

MR. ADLER: Our first panel today is going to be addressing the domestic economic impacts of greenhouse gas emissions. Moderating the panel today, who has graciously agreed to moderate the panel at the last minute, is Michael Fumento who some of you know was the 1994 Warren Brooks Fellow in environmental journalism at CEI; is now a Resident Fellow at the American Enterprise Institute; author of several books, two that I guess are most relevant to some of the issues that are big discussed today: The book *Science Under Siege*, which was published by William Morrow in 1993 and his latest work, he just published a book *Polluted Science* by the AEI Press that discusses the EPA's Clean Air Standards.

I think it's appropriate that we are having the conference this week in that the first panel discussing domestic impacts of greenhouse gas emissions because as some of you know, a study that had received a lot of attention but had yet to be published, a study done by Argonne National Labs was finally released by the Department of Energy last Friday. And this study shows that particularly if emission reductions are required in the United States but not in developing nations that there will be significant impacts, particularly on the most energy-intensive industries and that this could accelerate migration of those industries overseas and pose significant competitive problems. I don't know if the speakers today have had a chance to incorporate some of those most recent findings into their remarks. But that's something else to keep in mind is has that study was just released last Friday. And that certainly bears on what the domestic impacts will be.

So without any further adieu, let me turn the panel over to Michael Fumento of AEI and let him do it.

MR. MICHAEL FUMENTO: Thank you, John. It's a pleasure to be here even though I was called at the last minute in on this. In fact, Fred called me about, what, two-and-a-half minutes ago? Yeah. And I explained to Fred. I said, you know Fred, you've known me for years, global warming is an area I've tended to just stay away from. There's a lot of experts in this field. And because of that, I've tended to just stay out. It's a matter of allocation of scarce resources. I do things that other people aren't very good at. And I leave the global warming to them. And he says, But, Mike, this is a wonderful opportunity for on-the-job learning. Thanks a lot, Fred.

So I don't have a whole lot to say directly about global warming. But that's okay because I'm just the moderator, I guess. But I have a couple of indirect points to make. First of all, I wanted to point out that I have an article -- I have several articles right now -- John mentioned my book on the new EPA proposals. I also have an article in the current issue of *Reason Magazine* on the subject. And I have what I call a fib/fact article, Carol Browner says this. This is, in fact, what's going on in last week's *Weekly Standard*. Now I'm glad to say I actually got the most responses out of any article in the *Weekly Standard*, though it was a fairly short article.

And they are all favorable responses, except for one. It was half favorable. The guy starts out. He's as very complimentary. He goes, 'Where I take issue with his article is the caricature of Carol Browner. If she deserves credit for one act, it has to be for having the finest hair in the Clinton Administration. Possibly because of the media bias towards the First Lady's ever-changing hair style, Browner has failed to receive the respect she deserves for her stylish, shoulder-length cut. I know that the *Weekly Standard* isn't *People*, but Fumento might have questioned the amount of hair spray Browner uses which could contain some of the dangerous particulate matter.' I assure you there are scientists, some of the best scientists in the world, right now working on that very issue.

But I thought the guy made a point. And so I wrote a response which unfortunately the *Weekly Standard* in its infinite wisdom did not see fit to print, at least in this issue. I don't know how many of you remember the Neil Sedaka song, *Oh, Carol*. Well, I've written a bit of a song in response to what this guy had to say about Carol Browner's hair. Pardon the fact that I am the only Italian ever born who cannot sing. I will try this. I did at least write it, okay. It goes: *Oh, Carol I am but a fool. I just love that hairstyle though you treat the people cruel. You hurt them with your regs and laws, but darling, with your brown tresses, you make up for all your flaws. You want to wipe out all ozone and all PM-2. But just keep your hair long, and you can do what you want to do. You reduce our salaries, eliminate millions of*

jobs, just keep that stylish cut. Don't put it in bobs. You'll take away our lawn mowers and barbecues too. But with those brunette locks, I'm so in love with you.

(Applause.)

Thank you. Thank you.

Now in a slightly more serious -- slightly more -- I will -- again, I will tie these things into global warming, fear not. But again, these are issues that I've written about. And they are not global warming specifically. USA Today, yesterday -- a bit of a contradiction in terms -- front page: Few are dying despite faster speed limits. Now a year ago your host here, along with many other people, I must add -- I was not the only one -- I did this column: Speed limit rhetoric plays fast and lose with fact. I quoted the late, great Joan Claybrook -- actually she's still alive -- President of Public Citizen, saying that if speed limits went up, it would be, quote, a death sentence for a lot of Americans on the highways. My favorite cabinet officer because I come from Denver, Frederico Pena, who gave us that nice airport out in the middle of nowhere says that these speed limits would cost 5,000 extra lives a year. Other DOT reports says 6,400 extra lives a year.

And yet, there was a drop in deaths. And in fact, it was the same drop we have been seeing each and every year. It wasn't even a slowing down of the drop. Speed limits went up; fatalities went down. Now how could this be, the regulators asked. They had a very straightforward argument a year ago. And the straightforward argument was this: The faster you are going if you hit something, the more you go squish. Furthermore, the faster you are going, no matter how good your breaks are, the longer time it takes to stop. There's all sorts of problems, they said, physical problems, with going faster. Therefore 6,400 extra deaths will take place every year. People like myself -- and as I said, other people pointed out: It's not that simple, folks. You've got to look at a more complex model. There's more to it than these two physical laws that you happen to choose upon.

So it is with global warming. You have people out there who say, Well, look, we are pumping more carbon dioxide into the air. We are pumping more methane into the air. The world has to get hotter. It's that simple. And eliminating this or slowing it down is a matter of pumping less of these gases. And you have other people who have tried desperately to say, No, folks, it's not that simple. All sorts of things go on when the carbon dioxide and the methane and this and that -- even when the earth gets warmer, there are certain processes that kick in to make the earth get cooler. It's not that simple. We saw that with the speed limits. And I think there's a good chance that you are going to see it with global warming as well. And these people need to be listened to.

Okay, my second point before I bring on the real experts in this -- and this comes from my book Polluted Science, which is going to soon be available in bookstores everywhere. And I am going to put out summaries so that you can read about it and order it and what have you -- but I make a point in the book that economists call basically health equals wealth. This idea has become so accepted that I was amazed that a week-and-a-half ago even President Bill Clinton talked about health equaling wealth and said that, you know, We must make sure these regulations don't slow the economy because the better the economy we have, the more healthy people we have. Well, sure enough -- well, not sure enough.

