critical to this country—our energy independence and using our domestic reserves.

In Pennsylvania, we have a unique circumstance, as does New York, in that \$4 million is invested in producing each Marcellus shale well, and with 2,500 wells produced annually just in Pennsylvania, we're talking about \$10 billion that is invested in Marcellus shale sites. That's money that's coming right back into Pennsylvania. That's money that would be coming back into New York if the gentleman had his way, which I would support.

When we talk about natural gas—and we're going to get into the details, and we have gotten into the details of Marcellus shale, in particular, and what a great find this has been for the country—we think about ways that we can use the natural gas that results from Marcellus shale, things like natural gas-powered vehicles. We're going to have a discussion later in the year on an energy bill here in this Congress—it will be a bipartisan bill—as natural gas is going to be a critical part of our Nation's energy future.

Think about the great work that the scientists are doing on the research and development of natural gas vehicles, on the production of natural gas vehicles, on the purchasing and conversion in the country, and on finding a way to give tax credits to consumers so they can convert their vehicles into natural gas operating.

Then of course you have the chicken and the egg situation of who's going to go first. Do you have the filling station before you have the car or do you have the car before you have the filling station? We have to do both together. We have to incentivize the stations to put natural gas pumps at their stations and, of course, incentivize the conversion of the natural gas vehicle, which helps all of us. With the price of gas nearing and exceeding \$4 in many States in the country, this is only going to help with our energy future.

When you think about North America in particular, this is so exciting because gas resources are much larger, and the cost of producing gas is much lower because of the find of the Marcellus shale. If you are in a household in this country that doesn't get its electricity from natural gas, your electricity bill is still going to be lower because of the resources that we have, because of the abundance of natural gas.

□ 1640

We're talking about cheap energy because of the volume that we're talking about, unprecedented reserves that exceed the oil under Saudi Arabia, as the gentleman was discussing earlier. The ability of the United States to store natural gas has improved dramatically over the years.

So now we're in position where we can produce the gas, we can use it domestically to bring down the cost of electricity, we can store it, and we're going to export some of this gas as well. The market for natural gas around the world is increasing because of the Marcellus shale find in Pennsylvania and in New York and West Virginia and Virginia, Ohio. This is really a wonderful thing for this country.

And the total U.S. natural gas production in 2010 just last year was at its highest level ever. In 2010, the natural gas production in this country was at its highest level ever compared to oil consumption, which, since 2005, has dropped more than 5 percent, and natural gas use has risen 10 percent in that

time. Of course, that's preceding the big find with the Marcellus shale. So we're only going to see that grow and thrive.

So we're keeping energy prices low. We're making ourselves energy independent, which is critical. There's a national security issue to that. There's an economic and a jobs issue which we're seeing in Pennsylvania firsthand. And of course there's an energy issue to that, how we're going to continue to grow our energy resources.

So I congratulate the gentleman for leading the discussion tonight, and I look forward to continuing not just tonight but beyond because this has to be part of our energy future in this country. And it was the cover of "Time" magazine. So when you think about the Nation paying attention, the spotlight being on our region of the country, it truly is because this is something that's going to benefit everybody in this country.

Mr. REED. I reclaim my time.

I thank my colleague for his comments, and he's absolutely right. I agree wholeheartedly with your comments that the economic potential that we see not only with Marcellus shale but with all of the shale formations. When it comes to natural gas and oil development, it's huge. Those are real jobs.

I have had the opportunity to go to your great State and tour many of these rigs that we've seen in operation. You see the workers there. You see the people that are employed, that are being serviced by this industry that are putting food on their tables, putting money aside for their kids' college education. The prosperity.

I went back on multiple trips and stopped and toured some of your downtown areas in the locations where this development is going on. And I talked with residents and heard the success stories of how the restaurants are filled and how the hotels have "no vacancy" signs on their doors.

One thing that struck me was a family farmer who was talking about, until this came along, they were struggling with coming up with a plan to pass the family farm on to the next generation. And when I heard that story, I said, This is something, because it's continuing a way of life, a tradition of America when it comes to our farmers and, when it comes to people that we share in common in our districts, being able to pass that on because now they have the revenue from their lands that is going to allow them to preserve that way of life.

