mountains cannot be reached any other way. They have got to have helicopters to transport whatever they are going to transport. They need it, and they need it right away. The people are freezing in the mountains. They need food. The U.S. must lead the way.

I do not want to get into any discussion of competition, what nation is doing what and are we doing less than any other nations. I do not think that is the kind of discussion we ought to have. We ought to just understand we should come to the aid of Pakistan to the extent that we can. We are the greatest. We are the most resourceful. We are the richest Nation that ever existed on the face of the Earth. We should not hesitate to lead on this matter. We should step out there and not yield leadership and wait for someone else.

We have made past mistakes with Pakistan. Pakistan was our ally during the Cold War, and yet we treated them very poorly, and we did not take care of the needs of Pakistan once the war in Afghanistan was over and they had helped us to win the war against the Russians in Afghanistan originally. Now Pakistan has come to our aid in the war against terrorism. The Government of Pakistan teeters on the brink of rebellion because of the fact that large numbers of the Muslim population do not approve of the close friendship of Pakistan with the United States, the alliance with the United States against terrorism.

Let us come to the aid of our friends and make up for past errors. And here is a time when they have this great calamity that we can act and wipe out any harsh feelings about the past. Now is the time to act. For the future, as long as we can see it, I assure the Members that the Pakistani people will be grateful for what we have done. We ought to seal the alliance and make certain that they understand that we are their friends in every way possible. We do not want to just use them to fight the war on terrorism. We do not want to just use them to hunt for Osama bin Laden. We do not want to just use them in a critical time when we are threatened by terrorism. We care about them; and when they need help, we will be there.

Practical help is needed right now. We need cargo planes. At Kennedy Airport they have cargo-loads of material to go to Pakistan. They have no planes to send them there. They need the practical help. We need helicopters in Pakistan right now. Across the border in Afghanistan, we have hundreds of helicopters. We should give up the hunt for Osama bin Laden for a little while if necessary, and those helicopters should go to Pakistan. They need food. They need tents. They need attention from the whole world.

We need our caucus here, Members of Congress. We have a Pakistan Caucus. The Pakistan Caucus needs to meet as soon as possible. I call on the gentleman from Indiana (Mr. BURTON) and the gentlewoman from Texas (Ms. JACKSON-LEE), who are co-chairs, to call to meet as soon as possible. And let us, as Members of Congress, see what we can do to come to the aid of our friends, to come to the aid of millions of people who are in great distress and they look to the United States for leadership. We should follow that leadership. God expects us to provide leadership to help the people of Pakistan.

## □ 2000

## PEAK OIL

The SPEAKER pro tempore (Mr. BURGESS). Under the Speaker's announced policy of January 4, 2005, the gentleman from Maryland (Mr. BARTLETT) is recognized for 60 minutes as the designee of the majority leader.

Mr. BARTLETT of Maryland. Mr. Speaker, I have here an article that appeared on the front page of USA Today. It is above the fold. It is the center article. It says: Debate Brews: Has Oil Production Peaked?

The undeniable facts that spawned this article were noted by a number of the leading persons in our country several months ago, Boyden Gray, McFarland, James Woolsey, and a large number of retired four-star admirals and generals when they noted the facts that are on our first chart here: That we have in our country only 2 percent of the world's reserves of oil; we have 8 percent of the world's oil production. Just those two statistics together say something rather interesting. If we have only 2 percent of the oil reserves but are producing 8 percent of the world's oil, that means we are really good at pumping oil, does it not? That means that we are pumping down our reserves four times faster than the rest of the world.

We represent only 5 percent of the population, they noted, and we consume 25 percent of the world's oil and import about two-thirds of what we use. They wrote a letter to the President saying: Mr. President, the fact that we have only 2 percent of the reserves and use 25 percent of the world's oil and import two-thirds of what we use is a very large national security risk. We really need to do something about that as a country.

Whether you believe, as this article points out, that oil has peaked—in just a moment, Mr. Speaker, we will note how this term came into existence—or whether you believe that we need to do something about energy because of this national security concern, what you are going to do is essentially the same thing, because what you need to do, if this is just a national security concern, is to free ourselves from the dependence on foreign oil. That is exactly the thing you have to do. If you believe that we have reached peak oil, you have to free ourselves from the dependence on oil, most of which is foreign oil. In the former, if you just think it is a national security concern, we may muddle through that and come out okay. If you think that it is a peak oil issue, then there is no way of muddling through that, because unless you forcefully and intelligently approach that problem you are going to have some big problems.

The next chart shows us how this term originated, and we need to go back about six decades to the 1940s and the 1950s when a scientist by the name of M. King Hubbert whose name is widely known. I was reading an article just today. Without ever telling the readers the derivation of the term they were talking about Hubbert's Peak. Well, in 1956, Hubbert as a result of his analysis for nearly two decades of the behavior of oil fields made the prediction that the United States would peak in oil production in about 1970. As it turned out, he was right on target, we did peak in 1970.

He made that prediction because, as he noted, the exploitation and exhaustion of an individual oil field followed a typical not surprising or unsurprising bell curve, that it went up and up as you pumped a field until you reached the peak, and then at that peak about half of the oil had been pumped, and then the last half was more difficult to get and so you came down the other side of that typical bell curve, and that has come in the literature to be known as Hubbert's Peak.

This smooth green line is his prediction for the United States. The rougher green line with the heavy symbols indicates the actual production of oil. What you see, it roughly followed his prediction. The red curve here is for Russia that had more oil than we. They peaked after us. But when the Soviet Union fell apart, you see that they did not reach their potential, and they are now experiencing a second smaller peak that does not show here but it is a peak about like so.