But at any rate, I did something kind of sneaky with these EPA figures. They claim that they are going to save 15,000 lives with the new laws. Now all these lives are going to come from the fine particles standards. Even the EPA doesn't claim that the ozone laws are actually going to save any lives. They say it's all this fine particles. The first thing I did was I showed that there's no science behind this fine particles claims that there's basically -- no. There's no basically to it -- the environmental groups talk about thousands of studies that support their theory. Carol Browner has talked about 270 studies that support her theory. Other times they talks about 86 or 87 studies that their review board looked at. She's not sure whether it's 86 or whether it's 87 except for the fact that whichever it is, it's very, very important.

Actually it turns out that there are four studies that look directly at PM 2.5, which is what the EPA is looking to regulate, four studies that look at PM 2.5 and mortality. That is to say, premature death. Of those four studies, one on its face at least does seem to show that as particulate matter goes up, PM 2.5 goes up, deaths go up as well. Now there are serious, serious problems with that study. But what the heck, let's be magnanimous and put that one in the EPA corner. Another study looks at six cities. In three of the cities, as particulates went up, deaths went up. In three of the cities as particulates went up, deaths didn't go up, including the city that has the highest rise in particulates. So let's give half of that to the EPA, and half the EPA doesn't get. The other two studies out of the four show no connection between particulate levels going up and deaths going up. This is the science that the EPA claims is saving 15,000 lives.

Now, what about the costs though, the costs of these regulations? Well I looked at various -- I didn't -- I looked at the EPA calculations. And naturally the EPA did this cost benefit analysis and came to the conclusion that, guess what, these laws are actually going to save us money, lots and lots of money because of all the health benefits. I call it EPA's Humble Plan to Stimulate the Economy. However, other people disagree. For example, the President's own Council of Economic Advisors came to the conclusion that the ozone law alone, which the EPA said would cost us essentially nothing, will cost \$60 billion a year. I don't call that nothing. Now the Reason Public Policy Institute said 20 (billion dollars) to \$60 billion a year. The George Mason Center for Public Choice said a range of anywhere from 54 (billion dollars) to \$328 billion a year.

What does this translate into in lives lost when health equals wealth? Well, there's this gentleman named Kip Viscusi. A lot of you know his name. He's a top economist. He came up with this conclusion that a lot of people have backed up that says 50 million -- every \$50 million we spend in regulations costs us a life in terms of people who don't have the money to get regular health benefits, to get to the best doctors, to buy the latest model, safest cars, et cetera, et cetera. Reason Institute also did its own calculations. And here's what they found: Using the Council of Economic -- here's what I found -- I put these things together. Using the Council of Economic Advisors figures, the ozone standards will cost us, under Viscusi, 1,200 lives. Under the Reason Foundation figures, they will cost us 1,300 lives. Using Reason's calculations as to how many people -- how much money will be spent, Viscusi says the ozone will cost us as many as 1,200 lives. Reason says as many as 13,500. Finally, using the George Mason data, how much the ozone will cost, Viscusi says this will cost us as much as almost 7,000 lives. Reason says that this could cost us 73,000 lives. This is for ozone alone. When you look at fine particles, you find them costing us as much as, depending on who's studies you look at, again using my calculations with their figures, 12,000 lives for the PM alone, 33,000 lives under using the Reason Public Policy Institute figures. In other words, this law that the EPA claims its science shows is going to save us 15,000 lives a year could theoretically cost us over 100,000 lives a year.

So now what does this have to do with global warming? It's very simple. There's only so much money out there, folks. If you're not spending the money on one thing, you are spending it on something else. For the \$60 billion that we are going to be spending on ozone every year -- which, by the way, even the EPA calculates will reduce hospital emissions in New York City by three per summer, for that \$60 billion. The fact is all the money this nation spends on health, on research for all diseases, AIDS, Alzheimer's, cancer, you name it, is about 14 billion (dollars). So when you misallocate funds, you are costing people's lives. It's that simple.

So I am not going to get -- I am not the expert on global warming. These people are, the people who come after, the people who came before. But I can say this, I can say that when money is misallocated, people will die. And I can say that when people tell you I have a very simple model that will tell us exactly what will happen, speed limits go up, deaths will go up, it ain't so simple, folks. You need to listen to these experts. You need to listen to what they have to say.

That said, I would like to introduce our first expert. His name is Dr. Wilbur Steger. He's the President, Chairman of the Board and founder of CONSAD Research Corporation, a national, private sector think

tank in Pittsburgh. He serves as an economic policy and systems analyst consultant to several corporations and executive agencies. He is -- this list just goes on and on. Where should I quit? No. He's got degrees in economics from Yale, from Harvard, from Carnegie Mellon. He's published over 100 research papers, monographs, reports, and books. I'm getting exhausted just reading about all the wonderful things this gentleman has done. And so without further adieu, if you could please enlighten us.

DR. WILBUR STEGER: Thank you. It was probably about a week ago when I gave a keynote talk on regulation to the National Federation of Independent Business. And I mentioned to them that as an economist I had met 400 payrolls monthly since 1963. And I have paid six-and-a-half million dollars in payroll taxes. And I'm sort of here to still talk. The similar thing before your audience, I think, that would make me sort of stand out is that I'm among the few economists that did not sign the list of 2,000 economists who said that they were in favor of doing something about global climate change. And I presume what they were doing --

(Faint applause from the audience.)

Thank you. It isn't necessary to stand, yet. (Laughing.) My talk can start with. For those of you who know Vitas Gerulaitis -- anybody have heard that name before? Right. Well, at the recent, sort of, tennis shindig that was going on -- of course, he wasn't there because he died a couple years ago -- but his talk I think -- but what he said after he had beaten Jimmy Connors several years ago in the finals in New York, he was asked what it felt like since Jimmy Connors had beaten him 17 straight times. And he said -- he thought about it for a minute. This was in the news conference after the victory. He said: Nobody beats Vitas Gerulaitis 18 straight times. I sort of feel the same way.