So I'm proud to be here today. Before we get into some details as to exactly what we're talking about, one of those issues as we have indicated is getting the information out to the American public so that the American public can have the correct information based on science and data. And when our elected officials at the State level deal with the regulatory oversight that goes into this process, that we have the true

science and data before them to make sure that those regulations are appropriate and they're getting the job done.

Because we all agree on both sides of the aisle that we want this resource to be developed if it can be done so in a sound and environmentally safe fashion.

So I will yield at this point in time to my colleague, Mr. THOMPSON.

Mr. THOMPSON of Pennsylvania. I want to thank my good friend from New York. It's an honor to be joined by Congressman ALTMIRE from Pennsylvania as well.

Because this Marcellus natural gas is certainly a game changer for Pennsylvania. I think it's a game changer for the United States of America. And it is important that we educate. We're here to do that. And I know that's a—I think that's a vision of this caucus to make sure that we put out—get the science and the data out to people. Because there's a debate. And on most important things, most game changers you should have a debate, but it should be a debate that's based on facts and science and not on emotion and myth.

Let me share some more economic information, a couple facts relayed today.

You've heard some of this before. Certainly Marcellus contains upwards of 500 trillion cubic feet of natural gas. That is an amazing amount of natural gas. My colleague from Pennsylvania described it as it's more energy than the oil in Saudi Arabia. And it's clean energy. There's enough gas to meet this Nation's current gas demands for at least 100 years because we have the Marcellus formation, and then under that is, frankly, the Utica formation. And so there are tremendous vast resources.

According to Penn State University, a university I'm proud to not only be a graduate of but to represent within my congressional district, in 2008 natural gas production had a 2.3—I'm just saying in 2008—1 year—a \$2.3 billion direct impact on the Pennsylvania economy, adding more than 29,000 new jobs and \$240 million in State and local tax revenue. Frankly, the budget in Pennsylvania is hurting right now, the State budget. It's like here in Washington.

But in Pennsylvania, there's a blessing there with this revenue that's coming in by all of the companies and the individuals that are doing business in this natural gas industry of what they pay in taxes. Again, in just 2008, they paid \$240 million in taxes to the State and local government.

Another report also suggested in 2009: In slightly more than 10 years, the Marcellus industry could be generating nearly 175,000 jobs annually and more than \$13 billion in value added. And more recently in 2011, more recent data, facts, planned spending by Marcellus producers could generate more than \$10 billion in value added, nearly \$1 billion in State and local revenues. Now, this is just Pennsylvania.

I know that New York could use that type of tax revenue as well as West Virginia and Virginia and Ohio. The figures I'm sharing with you are really just about Pennsylvania. And more than 100,000 jobs.

This is not a short-term development. This is not a fly-by-night. This is not going to come in and leave in a matter of years, frankly. This resource means development for at least 50 years and beyond. When you start to take into account the Utica shale, it really multiplies out. The economic benefit is tremendous.

According to Penn State, the Marcellus could make Pennsylvania the second largest producer of natural gas in the United States by 2020. You know, there were pipelines that were installed decades ago and from the ports of the northeast coast because we were preparing to import natural gas from Russia, from overseas. Today, there's work to convert those pipelines so that we can export natural gas and that we, Pennsylvania in particular, can be an exporter. That's good news.

Mr. REED. Will the gentleman yield?

Mr. THOMPSON of Pennsylvania. Certainly.

Mr. REED. I think that articulates a great potential that we see with the Marcellus shale formation in particular. Its location in the northeast area of our great Nation opens it up to development to that densely populated area around New York City, up and down the northeast coast, the manufacturing hub of yesteryear that is there.

The opportunity that this energy supply that has this infrastructure in existence and also the potential to invest in that infrastructure to deliver this energy supply to a vast number of people and to a vast number of small businesses is going to put people back to work. I think that further articulates the game-changing nature of this find in northeast America.