If we look at the next chart, we see where we got the oil from in our country. I am going to spend a couple of minutes just to say what peak oil is, and I have got several colleagues that are going to join us. This shows where we have gotten the oil from in our country, Texas and the rest of the United States and Alaska and natural gas liquids. Notice the small contribution that Prudhoe Bay made, a big source of oil. We were starting down the other side of Hubbert's Peak. Remember, he said we would peak in 1970, and right on target that is when we peaked, and the big Prudhoe Bay oil field was a little blip in our downward coast on Hubbert's Peak. I am sure you can all remember the fabled oil discoveries in the Gulf of Mexico which was going to save us for the future. That is this yellow here. That is all that amounted to. There are 4,000 oil wells out there, I think, and that is their contribution to oil in our country.

The next chart shows the world situation, and this is a too busy chart. It is like reading a textbook. There is really a whole lot of information there. They

spent a lot of time putting this together, and what I have done is to pull out one part of this. This little inset here will be our next chart, and this inset shows two curves. They are really very interesting curves. The bars here show the discovery of oil, and you notice that we were discovering oil way back in the early 1900s and a whole lot of it was discovered in the 1960s and 1970s. The black curve here indicates our consumption of oil. Notice, up until about the early 1980s the world was finding a lot more oil than it was consuming.

Up until this point, this is all history, and from this point on now is a guess as to where we will be going. Because these two curves have the same abscissa, the area under these two curves, and this is one curve, the production curve, and this is the consumption curve. The area under those two curves has to be the same. What that means is that the only oil that we can pump is the oil that we found, and what the authors have done is to make a guesstimate of the oil which is yet to be found, and this is their estimate of what we are yet to find. We may find more, a little, we may find less. I will tell you, Mr. Speaker, that most of the world's experts agree that we have probably found about 95 percent of the oil that we will find, of the recoverable oil that we will find.

I did a little play with these curves, and I noted that this part of the consumption curve will consume some of this discovery, and I noted that it took all of the discovery to about this point just to make up the difference between the rate at which we are using oil, which you can see is three or four times as high as the rate at which we are finding oil. So what we have got yet to consume is this oil which remains here, and the authors believe that it will follow that kind of a slope.

The next chart shows a simplistic bell curve. By the way, this bell curve can be very sharp. All you have to do is change the ordinate and abscissa, you can make it very short and sharp, or you can make it spread out. This is a 2 percent growth rate in the production and consumption, because up until this point the production of oil and the consumption of oil have been the same thing. There have been no real shortages until currently, and there have been no big surpluses that have been stored away somewhere except for our strategic reserve and some other countries that have some strategic reserve.

This shows that the problem will occur not at peak oil but sometime before peak oil, because you see that the demand curve will separate from the supply curve quite a while before you reach a peak. If this is a 2 percent growth rate, that means you double, that is exponential, you double in 35 years. So that yellow area on the abscissa is 35 years long. What this says is that you should start seeing some little perturbations a decade or so before you reach peak oil.

The next chart kind of puts this in context, and I think that it is good to look back through history to see how we got here. Here we have three little curves, one of which shows our economy, and this starts way back in the 1600s and goes up to the present. This shows the economy of the world with wood, the brown; black appropriately for coal; and then look what happens when we get to oil. It just does not show the quadrillion Btus that the world has produced, that also mirrors pretty much the population growth of the world. We started out back here with less than a billion people for hundreds of years, less than a billion people. When we finally had the energy available from fossil fuels, primarily oil, our population has shot up from about 1 billion people to now almost 7 billion people.

I want to show one more chart before I put one up that we can talk to with the Members that have joined me. This is an interesting one that kind of tells you where we are today. The analogy I use is that we as a country are very much like a young couple that has gotten an inheritance from their grandparents, a pretty good inheritance, and they have established a lavish lifestyle where 85 percent of all the money they spend comes from their grandparents' inheritance and only 15 percent from what they earn, and the grandparents' inheritance is not going to last until they retire at the rate they are spending it. So they have got to do one of two things. Either they have got to spend less money, or they have got to earn more money. I use those numbers, 85 and 15, and some other people may use 86 and 14, by the way, but that is pretty much where we are in our country in terms of energy use. 85 percent of all the energy we use comes from fossil fuels and only 15 percent comes from other sources, a bit more than half of that 15 percent comes from nuclear. That could and probably should grow. There are obviously some problems with using nuclear, but you will make a choice between borrowing those problems or not having energy in the future, I believe.

The 7 percent which is what we call renewables has been blown up here so that we can see what it consists of. Notice that the biggest part, nearly half of that renewable energy, is hydro. That is probably not going to grow in our country, we are breaching more dams than we are making now and so hydro has probably peaked out in our country.

The next biggest source is wood. That is not rural people burning wood to keep warm. That is the paper industry and the timber industry wisely using what would otherwise be a waste product and they are using it to produce energy. Then, waste. That is a really interesting one because that is pretty big, well, pretty big compared to other things in renewables but not very big compared to the total amount of energy that we use. That is municipal waste being burned. The county instead of a landfill ought to have a generating plant that is burning this waste. There is a very good one, by the way, up at Dickerson not very far from here that they would be happy to show you.

Now we get down to those renewables that are talked about as the sources of energy that we are going to have to increasingly turn to as we slide down the other side of Hubbert's Peak. They are solar, 1 percent. That is 1 percent of 7 percent, which is .07 percent. Wind, 1 percent of 7 percent, .07 percent, more than that of electricity, because this nuclear power which is 8 percent of total energy is 20 percent of electricity in our country. Then agriculture.

□ 2015

By the way, there are two ways we use geothermal. One is the true geothermal where you are tapping into the molten core of the Earth and getting heat there. There is not a chimney, I believe, in Iceland, because they get all of their energy that way. We are now using that term ''geothermal'' in another way where you wisely couple not to the air, which you are trying to heat in the wintertime and cool in the summertime to condition your house, but you are coupling your heat pump to the ground or ground water which stays a constant temperature. Fifty-six degrees seems pretty cool in the summertime and pretty warm in the wintertime, does it not, and that is ground water temperature here.