Things you are talking about here today are these 2,000 economists. They have not been able to put together a single, published impact analysis of what will happen to our domestic economy. We are waiting for the interagency analysis team. How many of you are familiar with that report? It came out about the last several weeks. And that team was the Administration's team of economic experts. It's still in draft form. It's going to peer review. It is not publicly out. The studies I'm going to be talking about today are unfortunately the only such studies that I know about that actually talk about the impact, first, of a carbon tax, and then, of a fuel cost adder tax, and finally, something we haven't done yet but we are currently working on, which is the cost of emission trading, the costs that will come about because of emission trading. And these studies were done for the private sector but as well for the Department of Energy. Our latest study, 1997 study, to be released -- in quotation marks -- was done for the US Department of Energy.

How many of you are familiar with the Argonne National Laboratory report that the US Department of Energy has recently completed? Well, a few of you probably are. What I understand is that that report was issued last week. That was a report where the Department of Energy studied -- they talked to industry experts. It has taken a little bit over a year for that report to get out. But it was used in our study which is to take those and other inputs and put it through an economic model. I certainly hope that that report will get out.

Can I have the first slide? Thanks. I'm going to cover several things. I'm going to cover today the latest economic estimates that my company -- in 1992 we did a study of the carbon tax. I'll talk about those very, very briefly. That probably is the latest publicly produced estimates of the kind that we do which is to look at every industry, look at every state. So that's the first thing I'll be curving, our '92 -- and I'll show you something about our '97 results. As I said, they haven't been officially released.

On methods, I think this is where the war -- if there's a war between economists as there sort of is among physical scientists -- I think it's going to be over the following kinds of things: Do we care what happens in the transition between now and Nirvana? I mean, do we care what happens between now and the year 2020 or 2025 when emissions are under control, we've completely changed our capital stock, we now have people that will all be trained to work with windmills? And those are the -- and the question I think that

you should ask when you see an economic study is: To what extent does it cover the transition from here to there? Do we care about that? Are there any people let's see from the Hill here that would say that may be all they care about actually. But nevertheless, it's important to consider both.

Secondly, do the estimates that you are looking at, do they look at not just the impact on industry A or B but a total, if you will, a total comprehensive picture? For example, for me to say that the industry that's hurt the worst by either the particulate matter standard which we studied for the Air Quality Coalition or the global climate change proposals is likely to be retailing or the service sector, you say - Hum? Well, the answer is there are a lot of people in those sectors. And if you have a down economy, part of the wealth of reduction we are talking about, you are going to find a lot of industries that are standing in line to be hurt. So that's another consideration for models that we will be talking about.

Third, do you allow your computer, as smart as it is, to be overrun by experts? Or let's say, do you allow an expert to have a turn at deciding what kind of investments he might make or she might make in the aluminum industry or in the steel industry given the very, very large taxes on either carbon or fuel? If a model -- if the estimates of a model come out of the past, it's unlikely that the past has ever dealt with that situation before. I think that the battleground will be over the insertion of expert opinion, as in this Argonne report, which is that's what it was, as a matter of fact. And that's what we used plus some other insights from all those same industry people to be able to make our model more realistic.

And finally, to what extent does public sector behavior, such as the Federal Reserve, is it used to tone down or to temper what the model does? Now these are all -- if you say the Federal Reserve in its infinite wisdom will take any kind of big hit on the economy and reduce it to a mere smithereen nothing then you -- well, I guess you just bought the Brooklyn Bridge also. But nevertheless, that is something which differentiates between the models of the next six or seven months as the battle will continue.

Under institutional approaches, the question is: How do we get credible result out of all this? I mean, we are having enough trouble, obviously, in the physical science. We all know that everybody knows economics. And therefore there will be probably just as many estimates as there are people. Nevertheless, how can we get the public and private sector to produce something that really is meaningful to us all? Unfortunately, there is nothing like the IPCC process. We have 2,000 people signing a document, but that's far from those 2,000 people the agreeing to anything.

Can I have the next slide, please. The lasting policy impressions that come out of our studies is that first of all short run fixes are very expensive. We can talk about increases in cost of various kinds. But the main expense that happens really is that by virtue of saying that the certain kind of fuel has an extra tax on it or carbon or whatever is that our capital stock, which is in the many trillions of dollars, all of a sudden becomes partly irrelevant. In other words, like that. That may not seem very much, but if about a third of our capital stock is energy-embedded capital, that means has something to do, let's say in the case of cars with gasoline, in the case of steel and every other sort of major industry, physical industry, you are going to be dealing with a total -- how to say it -- very, very big hit on capital stock. Second -- and that's something which is to be compensated for allegedly by short run benefits. After listening to Roy earlier, I think it's hard for us to think about what kind of short run benefits will come out of those same short run hits on capital stock.

Secondly, massive transitional dislocation costs. Our initial study, as you'll see, '92, posed 600,000 jobs in the direct, in industries that are directly hit. They are big hits on output, big hits on jobs, big hits on prices. Those are transitional. Do we care? Fifteen years worth of them. I have a feeling that our country would want to take an interest in those.

Third, the capability to invest is reduced by virtue of the very tax that you are putting on the industries that you want to really invest in new technologies to capture carbon or to reduce NOx. And you've just done the opposite, of course, by taking away the money. The no role for carbon tax, which we said in '92 and which we still continue to believe in, at the time we thought that maybe something better could take

place which is emissions trading. We are having second thoughts about that now ourselves. But we still believe there is no role for a carbon tax.

Next few charts, the first one -- the next three are charts from our previous study. Since that's the only extant study, I guess we might as well still talk about it. What it shows is the industries that have the most job impacts, including job losses, you know, the, let's say, wage reduction uncertainty over tenure, et cetera, are chemical products, petroleum, stone, clay and glass, and primary metal. And in that study we did not look at these indirect impacts, the impacts on retailing and the service sector, so the 600,000 even then was low.

Next one, please. Pretty difficult to make because of the light, but let me tell you that the hard hit states California, Illinois, Ohio, Pennsylvania, Texas, Indiana, Kentucky, Louisiana, Michigan, these continue to show up in our current studies as the hardest hit states in terms of absolute numbers. But the states at the top and in the north are proportionately very hard hit.