I yield back.

Mr. THOMPSON of Pennsylvania. Thank you. I thank my friend for yielding back.

You had mentioned the history of drilling. I very proudly represent Titusville, Pennsylvania. It's where one of my district offices is. It's the Drake well. It was 151 years ago that Colonel Drake used a wooden drill bit, drilled down 37 feet and hit oil. So drilling is not new to Pennsylvania. As you said, the first natural gas is just within or just outside of your congressional district, natural gas well.

And in terms of Marcellus wells, I think it's important we talk about that. I think you have a great chart there that demonstrates exactly what we're talking about when we're talking about the Marcellus geological formation, which is not a shallow formation.

□ 1650

This is a deep well. This is 8,000 to 9,000 feet, well below when you think the water table in our area is normally

maybe 1,000 feet. This is 8,000 to 9,000 feet below that. And the horizontal drilling that was developed, directional drilling, there has been 1,900 of those wells already on the ground put in. So I think it may be good to take the opportunity to talk at some point about exactly how these wells work.

Mr. REED. I was just going to move onto that, but I will yield to my colleague from Pennsylvania.

Mr. ALTMIRE. I was going to actually segue into that exact point, because I know the gentleman from New York was going to talk about the process. And it's important to keep in mind there, of course, are always going to be concerns with doing the drilling as safely as possible, limiting any impact on the drinking water. And I know we are going to talk about the process.

Consider the fact that we're talking about drilling that has been done for decades safely, thousands and thousands of wells drilled in this process without any repercussions, any negative impact all across the country, and now beginning in the Marcellus shale area. We are talking about a water table, the drinking water at approximately 500 feet. The drilling takes place a mile below that, 5,000, 6,000 feet below the water table. It has been proven in the decades and decades and thousands and thousands of wells that have been drilled that if you do it correctly, if the company is diligent, if they follow the proper procedures, they can do it without harm. It's been proven.

Now, yes, as happens in any industry, energy or otherwise, if you have bad actors and you have people that don't follow the right procedures, that cut corners, then the potential would exist for a bad outcome. But that happens in any business, in any industry. So we do need to make sure that the drillers, and by and large they have shown the ability to do this safely, continue to do that and pay attention to the rules and the regulations. But we can't in any way put a burden upon the drillers that exceeds the risk factor.

We need to make sure that we are cultivating the resources, we are doing it in the appropriate and proven safe way as we have done for decades. I turn it over to the gentleman from New York.

Mr. REED. I thank my good friend from Pennsylvania. I do want to get into the process. I have a chart here today on the floor of the House to kind of go over exactly what we are talking about when it comes to this—I thank my colleague for joining us this evening—to talk about what we are dealing with here, this process of tapping into the shale formations, and in particular Marcellus shale formation. Really what we are talking about is kind of the combination of the existing technologies of horizontal drilling and hydraulic fracturing. That's kind of the game-changing combination of existing technologies that have been joined together to in an innovative way

come up with a way to tap these deep, large natural gas reserves in an environmentally safe way that will allow this gas to be recovered in an economically viable way.

So with that being said, I have got a chart here. And as many people know, there is the old traditional vertical well drilling which is represented, before we go into the horizontal role here, as straight down. The old vertical well is to punch a hole in the ground, as you said, 37 feet with a wooden bit, to one of the original finds in your district. That's what we're talking about.

But the horizontal drilling, the change in the horizontal drilling techniques that we're talking about is the ability to go down very deep into the Earth's crust. We are talking that this formation in Marcellus shale is about 6,000 to 8,000 feet below the surface. What happens is they drill from the surface down to that formation.

Then what they are able to do, and I have seen this with my own eyes, and I am sure my colleague from Pennsylvania has seen it also, they are able to turn that drilling bit, and turn the drill horizontally. So they go down vertically, and then as they get to the point where the formation is located and where the natural gas has been identified in the Marcellus shale formation, in the natural gas supply we are talking about tonight, and they turn that drill bit and they go out horizontally. And they go out thousands of feet. They go out and drill and open up that formation, that shale formation, to potential development for natural gas recovery.

