

**CREDIT FOR EARLY ACTION: WIN-WIN OR KYOTO
THROUGH THE FRONT DOOR**

HEARING

BEFORE THE

SUBCOMMITTEE ON NATIONAL ECONOMIC GROWTH,
NATURAL RESOURCES, AND REGULATORY AFFAIRS

OF THE

**COMMITTEE ON
GOVERNMENT REFORM**

HOUSE OF REPRESENTATIVES

ONE HUNDRED SIXTH CONGRESS

FIRST SESSION

—————
JULY 15, 1999
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Serial No. 106-37

Printed for the use of the Committee on Government Reform



Available via the World Wide Web: <http://www.house.gov/reform>

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U.S. GOVERNMENT PRINTING OFFICE

60-254 CC

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THURSDAY, JULY 15, 1999

HOUSE OF REPRESENTATIVES,
SUBCOMMITTEE ON NATIONAL ECONOMIC GROWTH,
NATURAL RESOURCES, AND REGULATORY AFFAIRS,
COMMITTEE ON GOVERNMENT REFORM,
Washington, DC.

The subcommittee met, pursuant to notice, at 3:15 p.m., in room 2154, Rayburn House Office Building, Hon. David M. McIntosh (chairman of the subcommittee) presiding.

Present: Representatives McIntosh, Ryan, Terry and Kucinich.

Staff present: Marlo Lewis, Jr., staff director; Barbara Kahlow and Joel Bucher, professional staff members; Luke Messer, counsel; Gabriel Neil Rubin, clerk; David Sadkin, minority counsel; and Earley Green, minority staff assistant.

Mr. RYAN [presiding]. The hearing will come to order. David McIntosh, the chairman of the hearing, is running late. We are going to try and buy some time and wait for him, but we had some votes a few minutes ago that had thrown everybody's schedules off, so I apologize, Mr. Kemp.

I am Paul Ryan, the vice chairman of the subcommittee. I have got to tell you this is a distinct honor to be sitting here in front of my former employer talking about this.

Mr. KEMP. It's my honor.

Mr. RYAN. No, it's really mine, Jack.

First we will go to the ranking member, Mr. Kucinich, for an opening statement.

Mr. KUCINICH. Thank you, Mr. Ryan. I want to thank Mr. McIntosh publicly. I will thank him again when he comes for holding this hearing today.

I support the concept of early action credits. In theory, this type of proposal would encourage businesses to reduce greenhouse gas emissions by rewarding them with credits that can be used to make future required reductions or sold on the market to another business that is not able to make reductions as cost-effectively or efficiently. Early action would encourage industry to reduce emissions of greenhouse gases now as opposed to 10 or 15 years from now when the effects become irreversible.

What makes an early action credit even more attractive is that some of the largest companies in the world, those with the most at stake, are actively engaging in the process. A credit program protects businesses against the uncertainty of future emission reduction requirements and gives those businesses incentives to act in

a way that benefits the economy and the environment. Later today we will hear more about this from Kevin Fay, the executive director of the International Climate Change Partnership, which represents some of the largest manufacturers, refineries and chemical companies in the world.

Today's hearing could not come at a better time. On June 29, the New York Times ran an article with the headline, "Human Imprint on Climate Change Grows Clearer." The following week, much of the company was in the grips of a deadly heat wave which took over 70 lives. It was just a few short years ago that another record heat wave in the Midwest killed more than 80 people in Chicago alone.

Climate change, however, is not just about heat waves. Scientists have linked the increase in greenhouse gases to the increased frequency and intensity of extreme weather patterns including droughts, floods and hurricanes. Unfortunately, it seems as though headlines about the damage, destruction, and human suffering caused by those events are becoming more and more common. Last summer's drought in Texas and the Southwest combined with the severe drought 2 years earlier was described by public officials as "the costliest and most devastating the region has seen since the Dust Bowl years." Researchers at Texas A&M determined that the 1998 drought cost the State's farmers and ranchers \$2.4 billion in potential income, while the farm-dependent businesses suffered an additional loss of \$8 billion. In Florida last year, fires and drought caused an estimated \$150 million in damage to agriculture. I am sure you all know that the list of weather-related damage goes on and on.

We have before us an opportunity to forge an alliance among environmentalist and industry groups, Republicans and Democrats, and others who support using market mechanisms to reduce greenhouse gas emissions in the most cost-effective and efficient manner.

I support the basis of the Kyoto Protocol. I also believe that reducing greenhouse gas emission and cleaning the air we breathe is an important domestic policy in its own right. Over the past 30 years this Nation has taken great strides toward a cleaner and healthier environment. We passed the Clean Air Act, the Clean Water Act, the Safe Drinking Water Act and a number of other laws because it was good for the American people, not just because we signed an international treaty. In fact, just yesterday Senator Jeffords introduced a bipartisan utility restructuring bill that sets caps on carbon dioxide emissions. A credit program could be used to encourage early reductions to meet that bill's goals.

The U.S. economy is in the midst of the longest peacetime expansion in its history. We have every reason to believe that we can reduce greenhouse gas emissions and keep the economy strong. According to a recent study by the American Council for an Energy-Efficient Economy, the United States was able to stabilize its energy-related carbon emissions in 1998 while continuing robust economic growth. I want to restate that. According to a recent study by the American Council for an Energy-Efficient Economy, the United States was able to stabilize its energy-related carbon emissions in 1998 while continuing robust economic growth. Furthermore, total energy used was down last year, even though gasoline

and fuel prices were falling for much of the year. In other words, it is possible to control carbon emissions without harming the economy or drastically increasing fuel prices.

We have the unique occasion of being able to address this issue in a proactive manner as opposed to reacting to the disastrous consequences we may find in the future. Mr. Chairman, we have a long way to go. There are many different concerns that need to be addressed before we can enact an early action program. Our distinguished panelists offer many different perspectives and will raise a number of concerns. I am looking forward to hearing from the witnesses this afternoon. I thank the Chair for the opportunity. I certainly want to join in welcoming Mr. Kemp, who I have a great admiration for, for all of his public-spirited works and for his vision in working with a whole range of issues that affect this country. So, Mr. Kemp, welcome.

Mr. KEMP. Thank you.

Mr. RYAN. Thank you, Mr. Kucinich.

[The prepared statement of Hon. Dennis J. Kucinich follows:]

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Statement of Rep. Dennis J. Kucinich
Hearing on Early Action Credits for Greenhouse Gas Emissions Reductions
July 15, 1999

Mr. Chairman, I want to thank you for holding this hearing today. I support the concept of early action credits. In theory, this type of proposal would encourage businesses to reduce greenhouse gas emissions by rewarding them with credits that can be used to meet future required reductions or sold on the market to another business that is not able to make reductions as cost-effectively or efficiently. Early action would encourage industry to reduce emissions of greenhouse gases now as opposed to 10 or 15 years from now when the effects become irreversible.