The next slide, talks about - by state - our data reveal the kind of industries that are in effect harming each state. Our study for the Department of Energy, mainly was a methodological study trying to get at the issues I raised before. In the next chart - not to be read, but felt - we were asked to compare model which many of you familiar with, the DRI model, Data Resources, and its outputs relative to impacts versus a PC-based model, the Regional Economic Model Incorporated, REMI, across a variety of scenarios.

Next slide. What we are talking about here is the fuel cost adder, dollars per metric ton of carbon in the fuel that's necessary to achieve the 10 percent reduction by the year 2010, relative to 1990. You notice that that can go as high as \$240 per ton and considering what the price of a ton of coal is today, that is a lot. And it is that number in fact, it's that number that was also asked of the Aluminum industry, the Steel industry, etc. as to what they would do if those kinds of numbers happened here or were not happening in developing countries. The imagination can run sort of wild here, but nevertheless, most of them said on investments, if they had a chance, and as soon as they could, their investments could go off-shore.

That was not being shown so much in the economic model because no economic model ever contemplated a tax of that variety, and that is a large tax, obviously, but it's a necessary tax to be able to get the emissions to come down because you need to have output reduced.

The next slide talks about the impact on employment, output and value added for each of the relevant kinds of model runs. If you look at the employment dots there, we're talking about -- these are not in your summary report, by the way. You're talking about employment numbers. If you see -- take a look at the second two rows -- REMI modified, national. That's the regional model. It's a model that you can have in your home, basically.

And you look at the employment hits and it matches up with the carbon tax -- the equivalent carbon tax -- before it. You're talking an employment hits for those intervening -- 2,000, 2005, 2010, until the nirvana of whatever it is out there -- 2020 -- of as many as -- considerably over a million -- as many as a million to five million is now the range compared to the initial 600,000, although the 600,000 as I said, didn't include direct effects.

And do I believe those? Well, I believe them as much as I believe any other number, but I think I can see -- but, of course, as I say, that was an attempt to reduce output by the year 2010 by 10 percent versus 1990. That's a hell of a job. What would happen if these models were run to just maintain the same levels of output in emissions in the year 2010? They'd be considerably less. Would they be less than a million? I doubt it. We are going to be continuing to make those runs.

But what if it happened? Why do you lose a million jobs when you're spending -- when the money is being taxed by the government and recycled back into the economy? Well, if investment is made overseas

as a result of these high taxes, I guess that my brother, an economist, would talk about how that is replaced over time by other kinds of industries, primarily in the service sector.

It takes time to do that. You're looking at 15 years worth of a million to five million jobs. If you try to reduce the output by 2010, if you attempt -- let me have the next chart. As far as employment, you're talking about -- at the bottom, two Vs are for these models that are affected by expert opinion. That is the main thing that drives, although there are other things that happen if you use a regional model, and that says the people in Pittsburgh, when they lose their jobs don't move out to California immediately, whereas in most of the other macro models, again, instantaneous gratification pretty much is what economists believe in, I think. They have these people move out to where the next job is in a national model -- in a national clearing model.

I don't believe that. I mean, I believe people take their time before they move out. They probably suffer a lot, as a matter of fact, too.

The next two charts, very quickly, show output. They show a trillion dollar hidden output. But how many people know what the national -income is, by the way -- the national GDP? About how many dollars? Any guesses?

Q: (Inaudible).

SPEAKER: Right, right. But by this time it would be about eight and a half billion, and goes on to maybe a trillion. And probably by 2005 you're talking about \$10 trillion, but you're still talking about -- I wouldn't call that insignificant.

Again, do I believe these numbers? I believe that they're the best numbers that now exist. I'd be perfectly happy to see the Department of Energy release them and I presume they will.

Final thoughts on the methods fight that is going to happen. Can I have the next chart? Do I believe? I believe that the battle will be fought over just using national or even -- or even some numbers that are global when you -- when we really do care about what happens to the main states, the main regions of our country. I think those numbers ought to come about, but if they do come about, we'll be looking at transitional costs instead of everything moving out as they might on a larger scale model.

I think the second dot refers to the use of expert opinion. I think it's very important. I think if you're talking about things that have never happened before, you might as well ask the people (who have had the experience knows ?) as to what they think might happen. And the third model run closure refers to the use of a monetary policy. So far that has not been explained by those who say the Federal Reserve can smooth out these million job losses. If you try to smooth them out by increasing output, you also increase emissions. That isn't the Federal Reserve's roll. There must be a way to do it but nobody has explained that to us yet.

And if I can have the last chart. You can skip the one in between. I think we're talking about, if the important thing is to learn and have sequential decision making, following up the idea that Roy has, which is that you look at the numbers as soon as you can obviously. In the case of economics, we have the quarterly, unlike this every five or six year look of the IPCC.

And if you have models that are inexpensive enough and mobile enough to be able to sequentially use the model to try to see where the impacts are and dampen them -- and dampen the effect to the extent possible. It's very important, the second dot says, to mesh your transitional and long-term strategies and try to find a way to use models to do that.

And finally, public-private sector investigations. That I do believe that it's possible for the government to be as unbiased as the private sector, although I think that it does have to prove that. Thank you.

(Applause)

MODERATOR: Thank you very much, Dr. Steger. And now, unfortunately, since I went over in my introduction, we're just going to have to skip over Fran Smith and go straight to -- just kidding. I knew she can take that.

Our next speaker is Fran Smith. She's executive director of Consumer Alert, a non-profit, non-partisan, free market consumer group founded way back in 1977. Fran has served as head of Consumer Alert since July of 1994 and is a member of the board of directors. In fact, I was one of her employees at one time. In fact, my right ear is still a little bit sore from all this sort of thing that went on all the time.

At any rate, she was previously a senior executive with Financial Services Trade Bureau where she oversaw issue management campaigns of public affairs programs. She started a non-profit foundation that educates consumers utilizing television documentaries, a monthly consumer column, self-help check-list, which has been widely used by consumer reporters in broadcast media. I've certainly seen that.

Fran was executive producer of two documentary videos on how consumers can make better financial decisions. These were shown by hundreds of PBS and cable TV stations. She's also the founding editor of an award winning, academic journal, the "Journal of Retail Banking." Last, but not most, she is the spouse, and in loco parentis of Mr. Fred Smith. She has worked for decades to keep him on even keel, sometimes falling short, but succeeding often enough. In any case, I'm convinced that for these efforts the next time we get a Republican president, she will, in fact, be in line for the nation's highest civilian honor, the Medal of Freedom.