After they turn that drill bit and they take that horizontal turn, they go out and then they engage in the process which is called hydraulic fracturing. Now, hydraulic fracturing has been around quite a long time. What essentially that means is that they are going in, they drill the well, and then they detonate some small explosives in order to crack the formation, in order to open up the formation, open up this shale rock that is not shale or slate that you are accustomed to on the surface of the Earth.

I held it the other day. A gentleman came into my office, had a piece of shale in the Midwest area, and it's as solid as granite. There are natural gas molecules that are trapped into that granite formation, that shale formation. What they have to do is they have to detonate small fissures and open up cracks in that formation so that the natural gas molecules have a path to go back up the bore, up the well site and be recovered at the surface.

Mr. THOMPSON of Pennsylvania. Will the gentleman yield?

Mr. REED. I will. Please.

Mr. THOMPSON of Pennsylvania. Those fractures, folks will sometimes be scared by that. They envision these huge caverns that are opened up under the ground. And in fact, these fractures, or fissures I think they are best described, and you have probably seen

them portrayed as spider webs. In fact, they are so small that they are held open by a grain of sand. That's the proppant that is put down into with water, and put in there to hold those fractures open. Just a grain of sand. So I think that, as we are talking about facts, so the people have a vision of what exactly we're talking about when this takes place.

Mr. REED. My colleague's exactly right. And if you can join me in this conversation, because by no means am I an expert in this technology. But what I have read and researched and what's been presented to me makes sense. Because you're absolutely right. What happens is then they take, after there is some fracturing of the formation of the shale—there is a hydraulic fracture, hence the hydraulic fracturing, the hydraulic portion of that technology name—what they do is they pump volumes of water, primarily water and sand, down the well site and into that horizontally-drilled well site and bore, and pump in water at high pressures. We are talking high pressure when we are talking about this process and this technology that not only pump into those fissures, those microscopic fissures that we're talking about that are the result of this fracturing process.

As they pump that water and sand into those fissures, when they withdraw the fracked material, those proppants as they are called, as my colleague's identified, keep those fissures open so that natural gas has the ability to have a natural, by way of pressures, ability to migrate to the well, to the bore site, to the hole, if you would, and then flow back up to the surface and be recovered and developed, and put into our pipeline systems to supply the energy that we all have become dependent upon.

Does my colleague have anything to add to that process?

Mr. THOMPSON of Pennsylvania. Sure. Absolutely. I think that if my good friend would go ahead and put that other board that's up, because when you are talking about the fluid, there is a lot of discussion sometimes about hydrofracking fluid. And this is I think a great poster that really captures what exactly is in that hydrofracking fluid. That sometimes is called brine, sometimes it's called slick water.

Mr. REED. Will my colleague yield for a question?

Mr. THOMPSON of Pennsylvania. Certainly.

Mr. REED. That's one of the great myths. I've heard these myths throughout my travels throughout the district and down here in D.C. that the hydraulic fluid, that there is some secret, that they don't want to talk about it, they don't want to disclose it. My understanding is that that truly is a myth. And you have here today I see on this chart kind of identified the ingredients. Would you agree?

Mr. THOMPSON of Pennsylvania. Yes. If the gentleman would yield, ab-

olutely. It's 99.5 percent is water and sand. The other half a percent is made up of basically ingredients that you would find in many household items as referenced from the chart. You know, there are some things there such as sodium, there is things that are used to reduce friction going down into the pipeline. It's the same things that you can find in water treatment or candy.

□ 1700

There is a gelling agent, also used in toothpaste, and other types of things, things that we use. The most important thing, though, this is all public record.

In Pennsylvania, the Department of Environmental Protection, which is the agency that oversees this drilling activity, requires that this list of ingredients is made available publicly; on the drilling sites they are available, standard, like any industry that uses materials. I would trust in our congressional offices somewhere we have a manual, an MSDS manual, material safety data sheets.