What makes an early action credit program even more attractive is that some of the largest companies in the world, those with the most at stake, are actively engaging in the process. A credit program protects businesses against the uncertainty of future emissions reductions requirements and gives those businesses incentives to act in a way that benefits the economy and the environment. Later today we will hear more about this from Kevin Fay, the executive director of the International Climate Change Partnership, which represents some of the largest manufacturers, refineries, and chemical companies in the world.

Today's hearing could not have come at a better time. On June 29, the *New York Times* ran an article with the headline, "Human Imprint on Climate Change Grows Clearer." The following week, much of the country was in the grips of a deadly heat wave which took over 70 lives. And it was just a few short years ago that another record heat wave in the Midwest killed more than 80 people in Chicago alone.

Climate change, however, is not just about heat waves. Scientists have also linked the increase in greenhouse gases to the increased frequency and intensity of extreme weather patterns -- including droughts, floods, and hurricanes. Unfortunately, it seems as though headlines about the damage, destruction, and human suffering caused by those events are becoming more and more common. Last summer's drought in Texas and the Southwest -- combined with the severe drought two years earlier -- was described by public officials as "the costliest and most devastating the region has seen since the Dust Bowl years." Researchers at Texas A&M determined that the 1998 drought cost that state's farmers and ranchers \$2.4 billion in potential income, while farm-dependent business suffered an additional loss of \$8 billion. In Florida last

-- more --

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We have the unique occasion of being able to address this issue in a proactive manner as opposed to reacting to the disastrous consequences that we may find the future. Mr. Chairman, we have a long way to go. There are many different concerns that need to be addressed before we can enact an early action credit program. Our distinguished panelists offer many different perspectives and will raise a number of concerns. I am looking forward to hearing from the witnesses this afternoon. Mr. McIntosh I thank you for this opportunity.

Mr. RYAN. Let me open with a brief statement that this is an issue that goes far beyond environmentalism. This is an issue that goes far beyond cleaning up our air standards. This is an issue that goes well into the political-philosophical makeup of not just this country, but the world. The Kyoto Protocol is not just an environmental vehicle. This Kyoto Protocol is becoming a political vehicle, a political power grab by many under many standards. I am looking very forward to hearing your testimony, Jack, on this issue.

We are going to hopefully hear from a good host of witnesses today on early action credits, whether or not the devil is in the details. Are early action credits truly free market vehicles toward achieving ends that are scientifically justifiable or not, or are early action credits vehicles toward circumventing the U.S. constitutional process of Senate ratification of treaties, as the Constitution of this land still requires, the last time I checked? This is something that is of dire importance and consequence not only to our institution, our democratic institution, our Constitution, but also let's look at the scientific—let's look at whether or not the science jury is in or not. I think we have to take a look at this issue in a holistic formula as to whether or not sound science tells us this is a wise course to take, whether or not this does allow Americans to craft laws for America, whether or not this is constitutional, and whether or not this violates our sovereignty.

At this time I would like to check with Mr. Terry if he would like to make an opening statement.

Mr. TERRY. No. I will yield to the chairman.

Mr. RYAN. I would like to recognize and turn over the gavel now to the chairman of this subcommittee, Mr. McIntosh.

Mr. MCINTOSH. Why don't you keep the gavel until we break for the vote.

Thank you for starting this process, and let me apologize for being late. Not often do you get a chance to meet with the chairman of the Ways and Means Committee. He came up to me at the end of the last vote and said, I want to hear your concerns about my tax bill. We had a half-hour discussion on the floor, and I apologize for being late. I think that we will get an even better tax bill. I am happy about that.

Now, I want to briefly explain the purpose of today's hearing, which Mr. Ryan has gone into and then I will put my full statement into the record. This subcommittee has been looking into the question of what the administration is doing to advance the Kyoto policy without going to the Senate for ratification. We had a hearing on May 20th in which we looked into whether they were following the Knollenberg language in last year's appropriations bill. It became very apparent they are not, and it's not an effective tool in preventing them from using a back-door implementation strategy.

On May 27th, Senator Don Nickles and I wrote to Carol Browner essentially asking if EPA was implementing the Kyoto Protocol under the guise of existing law, how would anybody outside the Agency know, because their answers are so circular. I have yet to get a satisfactory answer back to that one. What we did get was incomplete, essentially saying that they have committed not to implement it. Thus EPA believes that the language restricting spending in future bills is unnecessary, and we are supposed to trust

their commitments. But in short, the agencies have not come forward in any meaningful way to respond to serious questions about whether they are using regulation as a back-door tool.

Now we see a lot of action on proposing early action crediting that would reward companies for doing today what they would later be compelled to do under the Kyoto Protocol. It may sound attractive at first, but when you start thinking about it, you see that it creates a conflict of interest between the private interest and the public good. People will take actions and receive these illusory credits and, therefore, create political pressure for the Senate to adopt a policy that is patently bad for the country.

Today's hearing will also look at what types of problems are there with the system, what sort of financial conflicts are there with those who are advocating this early crediting provision, and what would be a better voluntary, truly voluntary, program that could be a win-win for the country without taking us down the path of ratifying the Kyoto Protocol.

With that, I would put the balance of my statement into the record and yield back the time to the chairman.

Mr. RYAN. No objection.

[The prepared statement of Hon. David M. McIntosh follows:]

Chairman David McIntosh
Opening Statement
Credit for Early Action:
Win-Win or Kyoto through the Front Door?
July 15, 1999

Today, the Subcommittee on National Economic Growth, Natural Resources and Regulatory Affairs will hold its tenth hearing on the economic and implementation issues raised by the UN global warming treaty, the Kyoto Protocol. Specifically, the Subcommittee will examine the case for legislation to provide regulatory credits for early reductions of greenhouse gas emissions, the economic consequences of credit for early action programs, and the impact of early action crediting on the debate over ratification of the Kyoto Protocol.

I want to welcome our witnesses, beginning with the Honorable Jack Kemp. Mr. Kemp recently joined the Competitive Enterprise Institute as its first Distinguished Fellow in order to devote more time to environmental and energy-related issues, such as the topic of today's hearing.

The Honorable Jay Hakes, Administrator of the Energy Information Administration (EIA), will testify on our second panel. Mr. Hakes will discuss EIA's voluntary greenhouse gas reduction reporting program, which has important implications for the design and feasibility of an early action credit program.