Then we get to agriculture, and what we can expect to get from agriculture. I know one of the Members who has joined us is going to talk about agriculture. Let me just call on the gentleman from Minnesota (Mr. GUTKNECHT) because he wants to talk about agriculture. Let me put the next chart up here, because what we are going to be speaking to now is the finite resources we have, the things we can turn to; but they are finite. They will not last forever, and then the renewable resources, and the gentleman from Minnesota (Mr. GUTKNECHT) is interested in one of those down here in the agricultural resources area.

Mr. GUTKNECHT. Mr. Speaker, I thank the gentleman from Maryland. I am so delighted that the gentleman took this hour tonight, because this is an issue that every American is thinking about, in terms of our energy, and the gentleman has probably done more research on overall energy and energy policy, how much good we get out of a barrel of oil. I apologize for being a little late, but I do want to talk just for a minute, because there are so many misunderstandings about ethanol and other renewable energies.

This is a chart based on numbers from the United States Department of Agriculture, and they have part of their numbers, I think, from the United States Energy Department, but it is a chart that most Americans would be surprised to learn. Frankly,

even back in my own district of Minnesota, many people are surprised that right now, in Claremont, Minnesota at the Alcorn ethanol plant, we are producing ethanol for 95 cents a gallon. That number reflects a higher price for corn than corn is today. Actually, corn is dirt cheap, as they say out in the Midwest. But the price right now is at about $60 a barrel for oil, and to produce a gallon of unleaded gasoline is $1.65.

Now, the truth of the matter is, we have to be honest, we get fewer Btus out of a gallon of alcohol than we do out of a gallon of gasoline; but even when you make that comparison, ethanol today is cheaper than gasoline on a Btu basis. On a Btu basis, $60 for oil, $2.25 for corn, these are the raw costs of that product.

Now, there are a lot of other benefits to using more ethanol. One, of course, is we become less dependent on foreign sources of energy. I think even if these numbers were reversed, it seems to me it would be worthwhile for us at the Federal level to do more to encourage more use of renewable energies like ethanol.

The other thing about ethanol is it is better for the environment, and perhaps the gentleman from Maryland (Mr. BARTLETT) can talk about this sometime now or later, but ethanol is an oxygenate. It is roughly 30 to 35 percent oxygen, which means that it burns far leaner than unleaded gasoline. More importantly, one of the by-products, of course, is carbon dioxide; but that gets used the next year in growing the next crop of corn. So in many respects, it is a perfect carbon dioxide cycle, if you will. So it is better for the environment; it is better for our economy, because in the month of August we spent $22 billion, over $22 billion, the United States, in buying oil from countries that are not particularly friendly to us.

I think we ought to set as a vision that we are going to become energy independent.

Now, I was taught many years ago in sales training class that a goal is a dream with a deadline, and so I tried to offer last week in the energy bill that we had what we described as a 10-by-10 amendment mandating that by the year 2010, 10 percent of our gasoline will be renewable energy. We did not get a chance to offer that amendment, so now I am having it redrafted as a bill. I am planning to offer it as a bipartisan effort. I think energy policy does not have to be partisan. But these numbers, I think, speak for themselves. Even if ethanol were more expensive, because of the environment and in terms of keeping more of those dollars rotating through our economy, it makes sense to use more renewable energy.

So I want to thank the gentleman for what he is doing tonight, I want to thank him for what he has done in the past, and I want to encourage Members, if they would like more information, because there are so many myths about renewable energy and particularly about ethanol, if they would like a fact sheet, we have some in our office, get ahold of my office or go to my Web site at gil.house.gov. We have some great information, and we have sources for all of it. This is from the actual people who produce it, and it was authenticated and authorized by the United States Department of Agriculture. Ethanol is cheaper than gasoline. I yield back to the gentleman, and I thank him for having this Special Order.

Mr. BARTLETT of Maryland. Mr. Speaker, I thank the gentleman for joining us this evening.

Ethanol is certainly one of the alternatives to which we can turn. But if there were some here on the other side, let me just indicate what they would probably say because, as a friend told me a number of years ago, the thinnest sheet of paper has two sides, and so let us look at what they would say on the other side.

I have here a chart which shows the energy input for producing a million Btus from gasoline and the energy input for producing a million Btus from ethanol. And to get a million Btus out of gasoline, we have to input 1.23 million, because you are not going to get it all. You have to transport it and refine it and you are going to lose something in the process. But for ethanol, we have the happy consequence of getting a lot of energy from the sun. So this chart says that for every million Btus you get from ethanol, it takes only .74 million Btus of fossil energy to produce it, and that is a good bet.

But, there are others, Dr. Pimentel, for instance, and his colleague from the West Coast. About 6 weeks ago I attended an all-day conference at the National Press Club, and their argument was that if you really look at all of the fossil fuel energy that goes into producing ethanol, you use more fossil fuel energy in producing ethanol than you get out of it. I hope they are wrong; but even if they are not wrong, the energy profit ratio is not going to be really large.

Let me look at this next chart for just a moment, and then I am going to come back to this one for a minute, because both of these relate to ethanol. This is an interesting chart. What it shows is energy profit ratios for several fuels. This is energy profit ratio.

Now, what the gentleman was looking at was dollar profit ratio. It is really profitable dollar-wise to produce ethanol today because it takes less money to produce it than you would pay for an equivalent gallon of gasoline. This is the energy profit ratio, and this is contrasted with a quality, economic effectiveness in transport, how feasible is it to use over a wide range of uses. Of course, the source that tops the list is the giant oil fields. We do not have any of those, by the way; they are all in the Middle East. But the energy profit ratio is very high: if you put in $1 you get out $60. And they are very economically useful, because you can make a whole lot of things out of it. You can make pharmaceuticals out of it, you can heat your house with it, you can run your car with it, you can make plastics out of it, do a whole lot of things with oil.