Because whether it's whiteout or it's some other cleaning fluid or Windex, you have to list all those things. You have to have an MSDS for them in any type of business or industry.

And so through MSDS, frankly, and requirements through agencies, oversight agencies as the Department of Environmental Protection, the ingredients that are required are available publicly. That is a great myth that has this is such a secret and people don't know what's going down into the wells.

Not all of this water comes out; that's important to recognize. Just a percentage of the waters that do come out, a lot of it actually is left 8,000–9,000 feet down. And the water that does come back, in my experience, being, observing these operations, much of it is recycled.

Mr. REED. On the chart that we have here this evening, what we are talking about is that hydraulic fluid is pumped into the horizontal area. Primarily that water is hitting that area, and it is then coming back up the well bore to a certain extent.

If you could continue as to what happens to the water that remains down there.

Mr. THOMPSON of Pennsylvania. It just stays with the geology down there, and this is like it's a mile below the aquifer. It's actually encased in layers of limestone, especially in Pennsylvania and in New York. That's our geology. We have this Marcellus shale, but it's really encased with what could be hundreds of yards of thick limestone on top, and certainly limestone in the bottom. And so the water stays down. The most important thing, though, is what happens to the water that comes up and especially when it passes through that area, 5, 6, 700 feet where the aquifer is, frankly, our water, fresh water comes from.

The casing that is on your poster is incredibly important to where it's en-

cased through that area. The wells are encased multiple times with both steel and with concrete, multiple layers. The safeguards are just tremendous so that you absolutely cannot get any cross-contamination with our aquifer.

Mr. REED. My understanding of the processing, correct me if I am wrong, is we are essentially dealing with a two-step process, if you would, in developing the well site. You have the surface up here; you have got the initial, where there is a drilling operation that goes through the—I forget the actual technical name—but the upper end of the well that we are tapping into.

And that's the area in the first 1,000 feet, plus or minus, that's going through the aquifer. I think we have highlighted kind of a cross-section and kind of highlighted that area because it is a legitimate concern, in my opinion. I know the regulatory agencies have identified this as a legitimate concern, and this is a critical portion of the well development that I think we need to spend a little bit more time on.

As we punch through the aquifer, what we are talking about is there are casings, there are steel casings, it's my understanding, that are pushed down the well site after it's been drilled, that are pushed down the bore, the well bore, and then going through that aquifer. And then what is happening once you get to that point that has been identified as the break-off point, or I forget the term that's in the industry, but what happens is they pump it up with a cement, with a material, that provides a barrier between the casing, the aquifer and the other formations and essentially fills in the area, if you would, between the casings and the aquifer and the other area that's kind of primarily going through that first 1,000 feet of well development. Is my understanding correct?

Mr. THOMPSON of Pennsylvania. I think the gentleman is very accurate, and it's multiple, multiple piping with cement in between each one.

Mr. REED. But it's redundancies built into the process.

Mr. THOMPSON of Pennsylvania. A lot of redundancy built into it because it's extremely important not to get that cross-contamination.

Mr. REED. I think that's a point that needs to be stressed is the redundancy of how the initial 1,000 feet, plus or minus, whatever the regulatory agencies say we have to have for that break-off point and that multiple protection to make sure that that aquifer is protected.

Then my understanding is the second stage of the process is where they continue to drill down deeper to reach the actual formation, which again is 6,000 to 8,000 feet below, because it's not a fluid level location throughout the Northeast, as many of us know from geology from our high school days. There are elevation changes in that formation.

That's the amazing part of the technology in my understanding is that as

that formation goes up and down, and you go from the 5,000 foot, the 6,000 foot to the deep at the 9,000 foot, the technology can actually trace into that formation. I hit those marks where the engineers have identified that this gas is located.

Essentially what they do in that second phase is they continue to drill down to the formation. As they turn the drill bit to do that horizontal drilling technique, that actually goes through that shale rock—and it is rock, I literally held it the other day, as I indicated earlier. It really feels like granite, but that gas is trapped within that rock and drills through and then reaches out thousands of feet from the well site up on the surface.