(Applause)

MS. FRAN SMITH: Luckily I've worked with Michael so I know what to expect. Thanks, Michael, and good morning, everyone. Nine out of 10 Americans don't know anything about the US climate change policy. Those are the results of polls that were released just last month by the Small Business Survival Committee. Yet as we know, five months from now in Kyoto, Japan, US negotiators are likely to commit the US people to sharp restrictions on energy use.

Now, something's wrong here. If we were at war -- if we faced a physical threat to the US -- Americans at home would be asked to sacrifice, and we would willingly do so -- gas rationing, canned food instead of fresh food, products in short supply. If we were facing an energy crisis, like the one in the 1970's, people would willingly cut back on driving. They'd car pool, as they did, turn down their thermostats and wait in gas lines, sometimes impatiently.

But something's different with global climate change. Something's wrong here. The American public doesn't know what's going on and policy makers aren't telling them. As we know, the debates on global climate change so far have focused on the science. Obviously, that's absolutely critical to the debate, and we focused on some of the macro-economic models, obviously very important.

But I'd like to note that what's missing from the debate is how consumers are going to be affected by these global climate change policies. The American public deserves to know what the proposals will mean to them in their every day lives. Because the effects on consumers will be real, substantial, and painful.

In my talk I'll try to convince you that this public policy issue deserves our attention -- deserves the attention of people not only in Washington, but people around the world. I think we ought to make sure we don't treat people, including the American people, as expendable pawns in the global climate change debate.

In my talk, first I'm going to look at some of the proposals on the table to restrict greenhouse gas emissions; and then second, I'll review what these proposals will mean to people in their every day lives

using some estimates and we know from other predictions and estimates of the future do not always show reality.

Next, I'll point out how policy makers are not discussing these proposals and their effects. What they're doing is using fear tactics, instead. So I'll turn now to some of the proposals.

As you know, and as we'll hear later, some of the proposals being discussed would sharply reduce greenhouse gas emissions from 1990 levels. Some of the discussions are 16 to 20 percent in seven to 12 years; sometimes more years are added on. These massive changes are not going to be achieved through minor reductions in energy use. People just can't turn up their air conditioners, thermostats to 72 degrees instead of 70 or take out their 75 watt light bulb and change those to 60 watts.

Instead, the proposed KYOTO accord will require drastic reductions in energy use in every aspect of people's every day lives. We also know that some of the approaches being discussed to reduce emissions are a carbon tax on fossil fuel emissions and the currently favored "cap and trade" approach.

Now, the administration, not surprisingly, has backed away from energy taxes. Their impacts are too obvious and the costs are too visible for the American public.

A 1994 EPA document affecting options stated this fact, and let me quote directly from it. "Energy taxes are likely to be unpopular and would require significant political capital to legislate. They might initiate some backlash against climate change and other environmental actions" -- end quote.

The same document -- the same EPA internal document, though -- gives the nod to cap and trade approach, and this is their assessment. Again, I quote. "A cap would likely not be as unpopular as a tax, since people are generally less familiar with the concept" -- end quote.

Now, this statement, of course, shows an all too common cynicism toward the American public. If people don't know what's happening, they can't mobilize against it. Some of the other proposals being discussed would combine energy taxes with massive subsidies for alternative technology -- subsidies that we know will provide huge profit to the politically preferred companies -- ethanol, electric cars, renewable energy sources, like wind mills and solar panels.

Now, electric cars sound good, but can you commute to work day in and day out reliably, comfortably, and, I think most importantly, safely? Now, solar panels, we know, might work in San Diego, but what about in Seattle, when we don't have very much sunlight there? Wind mills might work in Wisconsin, but what about in Washington, DC?

Shifting from visible taxes to hidden regulatory quotas or subsidies really, I think, gains us nothing. Any plan that makes energy less abundant will significantly affect people's living standards.

So let's turn now and look at some of those affects on consumers. Global warming policies will not simply change US lifestyle. They'll really change our standard of living. And I'll show some examples of that.

We know that higher energy costs will mean increased cost of housing, heating, air conditioning, lighting, transportation, food and consumer products. It's been estimated that electricity costs would increase by over 50 percent. Household fuel prices would jump by 50 percent. The price of gasoline would rise by 60 cents per gallon. And some of the economic consulting firms we've heard from -- Charles River Associates, DRI, McGraw-Hill have come up with some of these estimates.

All consumers will bear the brunt of hasty action. Energy taxes and restrictions on energy use, as I said, will affect people in their every day lives and their homes. They'll be built smaller, and yet, they'll be more expensive, because fewer houses will be built. We'll have sealed building standards, which will attract indoor air pollution and increased respiratory problems.

The indoor temperature will be colder in the winter and hotter in the summer because of the higher cost of fuels and electricity. On the dinner table, the cost of both fresh and prepared foods will rise. Families will cut back on recreational activities because of the high cost of gasoline and restrictions on discretionary activities that use fuel.

Air travel, likely to be hit with special energy taxes, will rise in price and service will be cut back. Other services for family members, such as nursing homes, day care centers, hospitals, will be more expensive as these firms find their own energy costs skyrocketing. Then we'll also see municipal services -- police and fire departments, schools -- they'll see their costs rise. This will lead to either tax increases at the local level, or they may find they're cutting back on those services.

Families will be driving smaller, less comfortable cars and face restrictions on when they can drive. Most importantly, those much smaller cars will be less safe. Controls such as rationing of gas will cause long lines at gas stations reminiscent of the energy crisis I mentioned.

So at home, driving, eating, working, travel, and, in fact, living -- people are going to feel the pinch of higher costs, fewer choices and many more restrictions.

Now, some of the costs aren't obvious, especially impacts that I think are going to be unfair and hurt the poor the hardest and will be legal.

First, climate change policies will be unfair. They'll have inequitable impacts on individuals in families. Who gains and who loses will be outside of people's control. People who live in areas dependent on coal to produce electricity, for example, will find sharp increases in their electricity bill. People who live in large states with less dense populations or in rural areas and have to depend on other transportation will be harder hit by high gasoline taxes, and the south and the Midwest I think are some examples.

People who live in older, drafty homes and have older appliances would pay significantly more in energy costs than those in newer homes. And senior citizens on fixed incomes may not be able to afford their steep increases in utility bills. And they may suffer severe health effects as they cut back on heating and air conditioning or try to spend less on food to help compensate the higher cost.