This shows the other compounds. Here is U.S. oil. We never were very good, and now we are getting on down further, tar sands and ethanol. Ethanol is way down here at the bottom because they say there is not a big energy profit ratio. But if it is even positive, it is really good, because when you use ethanol, it is relatively nonpolluting as compared to fossil fuels.

As the gentleman from Minnesota (Mr. GUTKNECHT) properly pointed out, there is no $CO_2$ penalty for that, because every bit of $CO_2$ you get out of it, next year's plant is going to absorb in growing it. We use oxygen, produce $CO_2$, the plants, happy neighbors; they use our $CO_2$ to produce oxygen which we then can breath. But you must be very careful with the energy profit ratio. The dollar profit ratio is one thing; and, today, that is about all economists look at. But energy profit ratio, at the end of the day, if we really have finite sources of these fossil fuels, is going to be important.

Let us go back now to the previous chart. I just want to take a quick look at the bottom of it because this shows something that most people have no idea about. This is the energy that goes into producing a bushel of corn which you are using for your ethanol, and notice that nearly half of all of the energy that goes into producing a bushel of corn comes from natural gas. And the other sources are the tractor that guides it, the seed, the phosphates, the diesel fuel, the gasoline, the electricity, natural gases and so forth.

But nearly half the energy comes from natural gas which produces nitrogen, and most people have no concept of that. Before we learned how to do that, the only nitrogen sources we had in the world were barnyard manures and guano, and it was a big industry a number of years ago. Guano, of course, is the droppings of bats and birds over tens of thousands of years that accumulated, and that is gone. If we wait a couple of hundred thousand more years, there will be some more. But ethanol is certainly something we ought to look at. It is one of a number of things on this list and it is down here in ethanol, and it is one of the things we can get out of agriculture. We will come back a little later in the hour to talk more about agriculture. Several other Members have joined us, and let me let them speak in terms of the time they appeared. I yield to the gentleman from Maryland (Mr. GILCHREST).

Mr. GILCHREST. Mr. Speaker, I want to thank the gentleman for his initiative to give us an insight into the world of peak oil and all its ramifications. I just wanted to speak briefly tonight in support of the gentleman's effort to bring this information across

the board to the administration, to Members of Congress, and to the country as a whole so that all of us can understand what is transpiring over the next couple of decades to have an enormous impact on not only our Nation's economy but on the world's economy.

The question that I would pose that I think everybody should think about is what is at the bottom of the bottomless well. I think most people think that oil will go on forever, that there is plenty of reserves out there, that they will never dry up, they are not a finite resource, they are there for the foreseeable future, and that nature is not dynamic, but it is static.

Well, I think the gentleman from Maryland (Mr. BARTLETT) is bringing to the forefront that what is at the bottomless well is not oil; and if it is not initiative, ingenuity, and intellect, we are in for a lot of problems in the very near future. If, at the bottom of the bottomless well is initiative, ingenuity, and intellect, we will take the next logical step in cultural evolution.

We all used to burn wood for thousands of years. People burned wood for energy, for heat to make their communities whole. Then we discovered coal, and coal was a lot more efficient. It burned a lot better, and our industries prospered, plus we had better uses for wood than just to burn it. Coal was then, to a large extent, supplemented by oil, and oil was more efficient. Our industries could prosper even more, and it increased the ability to advance technology.

Now, coal has more hydrogen than wood. Oil has more hydrogen in it than coal. And then we discovered natural gas, which was even more efficient than oil or coal, and that expanded our markets for our economic progress even more, and natural gas has more hydrogen than oil.

We are running out of oil, and I think the gentleman from Maryland (Mr. BARTLETT) said we have about 2 percent of the known reserves in the United States. Many people say it is a little bit more than that; but whether it is 2 percent or 3 percent or 4 percent or whatever, it is a limited resource. In 1970, we produced in the United States 11 million barrels of oil a day, in 1970. In the year 2004, we produced 5 million barrels a day. We produce less than half now than we did 30 years ago, and yet we are burning a lot more. We burn 20 million barrels of oil a day. Now, if we compared what we have done in the last 100 years in BTUs as far as oil energy use is concerned, we can put it into the number quadrillion. This is what a quadrillion looks like.

In 1910, our BTU energy output from oil was 7 quadrillion BTUs, 7 quadrillion. In 1930, it was 35 quadrillion BTUs. In 2004, it was 100 quadrillion BTUs. The point here is that as supplies go down from this finite resource, demand goes up exponentially.

□ 2030

And what are we going to do? I would just like us to think about a couple of things. Oil is not going to last forever. The horizon is seeing to its completion in a number of decades, and so the transition to find alternatives to that type of fossil fuel is now.

There are a number of alternatives that some of the other Members will talk about, whether it is solar or even hydrogen or using soybeans or corn or wind or other technologies, advancing nuclear. The idea that we need to transition and find alternatives to our transportation needs is vital.

The second thing is we have the technology right now to more than double our efficiency across the board. The technology exists right now to more than double what you can get out of an automobile, from 20 miles a gallon to 50 miles a gallon. We have the technology to make all of our appliances way more efficient.

When we burned coal, we found a lot better uses for wood. If we know what uses there are for oil, other than burning it, we would be astounded. Our whole economy, our medical field, our industry, our clothes, our trinkets, the things that we have in our house, it is all a byproduct of oil.

So we have better uses for oil than putting it in, pardon the expression, a gas hog, so we can run off to the 7–Eleven and buy a cup of coffee and maybe some item that is made in some other part of the world.