I think that's a point I would also like to articulate right now and stress that one of the things that I saw as a benefit—because I have seen vertical wells, I have seen horizontal wells. Vertical wells is one hole essentially going to the formation, and they take a shot at getting to the sweet spot, so to speak.

Then if they miss—and the general rule I believe in the industry is one out of three of those are not successful in the Northeast—and we are dealing with the Trenton rock and the Black River formation, which is a higher level formation, is my understanding. They would then have to move the well site, and they would have to disturb the surface, the area that they would have to clear in order to put the rig and the development facilities on the surface.

Now, what they are doing with this whole horizontal drilling technique is that they have six different well sites from the one platform. Is that understanding correct?

Mr. THOMPSON of Pennsylvania. That is my understanding, my observations, where on one site, where this drilling activity goes on, takes up to perhaps 90 days to drill and to frack one of these wells, you can put multiple, at least up to six, on one site. So in terms of not disturbing, minimizing disturbing the surface area, it's a great technology for the maximal production of a very clean and very affordable energy source for us.

Mr. REED. That's exactly what I saw in your district, in your great district as I came down and toured one of those sites. You got a real sense of the difference of having the multiple vertical locations that would talk about clearing trees and clearing the area and building roads to get access to those areas.

You would then essentially take six of those vertical sites and put them in one location where they could horizontally tap into this reserve from one location rather than six locations. I think that's a great point to put that education and that information out to people, because I think that people think this is just a one-hole operation. It's a multi-hole operation.

That's also what makes it economically viable, because this is not cheap.

I know these are millions of dollars of investment in order to tap into this resource, and that has to be recognized and respected.

Mr. THOMPSON of Pennsylvania. I think as we are talking, the environmental record is certainly an area of concern that folks have raised.

As you have noted, or as my other colleague across the aisle from Pennsylvania noted, hydraulic fracturing was first used 60 years ago, actually in Oklahoma. Fracking has been common practice and successfully used in over a million wells across the United States.

When performed correctly, the process of hydrofracturing has not once contaminated any aquifer or drinking-water supply. In Pennsylvania, there are 11 State laws that govern oil and gas development. In Pennsylvania, drilling companies have to disclose the names of all the chemicals to be stored and used at a drilling site in the Pollution Prevention and Contingency Plan that must be submitted to the State Department of Environmental Protection as a part of the permit application process.

□ 1710

In addition to regulations used in Pennsylvania and at the State level, oil and gas production is subject to eight Federal laws. More specifically, there are five Federal laws that regulate hydrofracturing, hydraulic fracturing. This includes the Clean Water Act in various stages of the process; the Safe Drinking Water Act when discharging frac fluids; the EPCRA, Emergency Planning and Community Right-to-Know Act, which mandates that operators maintain material safety data sheets at every well site in America where a minimum amount of chemicals were present, which, in part, is maintained by the State.

Now, these plans contain original copies of the material safety data sheets for all chemicals, and DEP recommends to operators that a copy be kept on each well site. So that comes back to the question of: What are the ingredients? What's going into this frac fluid?

Frankly, most companies exceed the State requirements in the Pennsylvania operations, not to say that, like any other industry, there aren't some outliers, some folks who don't follow the standards. I'm proud to say that in Pennsylvania, the Department of Environmental Protection, when they find those folks, they not only have to correct their problems, but if they're chronically doing this, they are put out of business. This is something that we have the technology. We are blessed with not just this resource from God, but we are blessed with the technology to do it right, and that should be a standard that we subscribe to.

There are some here in Washington that want the Federal Government to come in to Pennsylvania to regulate this. I don't have confidence in Washington. I have confidence in Pennsylva-

nia's Department of Environmental Protection. They've been doing a great job, and they continue to look at their standards, their regulations, and I think they do a great job of making sure that we are protecting our environment and producing a great resource which is adding jobs, growing the economy and, frankly, providing us a very affordable energy resource.