Our third panel includes David Ridenour, Vice President of the National Center for Public Policy Research; Fred Krupp, Executive Director of the Environmental Defense Fund (EDF); Kevin Fay, Executive Director of the International Climate Change Partnership; and Fredrick Palmer, Chief Executive Officer of Western Fuels Association.

Now, I want to explain a little more fully the purpose of today's hearing. On May 20th, the Subcommittee held a joint hearing with the Senate Subcommittee on Energy Research, Production and Regulation on the Administration's compliance with various statutory requirements, most notably the 1999 VA-HUD Appropriations Act limitation, also known as the Knollenberg provision, which prohibits backdoor regulatory implementation of the non-ratified Kyoto Protocol. The May 20th hearing inspired little confidence that EPA would not use its discretionary authority to implement the Kyoto Protocol under other pretexts or rationales.

So, on May 27th, Senate Subcommittee Chairman Don Nickles and I wrote to EPA Administrator Carol Browner, asking: "If EPA were implementing the Kyoto Protocol under the guise of existing law, how would anybody outside the agency know? Are there any criteria to distinguish innocent actions (those that incidentally accomplish the purposes of the Kyoto Protocol) from prohibited actions (those that implement the Kyoto Protocol)?" The answer we received was downright evasive. EPA wrote: "The Administration has committed not to implement the Kyoto Protocol ... Thus, we believe that statutory language restricting spending is unnecessary."

On May 27th, Senator Nickles and I also sent follow-up questions to the Office of Management and Budget (OMB). OMB's answers were equally uninformative. Also on May 27th, we sent follow-up questions to the Department of Energy (DOE). The Subcommittees have yet to receive any response from DOE. In short, EPA answered the Subcommittees evasively; OMB, non-responsively; and DOE, not at all.

In light of this pattern of arrogance and evasion by the Administration, I decided to hold a hearing on early action crediting. I believe early action crediting is the centerpiece of a strategy by the Clinton-Gore Administration to divide and conquer business opponents of the Kyoto Protocol.

Early action crediting would reward companies for doing today what they would later be compelled to do under a ratified Kyoto Protocol. The original legislation introduced in the Senate last year contained no fewer than 11 places where the early action period was identified as ending on December 31, 2007 -- one day before the start of the Kyoto Protocol compliance period. Therefore, I think a more honest title for such proposals would be "credit for early implementation." Vice President Gore may believe the Kyoto Protocol is a wonderful idea. But a multitude of expert witnesses have testified before the Subcommittee that the Kyoto Protocol would be an unmitigated economic disaster for the United States.

I regard early action crediting as a recipe for vast mischief. The program would create credits potentially worth millions of dollars but which would have no actual cash value unless the Kyoto Protocol, or a comparable domestic regulatory program, were ratified or adopted. Thus, participating companies would acquire financial incentives to support ratification. Congress and the public are entitled to know what economic motives and what special interest calculations might be behind the push for early action crediting. Today's hearing should help shed light on that topic.

Although touted as "voluntary" and "win win," I believe early action crediting is subtly coercive and would create a zero-sum game in which small businesses can only lose. Every credit awarded to early reducers would draw down the pool of credits available to all other U.S. companies in the Kyoto Protocol compliance period. Thus, if the Kyoto Protocol were ratified, companies that did not "volunteer" for early action would be penalized -- hit with extra compliance burdens. Most small businesses and family farms lack the discretionary capital, technical expertise, and legal savvy to participate in early action crediting. So, while making the Kyoto Protocol more likely to be ratified, early action crediting would make the treaty more costly for small businesses and family farms.

Proponents often describe early action crediting as a kind of insurance policy. They argue that, without an early action program, businesses that voluntarily reduce their emissions today might have to pay twice, so to speak, under a ratified Kyoto Protocol. We should have an opportunity to explore that argument later in the hearing. At this point, I would just like to observe that there is something odd about an insurance policy that makes the insured-against event far more likely to happen. It would not be smart to purchase fire insurance that virtually

guarantees your house will burn down. By the same token, it would not be smart to purchase Kyoto insurance that increases the odds of the Kyoto Protocol being ratified.

Mr. RYAN. Jack, we have a vote. Do you have time?

Mr. KEMP. Yes.

Mr. RYAN. We will recess for about 7 minutes for the purpose of voting and come back and swear you in and get going. How does that sound?

Great. Recess for 7 minutes.

[Recess.]

Mr. MCINTOSH [presiding]. The committee will come to order.

Let us begin immediately with our first panelist, and welcome, Mr. Kemp. Let me ask you, if you would, join me in taking an oath. Chairman Burton has asked that I swear in all witnesses before the subcommittee. If you would please rise and take the oath with me.

[Witness sworn.]

Mr. MCINTOSH. Thank you very much.

Mr. KEMP. Thank you.

Mr. MCINTOSH. Mr. Kemp, welcome to the subcommittee, and share with us your views.

STATEMENT OF JACK KEMP, DISTINGUISHED FELLOW, THE COMPETITIVE ENTERPRISE INSTITUTE

Mr. KEMP. Well, Mr. Chairman, first of all, thanks for having these hearings. Thanks for focusing the light of these hearings on this issue. I have absolutely no question in my mind that this will be a healthy debate. We don't need to fear it. I think all of us should welcome all sides to it. That's what a liberal democracy is all about, small L, small D.

I have a confession to make, Mr. Chairman. I'm not a climatologist, I am not an oceanographer. I didn't invent the PC. I did invent the forward pass, but not the PC.

I'm really pleased to be with you. I appreciate your indefatigable spirit in approaching this issue. I am sorry that Mr. Ryan is not here, one of my old comrades in arms and a terrific guy. The same could be said about Dennis Kucinich, who gave us some anecdotal evidence concerning today's topic.

Dennis, I just mentioned your name. I'm glad you came back. I didn't want to do it behind your back.

Dennis, I just wanted to say off the top of my head when I heard about various climate problems in the South and in the Southwest and maybe even in Cleveland, OH, who knows, I was reminded of my experience as a skier. My wife and I and family have skied a lot all over the world, but mostly in Colorado and Montana. I was in Vail, CO, last winter and they were bemoaning the fact that there wasn't a lot of snow in Vail. Of course, people were blaming it on global warming. And then there was a lot of snow in the Alps, and people who should know better blamed too much snow on global warming. Ten years ago there was no snow in the Alps and lots of snow in Vail, and that, too, was blamed on global warming.

Again, I'm not an expert. I am just a layman like all of us here who wants to get at the truth. I said earlier, this is a healthy debate. It can be done with civility, I hope. We don't need to burn down buildings in the name of saving the wilderness. We really have to bring some rationality to this debate.