So think about peak oil. Think about energy efficiency. Think about alternatives. These are not 100 years away. And think about your own lifestyle and how that fits into the mix.

Mr. BARTLETT of Maryland, thank you very much for joining us. You mentioned gas hog. The other day my wife read a new definition for SUV, it was a suddenly useless vehicle with the high gas prices we have now.

The gentleman from Maryland (Mr. GILCHREST) mentioned conservation and efficiency. I just wanted to come back for a moment to this chart to point out something that is quite obvious when you think about it.

If we are here, and I am going to call next on my colleague from Michigan (Mr. HOEKSTRA). And I see he has the same article that I started with. But here we have a curve that shows that as we approach peak oil that our demands for oil are going to exceed the supplies of oil. What that means is that there will not even be enough oil to fuel our present economies.

And if we are going to have any oil to invest, any energy to invest in alternatives, we are going to have to reduce our use of oil. Now we have blown, if you will excuse the term, 25 years. We absolutely knew in 1980 that M. King Hubbert was right about his 1970 prediction that we would peak.

By the way he predicted the world would peak about now, and we knew in 1980 that he was right about our country. Should not we have assumed that maybe, just maybe, he was right about the world and we ought to do something about that? We did absolutely nothing about that except grow an ever more and more lavish lifestyle that used ever more and more oil.

And so now just emphasizing what this curve tells us is if we are going to have any energy to invest in the renewables, we should have been investing for the last 25 years at least. We were not doing it. If we are going to have any to invest now, we would like to use this much oil, only this much is available totally so we cannot even use that much for ordinary activities, we are going to have to reduce that so that we have something to invest in the alternatives.

By the way, Mr. Speaker, I hope I am wrong. I hope all of these experts are wrong. Because if we are not wrong, the world and the United States mostly, because we are the biggest consumers of energy, are in for a very rough ride.

Let me turn now to the gentleman from Michigan (Mr. HOEKSTRA).

Mr. HOEKSTRA. Mr. Speaker, we must have both had our eyes drawn to the same article in USA Today that ran where it talks about the debate brews. Has oil production peaked?

As my colleague has pointed out, there are those that would advocate that say we have not reached the peak yet, that I think one of the authors or one of the people quoted in here says we have run out of oil five times since 1890 and we always find additional sources.

But it also goes on to say that the only debate should be over when we peak, not whether we will or will not peak. It is going to happen. And as we have seen over the last 12 months, especially the last 6 months, all of the indications are that we are going to continue to feel significant stresses with oil prices and the demand for oil.

With gasoline at one time having been close to $3 a gallon, now being back in the $2 and a half range, you know, we can see that perhaps at least for the short term some of the problems have been alleviated. But that only provides us what I believe is a short window, a very small window of opportunity for Congress and the United States to address this issue.

We know that our demand is going to continue increasing. We know that global demand is going to continue increasing, especially for two significant countries like China and India coming on-stream, their demand for fossil fuels is going to increase dramatically.

With increased demand, probably static production, we know that we are going to continue seeing increases in the pressure for the prices of fossil fuels.

You know I chair the Intelligence Committee. One of the things that I look at this as, I think this is a national security issue. We are extremely vulnerable. Today we import about 60 percent of our fossil fuels.

Who do we import from? Well, we import from our southern and our northern neighbors. We get 16 percent of our

imports from Canada. We get almost exactly that same amount from Mexico. And after that, we have got to be really careful in terms of how we describe these countries, but the next three countries, Saudi Arabia, roughly 15 percent. Venezuela, Hugo Chavez who has shown himself to be not a great friend of the United States, we get about 13 percent from Venezuela, and we get about 11 percent from Nigeria, and then you know a much lesser extent from a whole long list of countries.

But it becomes a national security issue, because at any particular given time, if these countries believe, or their leaders believe that they want to hold us hostage, they have the potential to perhaps do that.

So it is a national security issue. It is an economic issue. I agree with my colleagues and the comments made by my friend, the gentleman from Minnesota (Mr. GUTKNECHT), earlier that we ought to establish a goal, with a firm implementation date of when we will be energy independent. We ought to define exactly what that means and then we ought to develop those strategies to get there.

You know, he talked about ethanol. My friend, the gentleman from Maryland (Mr. BARTLETT) has talked about various conservation methods. There is probably no single magic bullet to solving this crisis, but if we push a whole range of efforts forward at the same time, there is no reason why by 2010 we could not be using 10 percent of our gasoline, or that all of our gasoline would be a 90/10 mix, 90 percent gasoline, 10 percent ethanol.

We just need to have a will to make it happen. Ford and GM, you talked about the SUVs, the interesting thing today about the automobiles that are being produced, I believe that every automobile being produced today can burn a mix of 90 percent gas, 10 percent ethanol. It is not a technology problem for the automotive companies.

As a matter of fact, everybody who is driving a relatively new car, something that has been produced in the last 5 to 7 years, can burn a 90/10 mix. The other interesting thing is all of the SUVs, the bigger vehicles with the bigger engines, because of some quirk in technology that my colleague from Maryland or my colleague from Michigan can maybe explain to me exactly how it works, but all of the larger engines today can burn a mix of 85/15, and that is 85 percent ethanol and 15 percent gasoline.

So the industry has come a long way. They have come a long way in moving forward on hybrids. And as much as I am against mandates, this may be an area, because I do not believe the oil companies, as I have talked to folks in my district who produce biodiesel, who produce the ethanol and these type of things, and I am asking if these are things are more economical to produce than fossil fuels why do not we see a richer mix of these fuels available at the pump?

And the answer is very clear. It is not a priority for the oil companies. They do not want to make it happen. They like selling fossil fuels and making significant profits. Maybe it is time for us to mandate that some of these products move forward so that we can facilitate the type of change that we really need.