Mr. REED. I would echo my colleague's comments about the State agencies being the appropriate agencies to oversee this development. In New York State, right now we are under a moratorium at the local level that has stopped any development of the Marcellus shale until our local DEC, Department of Environmental Conservation, issues its environmental impact statement to come up with the regulations that can deal with this issue in a responsible and safe manner. And to be perfectly upfront with my colleague from Pennsylvania, we've learned a great deal from what happened in your district and my other colleague's district in the State of Pennsylvania as to how to deal with these issues and make sure they are done safely and responsibly. And I think the DEC has done a good job in New York State of taking the time out and studying the issue. It's going on 3 years. I'm ready to move forward, in my opinion, to come up with regulations to unleash this game-changing opportunity for our Nation and for our areas.

I do also agree with my colleague that leaving it up to Washington to come up with a one-size-fits-all solution, to me, is just not the appropriate policy. Let our State agencies, the ones that live and breathe in our communities, the people that work in those agencies, that know our State best, let me deal with these issues and come up with the regulations that are reasonable to protect our environment and yet at the same time recognize the potential and opportunity that is located in our Marcellus shale formation. And I think that is best served in order to allow the State agencies to do that.

One thing I did want to stress as we're going through this chart, I've heard some concerns of people that, well, the fluid that remains down in the well site in the formation—because these are millions of gallons, there are millions of gallons of water that are pumped down the hole to create the pressures and to access this natural gas formation. There has been concern raised to me, and I would be interested to know what my colleague's thoughts are as to that water or that hydraulic, that slick water, that brine, as you had indicated, as it sits into the well site and into the formation, the potential risk of going back up through essentially a mile of sedimentation, of limestone, of different formations. Have you heard the same concern?

Mr. THOMPSON of Pennsylvania. I have heard those same concerns. But when you look at the geology in where

this drilling is done and you have the layers of Marcellus, and I think you only fracture maybe 18 inches, perhaps, from that horizontal pipeline, so you haven't permeated the entire Marcellus shale, and that is encased with a layer of perhaps hundreds of yards thick, hundreds of feet thick, at a minimum, of limestone. The geology is very, very—it's almost—you never say "never," but it's impossible in order to get that what would be called migration for that fluid to move outside.

Mr. REED. I believe the chart identifies what we're talking about here. We're talking the aquifer up here within 1,000 feet of the surface. Mostly, in our area, I know the water table is at about 500 feet, maybe 200 feet, people are putting their wells into those aquifers. And we're talking 6,000 feet, 8,000 feet.

I think this chart demonstrates it fairly accurately that we've got a ton of material, literally material, that is protecting this formation and that area down there from our aquifer. And I think that that concern is a legitimate concern, but because of the oversight and the ability of our local agencies to do their job, in my opinion, I think they can handle it appropriately and that Mother Nature will protect that aquifer from the development of this.

I think the standards of how these wells go in need to be enforced, and that means that the type of cement, both the steel that's used and even, as importantly, the cement casing that's utilized to make sure that it's of a high quality and to make sure that it's put in a way and tested so that there are no air pockets, there are no quick pathways somehow for migration to occur through the casing, and that is all done in a very high quality way with a lot of quality controls. That's where the oversight is important.

In Pennsylvania, again, I come back and put a lot of trust in the Department of Environmental Protection. There's a lot of folks on the other side that would be opposed to this. And I don't like to really promote anything, especially this, but there was a film series called "GASLAND." Let me just share with you some thoughts from John Hanger.

Who is John Hanger? John Hanger used to be the head of an environmental group, and he became the secretary of the Department of Environmental Protection in Pennsylvania. And Secretary Hanger did a great job. He was concerned about the environment. He had an environmental record that was tough. He said that "GASLAND" is "fundamentally dishonest" and "deliberately false presentation for dramatic effect." He called the producer of that a propagandist because of the way the information was presented.

Again, it comes back to how we started this. This is an important thing to have a debate on. But make the debate on fact and science, not on myth and emotion.