The second major problem with climate change policies again is that they are unfair. They'll worsen the distribution of income in the US, because they'll most heavily on the poor. Carbon taxes or their proxies will cause relatively large income losses in the poorest one-fifth of the population, according to Dr. Gary Yohe, professor of Economics at Wesleyan University. The poor also pay a larger share of their income for utilities, for household fuel, gasoline and motor oil.

In 1995, according to the Bureau of Labor Statistics, the poorest 20 percent of Americans paid about \$1,300 for these. If costs rise 50 percent as projected, they'll have to pay nearly \$24 more per month for their electricity bill and \$20 more per month for gasoline and motor oil for their car. They will not be able to afford these increases without stiff cutbacks in their essentials and they'll face a lower subsistence level.

A third and major problem is that climate change policies will have a lethal effect and this is something that I don't think we've paid enough attention to. Climate change policies will kill more people through raising the federal corporate average fuel economy standard. Proposals are to raise the standard for cars from 27.5 miles per gallon to 35 miles per gallon, and President Clinton, in a speech referred to earlier, recently one-upped this by promising to triple auto fuel efficiency over the next few years. Now, just look at that.

But I think a lot of us know that the human cost of CAFE is already too high. CAFE causes manufacturers to downsize cars in size and weight to meet the federal standards for their fleets and smaller cars are much less safe than larger cars in crashes.

According to an 1989 Harvard-Brookings study by Bob Crandall and John Graham, the current CAFE standard causes nearly 2,000 to 4,000 additional traffic deaths per year. If the standard were waived to 40 miles per gallon, as a 1992 study by John Graham estimated, there'd be an even greater increase in highway deaths, resulting in a total of 3,800 to 5,800 fatalities each year. So each day from 10 to 16 people will die unnecessarily. CAFE's tragic and disguised "blood for oil" trade-off has already gone on far too long for us to consider expanding it dramatically.

Now, I said earlier that Americans should be concerned about these policies, not just because they're costly, but because they're wrong. The United States, as we know, is a rich country. We can afford to do many good things foolishly. But curtailing energy use isn't a good thing. The human consequences of proposals to restrict energy use, especially on the most vulnerable people in America are wrong, as well as costly.

What should be disturbing to us, to all of us here, is that no administration officials or policy makers are discussing this consumer impact. That information isn't in the newspaper. That information isn't on television. And that information isn't even brought to them in their friendly, congressional constituency letters.

Just recently, Congressman John Dingell, made just this point, that our climate trading negotiators aren't releasing promised analyses of the effect of proposals on industry workers and consumers. So even our elected representatives are being left in the dark.

Finally, and let me stress this, before US negotiators agree to any binding targets and timetables to reduce energy use, we must inform the 90 percent of the American public I mentioned in the beginning of my speech, who know nothing about our global climate change policy. They deserve analysis, discussion and public debate, for a clearer picture of the real risk of global warming policy.

Instead, they're being fed scare stories. Global warming is the cause of floods in North Dakota, hurricanes in Florida, tornadoes in Texas, malaria in Mexico, cholera in Peru, and other diseases. Not one of these is founded in fact. Recent malarial outbreaks, for example, have more to do with restrictions on pesticide use than any other factor. And the outbreak of cholera in Peru in 1991 had to do with cutbacks -- recommended cutbacks by EPA -- in their use of chlorine in water purification. It didn't come from the weather.

While climate change proponents are painting these apocalyptic pictures, the true risk, the drastic consequences of proposals on the American public have been ignored. The risk of global warming, as we've heard, are speculative. The risk of global warming policies are all too real.

But I'd like to close with what I think is a compelling statement from the over 100 scientists who signed the Leipzig Agreement. And they said, quote, "In a world in which poverty is the greatest social pollutant, any restriction on energy use that inhibits economic growth should be viewed with caution." Thank you.

(Applause)

MODERATOR: Thank you very much, Fran. I'm still waiting for the first person who blames their having contracted a sexually transmitted disease on global warming. It's going to happen, folks. It's going to happen.

Our last guest is -- speaker, as it were -- is Eugene Trisko. He's an attorney who represents the United Mine Workers of America on AFL-CIO and environmental matters. I spoke with him earlier and said, look, if I can get up there in front of all these people and sing Oh Carol, surely you can give us a rendition of Tennessee Ernie Ford's "Sixteen Tons." He looked at me like I was an absolute idiot, which I think is probably a fair evaluation of the situation.

Mr. Trisko earned his BA in Economics from New York University, a JD from Georgetown University Law Center, was involved with the legislative development of the 1990 Clean Air Act Amendment from '81 to 1990. On behalf of the United Mine Workers, Mr. Trisko participated in all United Nations negotiations conferences, for which he has my sympathy, subsequent to the 1992 Real Earth Summit, including the first conference of the parties in Berlin in '95 and the meetings leading to the Berlin mandate.

He's evolved primary policy position papers on analyzing the impact of carbon reduction policies on the economy and we're very pleased to have him today.

MR. EUGENE TRISKO: Thank you, Michael, and without further ado. The American Federal of Labor-Congress of Industrial Organizations in February of this year issued a statement at its Los Angeles Executive Council meeting. That statement essentially urged the administration not to negotiate an amendment to the real framework convention on climate change, but failed to include appropriate limitations on emissions from developing countries, which are now responsible for nearly half of the world's greenhouse gas emission inventory.

This chart is the most recent, official United States government estimate of the potential job losses, associated with the imposition of, in this case, a carbon tax to reduce US greenhouse gas emissions by 20 percent from 1988 levels. This data was released by the United States government in the year 1992, coincident with the negotiation of the original real framework convention. There has, to date, not been another United States government estimate of the potential job losses associated with climate change policies adopted in the United States.

This chart, indicating the potential loss of 1.7 million American jobs, of which one million would be concentrated in manufacturing industries -- this chart underlies a concern that prompted the AFL-CIO Executive Council in February to issue that statement. Subsequently, resolutions of a similar nature have been adopted by the Industrial Union Department of the AFL-CIO, the Transportation Trade Department of the AFL-CIO and also the International Chemical Energy and Mining International Union in Brussels.