Technology has moved forward. You know, we need alternatives. It is a national security issue. It is only going to become a larger national security issue in the future.

I thank my colleagues for allowing me to participate. I thank my colleague for his deep in-depth knowledge on these issues, and for bringing it forward. When I take a look at the mix of Members that we have here, we have got a great cross-section of the Republican Conference, I am optimistic that we actually can come together with a legislative fix to address this issue and hopefully do it in this Congress.

Mr. BARTLETT of Maryland. Thank you very much. You mentioned prioritizing. And, you know, if we are going to avoid a really rough landing here, we need as a country, indeed as a world society, we need to have a mentality like the Manhattan Project or putting a man on the moon. This is a big, big challenge.

I just wanted to note your observation about we would reach peak oil. I come back to this chart for just a moment. This is only since 1630. We had a lot of recorded history about, what, 4,000 years before that of recorded history. Out of 5,000 years of recorded history we have been about 100 years in the Age of Oil, and we are probably about half way through the Age of Oil. There is a little argument whether it is 50 percent through, 40 percent through the Age of Oil. But we are roughly halfway through the Age of Oil. And during this Age of Oil, now we have permitted the world's population to grow to almost 7 billion people.

We will come down the other side. This will reach a peak. It will come down the other side. What will we do as we come down that other side? Now we can avoid catastrophic consequences of this, but we really must anticipate them to do that. Let me go back for just a quick moment to the analogy of the thinnest sheet of paper has two sides.

The argument for ethanol is great, and we need to go to ethanol. But I just want to dissuade people from believing that this is the solution to our problem. We are barely able to feed the world today. Tonight I understand maybe a fifth of the world will go to bed hungry.

We are just barely able to maintain the quality of our topsoils. Now taking corn does not degrade that, because we are taking the corn off anyhow. But ethanol will be a really meaningful contribution when we have drastically reduced our total need for energy, because to produce enough ethanol to make a dent in the amount of energy we use now is just going to take more corn than there is out there to do that.

Let me give you a real quick example of the energy density of these fossil fuels. One barrel of oil, the refined product of which will cost you a little over $100 will buy you the work output of 12 people working all year for you. We have some difficulty getting our arms around that. Imagine how far one gallon of gas or diesel fuel takes whatever you drive, from a big SUV that gets 8, 10 miles a gallon to I drive a Prius that gets 45 miles per gallon.

How long would it take me to pull my Prius 45 miles? How long would it take you to pull an SUV 8 or 10 miles? If you can do it with a come-along and chains and guardrail you can get it there. It would take you a long time.

Something, another analogy to help you understand how energy rich these fossil fuels are. If you work in your yard real hard all day long, I will get more work out of an electric motor with less than 25 cents worth of electricity. So in terms of fossil fuel energy, we are worth less than 25 cents a day in terms of work output.

So that is the challenge we have. Now ethanol is nearly as good as gasoline. But as I showed on the chart before, it takes an enormous amount of fossil fuel input to produce the ethanol.

You know all of these are solutions, but I tell you, none of them will work with the amount of energy that the world is presently using, particularly in the United States.

Now me turn now to the gentleman from New York (Mr. BOEHLERT). I know that he has had a long-time concern about energy and particular concerns that we ought to be getting more mileage from our motor vehicles.

□ 2045

Mr. BOEHLERT. I thank the gentleman from Maryland (Dr. BARTLETT). You will notice during this presentation the colleagues of the gentleman have constantly, as I have, referred to him as doctor. The reason we do so is out of respect for his background, his knowledge; because that Ph.D. that he has indicates he is a very distinguished scientist. So he is not just talking about some pet theory or some gut reaction. He is talking about facts, scientifically produced evidence; and I applaud the gentleman for that, and I want to compliment all of my colleagues for participating in this special order.

In sum and substance, I think the viewers might say, what do I take out of this tutorial? It has been a great academic exercise and the gentleman from Maryland (Dr. BARTLETT) has presented a compelling case why we should all be concerned about peak oil. But if you are watching this in your living room someplace across America you might say, what does it mean to me right now? What does it mean to my family right now and what can I do about it?

Let me suggest something that everyone can do. They can write their

Representative in Congress and urge their Representative to support CAFE standards. What are CAFE standards? Corporate Average Fuel Economy, CAFE. That is where you get the acronym. That is, the Federal Government should require the automobile industry, the manufacturers of automobiles, SUVs, light trucks, all of these vehicles that traverse our Nation's highways which we are so dependent on, we should require them to be more fuel efficient.

We have tried mightily to convince our colleagues of that basic fact using some of the facts that the gentleman from Maryland (Dr. BARTLETT) made in his presentation about peak oil, pointing out that we have 25 percent of the world's energy consumption but we have only 5 percent of the population and only 2 percent of the world's oil reserves, yet we are consuming 25 percent of the world's energy output. Now, something is wrong there.

I would suggest we are on a collision course with disaster and we have to do something very meaningful about it. We are consuming 21 million barrels of oil a day in the United States. 21 million. We import 14 million barrels of oil a day. So we are starting every single day with a couple of problems on our hands.

Number one, if we are importing 14 million barrels of oil a day and oil is costing $60, $65 a barrel, that means we start each and every day somewhere in the neighborhood of $750 million, three-quarters of a billion dollars in the hole, in the red in our balance of trade deficit. And ironically, we are sending, as you have heard from previous speakers, so much of that money to countries where we are not quite certain what they are doing with the money. And the saddest part, as we have heard from our chairman of the Permanent Select Committee on Intelligence, some of that money that we send abroad to purchase this oil from less than enthusiastic embracers of our democratic ways, ends up in the hands of people who are trying to undermine everything that is so dear to us that we cherish.