I come today as a fellow of the Competitive Enterprise Institute. I have another hat as codirector of Empower America. I'm very close to my friends at the Citizens for a Sound Economy. I am a man of the center right, a progressive, if you will, conservative. My values are conservative, not unlike those of the panel. But I hope to be progressive in terms of working for change, progress, reform, a better future not only for the folks of our country, but the folks who live in those parts of the world that look to the United States of America at the end of the cold war for real leadership.

Leadership comes from example, not from bullying people, and from knowing your own background. Mr. Mayor, Mr. Congressman, and you too, David McIntosh, Mr. Chairman, I think all of us, left and right, Republican and Democrat, male and female, ought to lead by example, not by bombing people and bullying tactics. Having said that, I am really thrilled to be here and appreciate again the opportunity that Chairman McIntosh has given to me and the men and women who will testify subsequent to my testimony.

I'm going to create a historical record here today. I am going to be relatively brief. It's no secret that Jack Kemp has been called the Hubert Humphrey of the Republican party. Senator Humphrey said one time, he didn't think his speeches were too long, he enjoyed every minute of them. I want to submit my full testimony, Mr. Chairman, for the record and just summarize it and get to questions.

Mr. MCINTOSH. Without objection, the entire testimony will be included.

Mr. KEMP. H.L. Mencken, the great iconoclast, said one time, to every human problem there is a solution, simple, neat, and wrong. I think as my buddy Fred Smith has said, early action credits in effect are energy rationing, and it's a wrong solution to the problem, in my opinion, and I have some doubts as to the nature of the problem.

I don't want to offend anybody. I do have respect for my opponents. I spent 13 years of my life in professional football. As I came out of that career, I found that some of the best friends I have in my life are the guys that used to beat me to a pulp on Sunday. They are friends. I expect that in politics. It's tough.

Look, the issue here is bigger than Kyoto, albeit that's a big issue and deserves the attention of this committee. It's bigger, in my opinion, than the debate and discussion of global warming or the disputes over climatic changes. In my opinion, Mr. Chairman, the issue is whether or not the U.S. Congress is going to endorse, in effect, a third way style of command-and-control economics and politics. By third way, I mean in the international arena, the idea of allowing an international bureaucracy to trespass on the sovereignty of that which Paul Ryan alluded to in his opening comments. And I know, Mr. Chairman, you have been a champion of protecting U.S. sovereignty; that is, that the United States should pass its laws, and it should affect the United States and hopefully affect other countries by setting an example, but not by turning our decisionmaking over to supranational authorities.

Congressman Kucinich mentioned earlier clean air, clean water, and I forget the other one. I want you to know, Dennis, I voted for all of them. I believe in those goals as do, I think, most men and

women of good will and civility throughout this country. There has been a lot of progress. We can debate excesses, but I don't think that anybody can debate that we have to have standards.

That's not the debate here. It's whether we are, as Fred Smith has pointed out, going to ration energy at a time when many countries and continents of the world are beginning to emerge into what I call an Internet century, but with almost Fourth World capability. I spent part of the month of April in Ghana. It was an incredible trip, and they are talking about trading with the United States. I look at that map over there indicating places on the Earth that are going to have their energy rationed.

George Gilder had an interesting article, Mr. Chairman, in the Wall Street Journal saying that Kyoto is kind of a zero sum approach to ecology. He mentioned that India, that huge continent of India, over a billion people, uses less than one-tenth the energy per capita as the American people. To tell them, Gilder writes, that their billions of citizens cannot even match current Western uses of fuel oil or fertilizer and other chemicals is to tell them that they can't perhaps feed enough people or let alone gain them wealth without some form of a war. That's what causes wars, telling people that the only access to resources is to take it from someone else. I believe that is the predicate that has been laid down. I'm not accusing anybody of wanting a war, but as Gilder pointed out, nothing so pollutes the world as war.

I urge you to read the morning paper that talks about what happened with the bombing in Serbia with regard to pollution. They had to send their children miles and miles away because of nausea and other problems.

This is not the place to go into that, but I did want to make the comment that this is a zero sum approach that will consign millions of black and South Asian and Latino, Third World and Fourth World countries to poverty when you and I have discovered in a postcolonial, post-cold war world that the answer to poverty is markets, and freedom, and private property, and limited government, and the rule of law, and incentives for men and women to work and save and invest and invent and take us forward into an age in which technology is going to come up with solutions to problems that we cannot even see in our limited scope here on the eve of the new millennium. We want America to be cleaner, greener, and wealthier. That's the debate at least from our side of the issue.

In my opinion, Mr. Chairman, the Kyoto Protocol and legislation is attracting unwarranted corporate support. I noticed that Vice President Gore, bless his heart, last year announced an emissions trading agreement between a Canadian company and a New York energy company. Vice President Gore said, "These two major corporations are seeing and seizing an opportunity to protect our planet, build their bottom line, and grow the economy."

So it sounds like it's positive, but in my opinion, it's still a zero sum approach because there are thousands of small businessmen and women anxious to go into business who are going to be, in my opinion, compromised. The corporate community is naturally—many of them are naturally attracted to this approach, getting valuable credits for advance action that allegedly reduces fossil fuel emissions, but it creates, in my opinion, a profound dilemma. The

treaty hasn't been submitted for ratification, and most people don't think that it's been submitted because it couldn't pass. With all due respect to the Senate, it couldn't pass. In my opinion, what the administration has in mind is luring corporate America into these early action credits so that they can buildup a rationale for ratification of Kyoto, to build support for Kyoto. I still think that it's not going to be ratified.

I would add that it's unworkable. It is unworkable for the very reasons indicated by the chart, Mr. Chairman, that you have put up over here. It has taken time away from important things like cutting capital gains taxes.

That was a serious comment, by the way.

The science of warming, the role of fossil fuels and greenhouse gases and their relations to fundamental forces in the Earth's climate for eons, even before the industrial revolution, is in contention. Joel Bucher wrote in March that Dr. Hansen, James Hansen, the very same distinguished American scientist who caused so much alarm in the 1980's claiming that global warming would bring catastrophic temperature increases, recently declared before the scientific community, as Joel characterizes his comments in the prestigious Journal of the National Academy of Sciences, that predicting global temperatures with climate modelling is all but impossible.

With all due respect, modelling climate has yet to reach a point that most men and women would agree is capable of deciding for us what we should be doing to have that cleaner and greener Earth that most men and women of common sense want.