And there were pictures of fire-spewing faucets that have been repeatedly found to be the result, frankly, of naturally occurring methane migration. People that drill their shallow wells for water, unfortunately, where they tend to drill, they sometimes drill them into methane pockets, naturally existing ones. I saw a picture yesterday of a gentleman farmer from Colorado, and it was a pretty cool picture because it showed a large flame in the middle of a river, but it was from a naturally occurring methane pocket. It had nothing to do with mining. It had nothing to do with drilling. But it was, again, naturally occurring. It had nothing to do with fracking.

The Colorado Oil and Gas Conservation Commission reviewed the specific location of the film numerous times and remarked "dissolved methane in well water appears to be biogenic"—that is, naturally occurring in origin—"and there are no indications of oil and gas impacts to the well water."

The Pennsylvania Department of Agriculture has confirmed that there have been no confirmed cases of threatened animal health in Pennsylvania, because, obviously, a lot of this occurs on our farms.

I would tell you that the Marcellus gas has saved more dairy farms in my district than probably anything else in the past couple years when dairy farmers were losing an average of \$100 per cow per month, based on the fact that the Federal Government prices milk, and it is such a flawed system that this really has been a blessing for our farmers. I have a few farmers running around on new John Deeres, or whatever their choice of tractors are, for the first time in their lives, actually. And so it's been a really good thing so that we don't lose our farms.

We are losing our agriculture acreage at an alarming rate even on a daily basis across this country, but in Pennsylvania, there has been a blessing that has helped to keep that land in production. There's a little bit of a disturbance, a small site for drilling, but once the rigs all go away and you have just that wellhead that you look at in the insert on the poster board there, you can farm around that.

Mr. REED. I hope we can have this conversation many more times as we go forth and bring forth science and data on these issues. The operation, when it originally comes in and the development of the well site does require some industrial-type activity. I do recognize that, and I think my colleague would recognize that. But, again, I believe you said 90 days is the estimated period of time for that development to occur.

I hear the Speaker giving us the sign that our time is up. I do thank my colleagues for joining me tonight, and I thank the Speaker for the opportunity to be here tonight.

□ 1720

FISCAL CHOICES

The SPEAKER pro tempore (Mr. ROSS of Florida). Under the Speaker's announced policy of January 5, 2011, the gentleman from Kentucky (Mr. YARMUTH) is recognized for 30 minutes.

Mr. YARMUTH. Mr. Speaker, it is a great honor for me to come to the floor of the House of Representatives this afternoon to join some of my colleagues on the Democratic side of the Budget Committee to talk about choices. You know, government is all about choosing. It is setting priorities, and it is choosing what we are going to spend the people's money for, how much we are going to ask the people to pay to the government, and how we are going to spend those dollars. It is all about choosing.

It is also about values. This week, this issue of choices is playing itself out in two arenas in government, one in the continuing resolution battle that took place on this floor this afternoon, the idea that we have to figure out how to fund the government for the rest of this fiscal year ending September 30, and whether or not we are willing to let the government shut down tomorrow night because of the choices that we either make or refuse to make. And it is also playing itself out now in the development of the budget for the following fiscal year, 2012.

Yesterday in the Budget Committee, we considered the budget proposal offered by Chairman RYAN and the Republicans that offered some very stark choices for the American people. They are similar to the choices that we have been debating week after week after week for the last couple of months about how we are going to fund the government for the rest of the year.

From the Democratic perspective, at least I know from my perspective, the reason I have not been willing to support the Republican versions of the continuing resolutions that have come to this floor is that they make choices which don't seem very fair to me. They don't seem to represent the values that this country has always embraced, the values of fairness and justice and the idea that we are all in this great journey together and that we are trying to create a country that works for everybody and not just for a very few.

Today, the Republicans brought to the floor a continuing resolution to fund the government for one more week. These are the choices they made as to what we should cut in order to avoid shutting the government down: they wanted to eliminate \$143 million for school lunch assistance programs; \$187 million for education for the disadvantaged programs, school improvement funds, education innovative improvement programs, and adult education. It cuts the WIC program, nutrition for low-income families, women and their children; the Office of National Drug Control Policy. They want