Now, to what are these job impacts attributed? This chart, based upon the same DRI studies done for the Department of Commerce in 1992 breaks down some of the state manufacturing impact from a 20 percent carbon reduction policy, and it's the largest job loss, as noted, or a 12 percent loss of manufacturing jobs in the state of Michigan; seven and a half percent in the state of Ohio; eight percent in Indiana; nearly five percent in Illinois.

This map looks veritably like an electoral college map of the states that are required to elect the next Democratic president of the United States, a fact that the United Mine Workers of America has brought to the attention of the White House from time to time, thus far, with little apparent success.

Now, let's fast forward to 1996. Last year the administration released the results of a DRI study without any job impacts -- a DRI study assessing the GDP effects, and GDP and employment tend to go hand in hand -- the GDP effects of various policies, ranging from stabilization of 1990 emissions to 10 to 20 percent reductions by the year 2005 to 2020. This chart summarizes the estimated GDP impact -- the loss of our gross domestic product as a consequence of the implementation of the policy.

Basically, what we are looking at here is a range of a loss of GDP as between \$100 billion and \$250 billion, and those figures can work in round numbers to a range of about one-half of one percent of GDP

to one and a half percent of our GDP in this time frame with most of your impact occurring between 2005 and 2010.

If we take that hundred to two hundred and fifty billion dollar loss of GDP -- and by the way, that was expressed in 1987 dollars. Not many of us recall what money was like in 1987. But if we convert it, using a GDP deflator to 1995 dollars, which we're probably more familiar with and then divide those impacts by the number of people in the United States, according to the Census Bureau projections of population growth in this country, this converts the loss per capita -- loss of GDP, loss -- foregone production of goods and services -- for each of those policies.

And here, essentially, what we see is a range of between \$500 per person and \$1,500 per person in the lost production of goods and services. Those, in turn, would translate. And by the way, the administration is hard at work on its 1987 analytical update of these results, and those results should be released shortly. We do not expect to find a significant difference between the results of the administration's release, presumably later this month or perhaps next month, and the results of the 1996 DRI study or the 1992 DRI study.

One can anticipate that an argument will be made that the United States can achieve stabilization of its CO₂ emissions at 1990 levels through the use of a fuel adder, or a permit system -- carbon system -- whereby the permits are auctioned by the government -- by FCC radio licenses -- and that permit would be worth about \$100 for a ton of carbon, and that would be sufficient to achieve stabilization.

Now, just for a point of reference, when you see the figure, \$100 carbon permit, you need to translate that figure into the following changes and impacts for consumer energy prices. A 26 cents per gallon increase in gasoline; a two cents per kilowatt hour increase in electricity; 16 cents per therm increase in natural gas; 30 cents per gallon increase in fuel oil; \$70 a ton increase in coal; and a \$14 per barrel increase in residual oil prices. And for the typical American household, those fuel price increases at the \$100 per ton carbon level, would translate to an increased out-of-pocket expenditure every year of approximately \$600 at \$100 per ton.

Now, the UMWA obviously is concerned about the prospective loss of its members' jobs as a consequence of a carbon reduction strategy. But if it were only our jobs at risk and we were a voice in the wilderness, so to speak, our case might be considerably weaker than it is.

But having had the benefit of observing the international negotiation process from the INC meetings in New York through COP-1 and the AGBM negotiations in Geneva and now in Bonn, we are committed as a matter of a moral certainty that this union will not give up one of its jobs, one of its members jobs for an agreement which fails to produce any measurable environmental benefits in exchange for the loss of those jobs. That is the least of our concerns of the administration's policy, and let me briefly describe that in the context of the negotiations that are now under way.

The Rio Treaty, as you may recall, requires signatories to agree upon an atmospheric stabilization target -- a long-term target for stabilizing atmospheric concentrations with CO₂ at a level that would present so-called dangerous -- anthropogenic -- interference with global climate. To date, parties to the treaty have not yet begun to discuss what that target may be. Most of the scientists involved in the IPCC process talk in terms of a range of targets, between 450ppm and 650 ppm. This chart indicates the global pathway of allowable carbon emissions. We now emit about six and a half billion tons annually -- the allowable pathways of global carbon emission consistent with meeting atmospheric targets ranging from 450 to 650 parts per million.

You'll note that from a current level of approximately six and a half billion tons of carbon, allowable emissions can increase to as high as 13 billion tons and double the current level over the course of the following decade and still meet one of these targets.

Now, there are two parties to the Rio treaty. There's the Annex One Party -- United States, Russia, Europe, Australia, Japan -- the industrialized countries -- and then there's everybody else -- the developing countries. The developing countries have not undertaken pursuant to the Rio treaty any affirmative obligations with respect to the control of their emissions.

And in fact, in 1995 in Berlin, in a critical negotiation that concerns the future responsibility of developing countries to, if you will, belly up to the bar and agree to undertake some affirmative emissions reductions obligations under the treaty, when the rest of the industrial countries were concerned about agreeing to a set of future limitations after the year 2000 and those limitations are what the Kyoto protocol will be all about, the developing countries, uniformly represented by the G-77 in China insisted that the Berlin mandate ensure no increase in their responsibility pursuant to the Rio treaty.

At that point, this debate ceased to be about the environment. It became a debate about trade and jobs. That's all it's about today. Because in the absence of affirmative commitments by developing countries to reduce the future rate of their greenhouse gas emissions, there is no course of action available to the United States or the other industrial countries that will meaningfully reduce the future rates of atmospheric concentration of CO₂.

Let me show you. Let's say that the industrial countries in Kyoto agree to a substantial emissions reduction pathway -- 10 or 20 percent reduction of CO₂ off of the baseline. This shows the allowable carbon emissions from industrial countries -- Annex 1 countries -- over the course of the next century that would be required in order to meet one of those atmospheric CO₂ targets -- 450 to 650 ppm's.

As you can see, the industrial countries, in order to meet one of the targets -- their emissions must drop below zero. In effect, we must become a net carbon sink in order to achieve one of those targets.

Now, what about the developing countries? How will their emissions effect future concentrations? And what are the time tables that will be available to developing countries for their economies to expand? And that, by the way, is a critically legitimate argument on their part, that we historically have been responsible for most of the growth of greenhouse gas emissions up to this point. They have urgent need to increase their infrastructure to eradicate poverty and that's a perfectly legitimate argument.