The Kyoto pledge to cut emissions to 7 percent below the 1990 level, which would be by 2010, Mr. Chairman, close to a 40 percent reduction, would, according to several economic forecasting firms, cost the U.S. economy well over \$300 billion a year, close to \$3,000 per household, raise gasoline prices by 65 or 70 cents a gallon. I admit that I don't know. I don't have to know. But I do know that rationing has never worked anywhere on the face of the Earth. That's what this is. I can't imagine America on the eve of a millennium in which we can create not only more wealth for our own country, but help provide an example for the rest of the world, would want to introduce into our political economy such a Malthusian zero sum rationing idea. The administration's own Energy Information Administration estimates a \$64 billion per year cost; someone said a conservative estimate of the cumulative cost would be close to \$400 billion by the year 2010. Again, I'm not throwing these numbers out because they are perfect, I just do it to use it as a metaphor. There is a huge cost involved with Kyoto, notwithstanding the fact that it's consigning people to almost perpetual poverty in many parts of the world.

I said that many of our major corporations, including energy producers, see early credits as a way to gain a windfall for steps that they would have taken anywhere, anyway, and a way, perhaps, to gain a competitive market advantage over smaller, often more entrepreneurial competitors. I don't want to pit the little guy versus the big guy. The American dream is to start small and grow your business. I'm not anti-big business or corporate business, but my bias is clearly toward the entrepreneur, the men and women who

are the innovators and the wealth creators and the risk-takers who may fail, but can start again.

The real fight in this issue, Mr. Chairman, is about our energy future, our economic future and that of the world. The Kyoto mindset implies taxes on energy use, on the use of energy as far as the eye can see. Direct taxes are already under serious review in Canada and the EU, the European Union, I should say. Early action credits are touted as a market approach by everybody who supports it. I appreciate their fidelity to markets. I doubt very much whether they really understand the market if they think this is a market approach.

I'm not trying to be a smart aleck up here, but I am trying to suggest that you can't set prices, Mr. Chairman. That's why socialism has failed from Eastern Europe to every part of the world, because you can't price goods and services. You can't establish the value of anything if the market doesn't set those prices. I'm not talking about libertarian, 19th century Darwinian biological competition, not at all. I think there are places where markets must be enhanced, must be protected. I am for antitrust laws, but I think having the Federal Government get into building cars, subsidizing ethanol, overseeing investment subsidies, it really doesn't make much sense, in my opinion.

I mentioned earlier that there is a large cost to Kyoto. I hope people will read "Early Action Crediting: Growing the Kyoto Lobby at Small Business' Expense, a policy brief by CEI, and also CSE's explanation and analysis," which was published February 12 of this year. As I said, I think this treaty cedes U.S. sovereignty to global bureaucrats.

I would be glad to answer any questions. I apologize for perhaps going on a little bit longer than I wanted to, but I think this is an important issue, and I welcome the debate. I know that I have got a lot to learn, but maybe there are others who have something to learn as well.

Mr. MCINTOSH. Thank you, and I appreciate your forceful argument for true free markets.

[The prepared statement of Mr. Kemp follows:]

Testimony of Jack Kemp
Distinguished Fellow, The Competitive Enterprise Institute
before the
Subcommittee on National Economic Growth, Natural Resources, and Regulatory
Affairs
U.S. House of Representatives

July 15, 1999

I want to thank you, Mr. Chairman and distinguished Members of the Subcommittee for inviting me here today to speak about the Kyoto Protocol on climate change and the alleged threat of man-made global warming; that treaty's implications for both the world economy and the American system of government; and proposed legislation concerning so-called "early action credits" to reward hypothetical reductions in fossil fuel emissions. These credits are touted by some as offering a "market approach" enabling us to regulate the future climate of the Earth. As I hope to demonstrate, they are nothing of the kind: instead, they are truly market socialism, an artificial device attempting to mimic market activity that really conceals a concerted campaign by international bureaucrats to seize control of the world's energy supply and indeed of every facet of our economic life.

No, I'm not exaggerating. Before I address the specific emissions credit legislation before you, Mr. Chairman, as well as your own excellent proposal, H.R. 2221, for slowing down the Kyoto express, let me sketch out the reasons why this issue has such profound implications for economic freedom and the democratic traditions that make America a beacon of hope for the world.

The Issue is Power

The Kyoto Protocol, the idea of trading credits to facilitate implementation of that agreement, and the very concept of regulating the world's energy policies through an international treaty together constitute a huge battle over power--not just "power" in the sense of controlling the energy sources that drive the world economy, but *political* power in the sense of "who decides"; who decides how fast our economy should grow (or if it should grow at all!), who decides where the technologies of the future will come from, who decides how and under what terms the peoples of the developing world will enjoy the blessings of economic freedom and the tremendous wealth that comes along with it. And by "wealth" I mean not just greater personal and national income, but the improved quality of life (health, safety, and yes, a cleaner environment) that is the hallmark of an advanced free market economy.

This is a profoundly important point, Mr. Chairman. Kyoto and its proponents are the leading edge of the greatest non-military power play in history, a play for command-and-control authority over economic life by a coterie of international bureaucrats whose names, titles, and functions are known to at most a *tiny fraction of a percent* of American voters. But these are not the 'faceless bureaucrats' we all like to complain about. Their faces, names, functions and extremist ideology are all too well known to their well-placed allies in think-tanks, foundations, and 'civic organizations' (*i.e.* non-governmental organizations, or NGOs) who work tirelessly to spread the Malthusian message of limits to growth, 'green' controls on job creation and advanced technology, and strict controls on population. Together with government officials, these organizations (with selective support from elements of the corporate community that have a particular interest to pursue) form a kind of "global iron triangle" that secures power to advance an elitist and radical agenda at the expense of the average citizen, and secures it in a manner that contradicts the fundamental principles of a free society: open exchange of ideas, popular sovereignty, a constitutional government of limited powers, and full accountability to the electorate for actions taken by government officials.

Here's a clear example of what I mean. As you know, the Kyoto Protocol was negotiated under the auspices of the United Nations with, I regret, active participation by the Executive Branch of the U.S. Last fall President Clinton authorized the U.S. to sign the treaty, but he has refused to submit it to the Senate for ratification'. Nevertheless, the administration works tirelessly to implement Kyoto de facto.

Binding the Nation

Mr. Chairman, as you and this Subcommittee are acutely aware, the Clinton administration is relentlessly promoting and in some cases implementing policies designed to reduce fossil fuels emissions in line with the 'commitment' the President made in Kyoto--a commitment that *in theory* should have no binding effect on the United States unless the Kyoto Protocol is ratified by the Senate--something that just isn't going to happen absent major political changes. As was made clear in your own May 20 hearing on administration compliance with the Knollenberg provision¹, EPA is undeniably working to bring the U.S. into compliance with Kyoto's requirements through public advocacy, incentives for so-called "renewable fuels", 'technical assistance' for reducing fossil fuels emissions, and so on. The President himself has cited global warming as a reason for (1) his executive order mandating a 30% emissions reduction in

¹One reason is the Senate's adoption in 1997 (by a vote of 95-0) of the Byrd-Hagel resolution, S.Res. 98, which puts that body on record in opposition to any climate change treaty which would cause serious harm to the U.S. economy and which does not include developing countries on an equal footing. Kyoto easily fails on both counts.