So, in effect, you could make an argument that we are helping to sponsor terrorism by sending so much of that money abroad to countries that do not really give two hoots about our way of life, and some of that money ends up in hands that are intent on doing us harm. That is established. That is a fact. That is not just a pet theory.

Now, in addition to creating further pressure on our balance of trade, sending all of this money abroad, we are also doing something that is mind boggling to me. We are concentrating all of our efforts not on how we can conserve energy, but how we can consume more and find new sources of energy. Now, that is important. We have got to constantly be searching for new sources of energy but we ought to think in terms of how we can conserve energy, and making our vehicles more fuel efficient is a way to do it.

Now, back in the mid-seventies I was a member of the staff here in Congress at that time when CAFE standards were first introduced into the American lexicon. The opponents of that fought every step of the way, screaming and scratching, do not do it. If you force CAFE standards, and we only did it minimally, very modestly initially, said the opponent, that will put a death knell in the domestic auto industry. As a matter of fact, they asserted, if you do that, within 10 years all Americans will be driving compacts or subcompacts. That did not happen. You know it did not. So do I. So do the facts verify that. But they opposed it every step of the way, and these same forces are trying to oppose it today.

Now, what are their arguments? Well, the one argument they trot out is to make vehicles more fuel efficient the only way to do it is to make them less safe under the theory that you have to make them lighter, therefore less safe. Unmitigated nonsense. That is not my theory. That is not the theory developed by the Committee on Science of which I am privileged to share. That is the scientific consensus embodied in papers produced by the National Academy of Science, the most distinguished scientists in America.

Now, everybody in this body loves to say ''we are for science-based decision making'' until the scientific consensus leads to a politically inconvenient conclusion. Then they want to go to plan B. So the safety argument is phony on its surface.

The next big argument, well, if you require the American domestic auto industry to make more fuel efficient vehicles, SUVs, light trucks, passenger cars, well, that is going to cost jobs. How is it going to cost jobs? I think the American public would challenge more to go to the showroom to buy vehicles that are more fuel efficient because you know what? At today's price when you fill up, I filled up my vehicle today, $56 for one tank of gasoline. Do you know what $56 means to a lot of families in America? It means, boy, they have got to make some hard choices and they are going to have to go without something just to pay the gas bill. And most Americans just are not driving around on a Sunday afternoon drive to look at the scenery. They are going to work. They are going to church. They are taking the kids to school. They are going to the doctors. They are doing what they have to do. They do not have a choice. They have got to fill up their vehicle and they have to drive to places their family has to go.

So if you make more fuel efficient vehicles, they are not going to stop suddenly buying the vehicles. They are going to buy more because they are going to see, wow, this will get me farther on a gallon of gasoline. This will mean I do not have to fill up every week. Maybe I can fill up every 2 weeks. My family budget will be stretched.

Then the argument, the business, if it requires to make them more fuel efficient, and I have shot down the safety argument and I have shot down the jobs argument and they say we do not have the technology. The technology is there, it is on the shelf. We have got to continue research to develop new ways to do things even more efficiently. But the fact of the matter is off-the-shelf technology is there that if employed by the domestic manufacturers or by manufacturers any place, we can make the vehicles more fuel efficient.

So we work to the advantage of national security, make us less dependent on foreign source oil. Incidentally, I do not like the fact, I do not think any American likes the fact that a group of people can get together someplace a half a world away, they can get together and decide to turn off the spigot or reduce the flow on the spigot. That plays havoc on the domestic economy. The prices go up through the ceiling. We have all experienced $3 plus a gallon for gasoline. Some predictions indicate that it is going to go even higher. It is down temporarily.

I filled up today and it is down to $2.89 a gallon. I thought, gee, some relief is on the way, but 2 weeks ago it was $3.29 a gallon. But the fact is if we deal in a responsible way with the CAFE standards, we will provide a benefit to the consuming public from coast to coast. Not that the Federal Government is saying, look it, Detroit, and I use that as a euphemism for the domestic manufacturers, you cannot make SUVs anymore. That is nonsense. There are a lot of people that want SUVs. They have got families. They have got things they cart around in addition to the kids and all the supplies for all the events. They need bigger vehicles. But they want bigger vehicles that are more fuel efficient. You can get them with existing technology. So I would argue that this is an idea whose time long since has come and we are making progress.

In the 107th Congress when I first offered my amendment to increase the CAFE standards from an average of 25 miles per gallon up to 33, that is the current version of it. It was somewhat different back in the 107th Congress. We got 160 votes from Republicans and Democrats alike. And then in the 108th Congress we went up to 162 votes. Not much progress. Then at the beginning of 109th Congress we got 177 votes. Guess what? That was before we had $3 a gallon gasoline.

Now, I would submit that the votes are there to finally pass CAFE standards but what happened? We had a vote last week on another energy bill and my amendment to increase CAFE standards was not given a rule which would allow open, public debate on the floor and a vote by the people's House. I was denied that opportunity. But I am going to be persistent. I am going to keep at it. One of the reasons I am going to keep at it is because the gentleman from Maryland (Dr. BARTLETT)

has pointed out with his presentation on peak oil this is a serious matter that demands our collective attention and we have got to deal with it in a responsible way.

So I thank the gentleman from Maryland (Dr. BARTLETT) for his support, for his leadership in dealing with a very important issue for all Americans, energy.

Mr. BARTLETT of Maryland. The gentleman mentioned a collision course with catastrophe. I just wanted to make a quick quote from the article in the paper that the gentleman from Michigan (Mr. HOEKSTRA) was mentioning.

''The least-bad scenario is a hard landing, global recession worse than the 1930s,' says Kenneth Deffeyes, a Princeton University professor emeritus of geosciences.''