At a 550 ppm target, developing countries would be able to increase their emissions from a current level of roughly two billion tons per year up to slightly more than six billion tons per year -- roughly equal to the current global total by the year 2050. At a 650 ppm target, they would be able to increase their emissions to nine billion tons a year by the year 2060. They would have another 60 or more a year in order to develop.

But then, look at the 450 ppm line, and this is quite important. At the 450 ppm line -- that's the bottom one on this chart -- developing countries would need to begin to reduce their emissions by the year 2010 -- a scant 13 years from today. It just so happens that all of the protocol proposals that are on the table today in Bonn are consistent with a pathway, whereby industrial countries meet a 450 ppm target. What is the likelihood that when the community of nations that has signed the Rio Framework Convention eventually comes to negotiate what the convention calls for -- stabilization of atmospheric emissions at a level that will prevent dangerous anthropogenic interference, that those developing countries will vote for a 450 ppm target to cut off their own economic growth just 13 years from now?

Is it not more likely that when they do come to that vote, that they will pick a target that is consistent with the growth of their incomes and GDP's that they so urgently desire -- one that is more likely a pathway such as 650 ppm's? Well, when that vote is taken, both with the majority -- because developing countries constitute the majority of votes in the United Nations process. And therefore it is inappropriate for the United States to consider giving up a dollar of its GDP, or the loss of a single coal mine for field worker jobs on the bet that when developing countries take that vote, they're going to be shooting themselves in the foot. Don't bet on it. Thank you.

(Applause)

MODERATOR: Thank you very much. You heard it here first folks, a non-boring, straight-talking attorney. I'm afraid we have run over. This is not your moderator's fault. This is CEI's fault for choosing me to be your moderator. We have very little time for Q and A and then we're going to take just a three minute break before the next panel convenes. Because we have very little time, please, no questions concerning global warming and sexually transmitted diseases or Carol Browner's hair.

Q: MALCOLM ROSS: Just a question on how the U.S. has renewed the status of China as a Most Favored Nation. And my question is the renewal of China's status does not seem consistent with the fact that China is considered not a phase I, one of the developing countries, one that will be responsible for the highest level of greenhouse gases, and is the renewal of China's status a consistent policy with global warming?

MR. STEGER: My sense is that the decision respecting the renewal of China's MFN status has relatively little to do with considerations of a prospective carbon dioxide emissions. I think it's notable that about a year ago in AGBM-5 -- AGBM stands for Ad Hoc Group on the Berlin Mandate. It's a group of officials who come together to negotiate the terms of the protocol -- that in response to a suggestion from the Canadian minister that developing countries' responsibilities might be increased somewhat prospectively under the amended treaty, the ambassador from China objected stringently to this suggestion. Using this argument, that China is a developing country today, China will always be a developing country, China will never agree to undertake those additional responsibilities.

Q: We heard some estimates of increased energy prices, but there was one that you left out and I was wondering if you had any estimates on it, and that is the increase in the prices of renewable energy, particularly wind and solar. Wind and solar have no energy cost. There's no cost for the sunlight or the wind. All the cost of wind and solar come from the capital inputs of steel, glass and concrete. If you take away those three things, there's not much left of wind and solar projects. Have you heard of any increase in the estimates of the cost of renewable energy?

MS. SMITH: I have not, that would be subject to many of the same raw material costs. I am not sure... the point you wanted to make with some of the renewable technology? Its not easy to change over from a system of many smokestacks, industrial processes and such to using windmills. And as I mentioned, windmills aren't appropriate in some places - may be in others. And to solar panels; one of my friends estimated that to cool or heat one city would probable have to cover a desert with solar panels. We don't know what these environmental impact of many of those things - windmills kill birds. So we can all, I think, hypothesize wouldn't it be nice if we could all go back to nature and if we could have our little windmills in our garden turning our turbines and such. And wouldn't be nice if all of our solar panels in Seattle could somehow link to some sort of light source. But those things don't happen overnight. Its fine if people want to do them, but all of us shouldn't be chained to that sort of lifestyle.

Q: The reason I asked the question is, I think you will see the price of renewables goes up significantly. In a key assumption of the "Free lunch hypothesis" is that today, renewable technologies have become competitive with gas and coal technologies and there is no assumption that these prices will go up once carbon abatement policies come into play. So this is an area I think we need a lot of research on.

MODERATOR: There is a study, by the way, by the Resource Data Corporation which will be released next week, which will be able to bear that out.

DR. SINGER: Mr. Trisko has put his finger on a very important point. That needs to be emphasized again and again which is, we don't have a clue, what constitutes a dangerous level of greenhouse gas concentrations in the atmosphere. There is no scientific basis for with a lower concentration or a higher concentration as far as we know. In other words, the goal is completely undefined - scientifically. Any

goal will do or no goal will do if you don't know where your going. There has been a paper recently published in Science, an opinion piece by two Swedish scientists blaming that the present level is the right level. That is a completely spurious paper which we will attack in its proper place by replying to it. As far as we can tell from any impudence from the geologic record, it is that the lower concentration of CO₂ that prevailed 10,000 years ago gave more instability than the present concentration. For what that is worth, it may be that more carbon dioxide is better for the planet than less.

MODERATOR: One more question

Q: MYRON EBELL: Yes, I appreciate the opposition of the United Mine Workers to a reduction in our living standards and in jobs for Americans. But am I right in inferring from Mr. Trisko's presentation that the UAW would be willing to consider such a diminution of jobs and wealth in this country if the developing nations were willing to accept a similar decrease in their living standards and economic outputs? Is that a correct inference or am I getting something wrong?

MR. TRISKO: I think you are taking it one step beyond my intended remarks. But, from the standpoint of the policy as it has now developed, we are rather admittedly opposed to giving up a single job in the absence of those commitments by developing countries. It is not to say that in the event that there is adequate scientific support for the selection of an appropriate target. And Dr. Singer is correct, it is not a scientific issue at this point. As Dr. Bert Bolin pointed out in his valedictory address to AGBM6, this choice of ranges between 450 and 650 is a policy choice. It is a policy choice - not guided by science. But, in the event of an adequate scientific foundation and a global commitment toward meeting such a target and I think that the United Mine Workers and most other organized labor groups in this country would be more willing to accept the consequences that is now the case.