²Rep. Joe Knollenberg's provision in the FY 1999 EPA appropriations bill was designed to bar any expenditures toward implementing or preparing to implement the Kyoto Protocol.

federal facilities (an order Senator Cochran is fighting to block in the Senate), (2) various provisions of his electricity restructuring plan geared to reducing emissions and promoting the so-called renewables, and (3) EPA's attempt to regulate particulate matter and ozone (an attempt launched on other legal grounds, and recently blocked by the D.C. Circuit Court of Appeals).

In short, there is no reasonable doubt that the President and his administration are hard at work trying to impose on the American people Kyoto's limits on growth and innovation, and they are doing it (1) without the authorization of a legally binding treaty, and (2) as far below the radar screen as they can possibly go in order to avoid alerting the public to what is going on and what is truly at stake.

Whether the Clinton administration is in violation of the literal language of the Knollenberg provision is a question I leave to the lawyers. But that the Executive Branch is in clear violation of the will of Congress as expressed in that amendment, and in the Byrd-Hagel resolution, is absolutely clear to everyone. Congress does not want Kyoto; the public does not want Kyoto; the Clinton administration *does* want it, and is determined to ram it down the throats of the American people whether they like it or not.

What can we do about all this? It is certainly worth exploring legislative language that would strengthen and clarify the Knollenberg provision, and the language in your own H.R. 2221 is an excellent step in that direction. In particular, your provisions barring the government (not just EPA) from regulating carbon dioxide emissions absent express legislative authority, and prohibiting any use of taxpayer dollars to advance the cause of granting early actions credits for claimed reductions in fossil fuels emissions, are extremely helpful.

At the same time, Mr. Chairman, you know even better than I do that drawing lines between education and advocacy, between measures designed to implement Kyoto and those the administration justifies as using pre-existing programs to promote alternative fuels or emissions reductions is a tricky process, and I am wary of being overly dependent on technical legal interpretations to advance the will of Congress, safeguard the treaty power of the Senate, and protect the right of American citizens to shape their own economic future. These are very weighty issues, and it may be time to raise public awareness of what is at stake in this debate if we are serious about stopping back-door implementation of unratified treaties and the proliferation of international bureaucracies with broad, unrestricted power over the economic lives and even the political rights of American citizens.

A Bold Approach

Mr. Chairman, we need to take the Kyoto Protocol, the Kyoto mindset, and the so-called "Third Way" agenda head-on. The trendy Third Way rhetoric so beloved to our news magazines and pop-culture policy gurus disguises an agenda that is nothing less than

market socialism and statist corporatism: the Third Way ideology assumes businesses, individuals, and all of us here in this room are agents of the state, put on this earth to make elitist bureaucrats happy. Our prerogatives as a free society and a free people are truly at risk here, as is the future of the global economy. If as a nation we choose the wrong path now, it may take a generation or more to undo the damage. We can't let that happen, and it won't happen if we make our case honestly, openly and vigorously. The American people will rally to our side, I have no doubt of that.

To make that case we have to strike boldly. To leapfrog over the green-eyeshade issue of what the administration is spending "on Kyoto" versus "on idiotic energy policies" we should decisively go after the latter. Over two decades after the Carter administration's costly and failed policies to promote energy sources that have no prospect of market viability (solar, wind, synfuels, biomass, ethanol, *etc.*), why do we still have programs on the books to subsidize what we know doesn't work? Our policy as a nation should be to encourage technological innovation in the broadest and most sweeping sense, whether in the field of energy or beyond. We don't need corporate welfare programs, public-private partnerships, special-interest tax breaks, or propaganda campaigns to fight what the market tells us: the people want clean, efficient, reliable sources of energy at a reasonable cost. The free market has given them that, and will continue to do so with minimum, prudent regulation. Our energy future is freedom--it's as simple as that.

Furthermore, we must pursue a pro-growth, pro-innovation, pro-entrepreneur tax policy that will liberate the imagination of our people to find ways to create jobs, improve productivity, and generate wealth in ways that are even greener, cleaner, and more energy-efficient. That means lower tax rates, reducing the cost of capital, and removing tax considerations wherever possible from the economic decision-making equation, whether it be investment in new equipment, raising venture capital, or a personal decision to invest in stocks as a step towards retirement security. That kind of tax policy has everything to do with Kyoto, because it enthusiastically embraces America's overwhelming competitive advantage: the ingenuity of our people and our business leaders in bringing economic abundance, lower-cost energy, and more efficient energy to the world. Compared with that, the Clinton administration's elitist policy of offering miniscule tax breaks to politically-favored energy producers (like the so-called renewables) looks primitive indeed, whether motivated by Kyoto or not.

I applaud the preliminary steps recommended by Chairman Bill Archer and others to move tax policy in the direction of pro-growth across-the-board cuts, but we need to be much, much more aggressive on this front. The proposals being offered in the House Ways and Means and Senate Finance Committees are being marketed under the banner of economic growth, but unfortunately abandon that principle by embracing fiscal austerity, limiting tax rate reductions to what's supposedly "allowed" by static revenue estimates and an obsessive concern with retiring the national debt. I urge all my friends in Congress to hang tough on wealth-enhancing, pro-innovation tax cuts--it's not worth

dealing them away for a few concessions on spending here and there. The federal government's coffers are overflowing, and that money belongs to the American people.

Congress also must be more aggressive in fighting Kyoto-type initiatives with the power of the purse. Since finely-tuned oversight of administration efforts to advance the Kyoto agenda is a very difficult process, go for the bold stroke. No one can force Congress to appropriate money for EPA progaganda efforts, conferences, or forums that seek to frighten rather than enlighten people on the issue of climate change. By all means pursue vigorous oversight of all federal agency activities (as you have been doing with EPA), but if it is hard to parcel out spending 'for Kyoto' from other spending on 'education and outreach', just give the entire budget for those activities a nice big cut, and tell them why you're doing it. President Clinton and the Kyoto bureaucrats want to tell us how and where to tighten our belts and restrict economic growth. Let them try a little belt-tightening of their own; EPA, the Energy Department, and every other entity in the federal government that subsidizes or promotes certain types of energy sources, or uses, or practices, over others.