He goes on to say that he made that prediction because ''the worst case borrows from the Four Horsemen of the Apocalypse.'' That is better than war, famine, pestilence, and death.

It is interesting that the gentleman's ''collision course with catastrophe'' is mirrored by what he said.

I want to yield the remainder of my time to a colleague who has a fascinating Energy 101. We will only get partway through it today and we will give him a chance for a full explanation of this.

Mr. EHLERS. I thank the gentleman for yielding and I thank him for organizing this session.

I want to go very quickly through one item, and as we said we will continue later. I am a physicist. As a physicist, energy is tangible to me but to most people energy is intangible. You cannot touch it, see it, feel it, smell it or taste it. In other words, with our senses we cannot detect it. The only tangible aspect of energy for most people is the price at the gas pump and the utility bill at the end of the month.

But I have a wish and I wish it were true but my wish would be that energy would be purple. If energy would be purple it would be tangible. We could see it. And if you drive up to your house in the middle of the winter and saw the purple oozing through the walls and coming out in rivulets around the doors and windows where they are not sealed properly, you would say, oh, that is horrible. I am wasting all that energy. It is costing me money. So we would make sure that we would get the house sealed up.

Or if we were driving down the road and a Toyota Prius such as is owned by the gentleman from Maryland (Dr. BARTLETT) or Honda Insight or some other hybrid vehicle went past us, there would be just a little bit of purple around the outside of it because it is very energy efficient. But if an SUV roared by there would be a huge cloud of purple. You could hardly see it. If people saw that they would say, why, that is foolish. Why would I want an SUV that is using all that energy? We are wasting energy. We are wasting money. Why do I not get a hybrid vehicle?

My point is simply because energy is intangible, it is very difficult for people to understand the problem and to deal with it. But if we can believe the experts who tell us about energy, it would be just as good if we saw it because energy is purple.

□ 2100

I am wearing a purple tie for a reason. First of all, I like it. But, secondly, its keeps reminding me if energy were purple, we would certainly change our energy use habits and we would do a much better job of conserving, as the gentleman from New York (Mr. BOEHLERT) observed earlier about conservation. That is very important.

And I have to tell everyone in this Chamber and all of my colleagues, there is no faster, cheaper way to increase our oil supply than to conserve what we use. Because we can get the use of more energy at lower cost by doing that than by any oil exploration scheme and refinery-building scheme or anything else you wish to do. It costs less to conserve energy than it does to produce more. That is a very important principle to remember.

So I hope that everyone in this Nation and certainly everyone in this Congress recognizes the importance of energy efficiency. Conservation is just one part of energy efficiency, but we can certainly use our energy more efficiently than we have in the past. We can get more bang for the buck because we have the technological capability to do that today.

And it is absolutely essential to do that because, as you heard, we are being held hostage by other countries. Our energy costs are being used against us in various ways, and we simply have to start conserving energy, using it more efficiently, imagining that it is purple and keep trying to reduce the amount of purple that we produce by our use of energy. Then we have a chance of balancing our import-export balance, reducing the deficit of payments, and having a better economy at home because our money will be staying here rather than going abroad.

## 30–SOMETHING WORKING GROUP

The SPEAKER pro tempore (Mr. FITZPATRICK of Pennsylvania). Under the Speaker's announced policy of January 4, 2005, the gentleman from Florida (Mr. MEEK) is recognized for 60 minutes as the designee of the minority leader.

Mr. MEEK of Florida. Mr. Speaker, once again it is an honor to come to the floor. We would like to thank the Democratic leader as well as the gentleman from Maryland (Mr. HOYER), our Democratic whip, for allowing us to have this hour here to talk about the issues that are facing Americans and the issues that we feel should be brought to the forefront which are not being addressed.

Tonight I am joined by the gentleman from New Jersey (Mr. PALLONE) and also by the gentleman from Ohio (Mr. RYAN). I am glad to be joined by them once again because, as we have said before, we are going to come to the floor night after night to try to push the American agenda forward as best we can.

As my colleagues know, being in the minority here in the House of Representatives does not bring about the kind of power one needs to be able to respond to the needs of Americans. But I can say that being in the minority and pointing out these issues of how we could do the job better than the majority side has done, I think is not only educational for the Members of this House but also should bring about some kind of change so that we can have better representation here in Washington, DC, especially representation in terms of legislation that passes from this floor and out of this Congress and on to the White House.

We have been out for a week on the Columbus Day break, and I know the gentleman and his constituents have been getting lots of rain in New Jersey, so my prayers go out to your constituents and many others. Being from Florida, as you know we receive our fair share of good and bad weather. Mainly good, and so we want folks to come to Florida; but we know the Garden State has been hammered, along with other States around it, for quite a few days now. So I hope all is well with those counties that are trying to survive some of the flood waters.

I think it is important to begin where we left off almost a week ago, Mr. Speaker, and to address the issue of having an independent commission for the aftermath of hurricanes Katrina and Rita and making sure that not only are those Americans not forgotten but that we not forget the mistakes that took place during the aftermath of Hurricane Katrina so that they never happen again. Never again in the United States.

I think it is important for us to also realize, Mr. Speaker, that it was not just a storm. It was the aftermath of the storm and the lack of governance on the front end, making sure that our levee systems were where they should have been and the issues as relates to those buffer islands in the gulf coast area, especially in Louisiana. Those issues should have been addressed by the Federal Government in making sure that we have the kind of buffer to protect one of our greatest U.S. cities.

As my colleagues may know, the gentleman from Florida (Mr. HASTINGS) and also the gentleman from New Jersey (Mr. MENENDEZ) on our side of the aisle have introduced an independent commission bill that we have been working to get to the floor for some time now. I think that not only the Members but the American people need to realize that the power of this House, if we were in the majority, and this is not a partisan issue, but if we were in