And while you're at it, apply the money you save to giving the American people a bigger tax cut.

Finally, Mr. Chairman, all of us need to find better ways to dramatize the way the Clinton administration is abusing the power of treaty-making to bind the nation to agreements that not only are unratified, but that are never even submitted to the Senate for ratification. This is a fundamental issue of constitutional power, not just between the President and Congress, but between America as a sovereign nation and those international institutions to which we subscribe, but to which we must never cede authority over our economic life and our political freedoms. As one who respects the U.N., and both an admirer and I hope a friend of Kofi Annan, I can nevertheless say that I absolutely do *not* want the U.N. to tell me or my family how much we should pay for gasoline, what kind of cars we should buy, or how we should heat our homes.

While Kyoto may be the leading-edge case of this corruption of the treaty-making power, I am sad to say that it is far from the only one. This administration has followed exactly the same practice with regard to the ABM treaty amendments negotiated with successor states to the former Soviet Union, which the President has used as an excuse for not deploying a national missile defense system (and which, like Kyoto, he has refused to submit for ratification); with the Comprehensive Test Ban Treaty, submitted to the Senate but unratified, which the Clinton administration is observing *de facto* by unilaterally halting nuclear testing and effectively dismantling our system of technical means for verifying the continued viability and effectiveness of our nuclear deterrent force; and with the NATO Charter, which the President effectively rewrote during NATO's 50th anniversary gathering and proceeded to implement in Kosovo without bothering even to consult the Senate.

Woodrow Wilson unabashedly described (and then employed!) this unique form of triangulation, pointing out that the way for a wily President to gain leverage with Congress is "to get the country into such scrapes, so pledged in the view of the world to certain courses of action, that the Senate hesitates refusal to ratify the rash promises."

That's the Clinton approach in a nutshell. His agreements make critically important decisions affecting national security (the ABM and testing treaties, and Kyoto as pertains to fuel use by our military forces) and both the national and global economy (Kyoto), yet they are being implemented in effect without the advice and consent of the Senate required by the Constitution. Over in the Senate our friend Jesse Helms has sought in the Foreign Relations Committee to bring the administration to account by holding up other treaty actions until at least the Kyoto and ABM agreements are submitted for ratification, but he needs help.

There is no magic solution here, but it is incumbent on all of us to raise this issue with the American people over and over and over again, every chance we get. Our national security and economic future are being put at risk by agreements never properly vetted in the political process, and imposed on our nation by the sheer will of the Chief Executive. It is hard to imagine a more urgent issue than this. I for one would like to hear much more about these issues, and less about campaign fundraising and the presidential candidates' poll standings.

To begin the urgent process of raising public consciousness of this issue, it might be well for the Senate to vote up or down, right now, on the Test Ban Treaty; and to vote up or down as well on the substance of the Kyoto and ABM Protocols. For that matter I do not think it would be out of line for the House to pass a resolution calling on the Senate to do so, in light of the Clinton Administration's brazen flouting of the constitution. No one can force the President to submit a treaty for ratification, but it is certainly possible to draft the substance of these agreements in legislative form and have a direct vote on them. Once the will of the Senate is made clear (and even more directly than was the case with the Byrd-Hagel resolution), the battle lines will be drawn. Count me in as one the leading combatants, and at least on the issue of Kyoto, count the outstanding staff and scholars of C.E.I. as well.

The Lure of Emissions Credits

Mr. Chairman, I know everyone is sitting here wondering, "when is he going to talk about emissions credits?" The answer is right now, but for reasons that should be clear it was important to set the stage by putting the issue of credits in a larger context.

Because when all is said and done, so-called early action emissions credits--giving value to, and creating a market in, quantifiable reductions in fossil fuels emissions from some undefined and highly speculative baseline of what emissions *would* otherwise have occurred--are just the next campaign in the Battle of Kyoto, the fight over who will

decide our energy future. Let no one be deceived into thinking that these credits are a legitimate market-based initiative, or have anything to do with environmental policy per se. They are an attempt to lure both energy and non-energy businesses into supporting, or at least acquiescing in, Kyoto as policy and practice. Early credits do that by creating windfalls for some of the big guys, penalizing the less powerful (especially small businesses), and using the classic government ploy of income redistribution--both within and across national boundaries. I am reminded of what V.I. Lenin said: "Liberty is precious--so precious it must be rationed." I am deeply troubled that some of my friends in the business community would buy into the kind of neo-corporatism represented by early action credits, thereby falling prey to the mentality Ronald Reagan warned against when he warned against business getting too enthusiastic about wheeling and dealing with the government, pointing out that they were "just feeding the crocodile hoping he'll eat you last." Let's not feed the crocodile in the first place.

As you rightly point out in the "Findings and Purposes" section of H.R. 2221 (paragraph 8) Mr. Chairman, "Early action crediting would ... encourage participating big businesses to support ratification, because participants would acquire costly paper assets that could be used as emission credits under a future regulatory system and that could be monetized if the Kyoto Protocol were ratified." You also point out, again quite rightly, that such credits would particularly hurt family farms and small businesses which lack the time, resources, or expertise to implement or document the kinds of "emission reduction strategies" some of the larger power producers and consumers can undertake. After all, Kyoto purports to "cap" all fossil fuels emissions in each participating nation, so businesses that can get credit for coming in under the cap first, effectively squeeze out those who can't move so quickly. Whether creating winners and losers this way is just, or makes economic sense, is irrelevant to the proponents of early credits.

The only effect of early action credits legislation like S. 547, which I regret is being proposed by my good friends John Chafee, Joe Lieberman, and Connie Mack in the Senate, is to divide opposition to Kyoto and build special-interest constituencies for the Kyoto regime, and by implication for the general principle of delegating our energy policy to the control of international bureaucracies. I am also very disappointed to read press reports that Reps. Rick Lazio and Calvin Dooley are preparing a similar bill for introduction as early as today which is designed to be even more tantalizing to sectors of the corporate and environmental communities. This is that rare case where both the ends *and* the means of this legislation are highly objectionable, and I wish all these gentlemen would reconsider.

Ultimately, they must be hoping that short-term economic interests of pro-credit businesses will trump our clear, long-term interest of preserving and expanding free markets in energy, goods, and services. That is wrong, and I congratulate you, Mr. Chairman, for tackling the early action credits issue head-on in H.R. 2221.

By the way, for an excellent, cogent, and more detailed discussion of the way early action credits would alter the Kyoto playing field, I refer the Subcommittee to the work C.E.I. has done on this issue, particularly "Early Action Crediting: Growing the Kyoto Lobby at Small Business' Expense," published as a CEI *On Point* analysis on February 12 of this year. I ask permission to submit this analysis for the record.

We can do more, though, than just oppose early action crediting legislation. We must *at least* do that, but speaking for myself as a C.E.I. Distinguished Fellow, I intend to speak out frequently on this and the entire Kyoto mindset. That mindset is a true prototype of Third Way thinking--the notion that expanding government power over individuals, and even taking it out of the reach of sovereign nations, is O.K. if it's masked in consumer-friendly jargon: protect the climate, save the planet, think globally, and of course, to do it for the children. The easiest way to forfeit our economic and political freedom is to accept the notion of elite guardians that will do good things for us if we just don't ask too many questions. I intend to ask those questions, and bring them to the attention of opinion leaders, corporate executives, and policy experts all across the country. I will, if you please, carry the banner of economic liberty into the environmental field, and I hope in much else besides.

There's no one in America who doesn't want a cleaner, greener, higher-tech world. We free-marketers have an advantage, though. Myself, CEI's distinguished President Fred Smith, and many others are truly the "Smart Greens", because while we acknowledge a proper role for government in environmental matters, we know that the free market is the only true path to that cleaner, greener, and more prosperous future. That is true in energy policy, it is true in environmental policy, and that truth is our most powerful weapon in fighting Kyoto, early action credits, and every device known to the mind of man that seeks power over others, rather than honest and open debate over what is best for our country.

In concluding, Mr. Chairman, I would like to suggest to the Subcommittee a subject for future exploration. Mark Mills, a Senior Fellow at CEI and science advisor to the Greening Earth Society, has done a preliminary study of the impact of the internet economy and near-universal computer use on energy supply and demand. His full report, available from the Greening Earth Society, is admittedly conjectural in some respects, but his findings are quite provocative. If Mills is correct--and his work needs to be backed up by more in-depth studies--the internet economy is the fastest-growing component of energy use, and may be even more decisive in shaping future energy demand. That means burning fossil fuels, folks. The irony is that the Kyoto mindset may be in direct conflict with the clean-and-green high-tech economy of the future. It is definitely food for thought, and I urge the members of the Subcommittee at least to read a summary of this work published by Mr. Mills and Peter Huber in *Forbes* magazine, "Dig More Coal," which appears in the May 31, 1999 issue at page 70, and which I also submit for the record.



ON POINT POLICY BRIEF

2/12/99

Issue Area(s)
Global Warming

Early Action Crediting: Growing the Kyoto Lobby at Small Business' Expense

By

Marlo Lewis, Jr.

"Credit for early action" – a policy proposal developed by the Environmental Defense Fund and warmly embraced by the Clinton-Gore Administration – is the latest ploy in the Kyoto lobby's strategy to divide and conquer the American business community. Like the President's Climate Change Technology Initiative (a \$4 billion package of targeted tax breaks and subsidies), early action crediting is designed to jump-start implementation of the non-ratified UN global warming treaty while expanding the number of companies favorable to ratification of the Kyoto Protocol.² Although touted by proponents as a "win-win" environmental program, early action crediting would benefit participants *at the expense* of non-participants. The losers would include most small businesses, which lack the discretionary capital and technical expertise required for participation.

Background. Although early action crediting is the subject of much technical analysis and discussion,³ the basic concept is fairly straightforward. Companies that reduce their energy-related emissions before 2008 – the year when a ratified Kyoto Protocol would go into effect – earn credits they could later use during the first (2008-2012) Kyoto emission budget period.

Early action crediting would not only encourage implementation of a non-ratified treaty, it would also give companies a cash incentive to support ratification. Credits earned under the program, although *potentially* worth millions or billions of dollars, are *actually* worthless unless Kyoto, or a comparable regulatory program, is ratified or adopted.

There's also a strong likelihood that EPA would be the administering agency. Through tacit threats of permitting delays, burdensome information requests, or aggressive enforcement actions, EPA has the means to make companies "volunteer" – and, thus, to swell the ranks of companies with a cash stake in ratification.

The Fixed-Pie Problem. Even if not administered by EPA, an early reduction program would put the squeeze on many companies to "volunteer," because participants would profit *at the expense* of non-participants. The latter would not merely forgo benefits – they would be penalized.

Here's why. Under the Kyoto Protocol, every industrial nation is allocated an emissions budget – a fixed quantity of emission allowances or credits it may lawfully use during

2008-2012. Industrial nations can earn emission credits, and thus increase their budgets, through early reduction projects completed before 2008 *in developing countries*, under the Clean Development Mechanism (CDM). But *domestic reductions* achieved before 2008 do not create credits that can be banked and later added to a nation's budget.

This "early action discontinuity" – the fact that early reductions overseas generate bankable emission credits but not identical reductions achieved at home – may seem unfair or irrational. Nonetheless, it is built into the Kyoto Protocol. Where, then, would the credits to fund an early action program come from? They can only come from one place – the U.S. budget allocation for 2008-2012. If we are not to break our budget cap, every credit awarded to companies for early domestic action must be subtracted ("drawn down") from the total U.S. allocation in the compliance period. In other words, for every company that gains a credit for early action, there must be another company that loses a credit in the compliance period.

An Illustration. Suppose for simplicity's sake that there are only four companies in the United States (A, B, C, and D), each emitting 25 metric tons (mt) of CO₂ equivalent, for a national total of 100 mt. Suppose further that the U.S. Kyoto budget is 80 mt, or 80 allowances (1 allowance or credit being an authorization to emit 1 metric ton). Absent an early reduction program, each company would receive 20 allowances during 2008-2012, and have to reduce its emissions by 5 mt.

Now assume there is an early action program that sets aside 20 allowances for reductions achieved before 2008. That reduces each company's budget period allocation from 20 credits to 15 (4 companies X 15 credits each = 60 + 20 early action credits = 80, the total U.S. budget). Finally, suppose Companies A and B make early reductions and each earn 10 credits. In the compliance period, A and B will have 25 credits apiece (10 + 15). Thanks to the early action program, A and B will each have five credits more in the budget period (25 instead of 20) than they otherwise would – but C and D will each have five fewer credits (15 instead of 20). C and D must make deeper reductions than Kyoto itself would require – or they must purchase credits from A and B. Either way, the early reducers gain at the non-participants' expense.

The Experts Agree. This zero-sum problem is widely recognized by proponents of early action crediting. The Center for Clean Air Policy writes: "Credits earned should be subtracted from the pool of allowances given out in the binding program, rather than added to it. *This means that early reducers will be rewarded at the expense of those who don't participate.*"⁴ As one CCAP scholar put it, "This is the essence of an early reductions program – it reallocates first budget period allowances from those who don't take early action to those who do."⁵

The Pew Center's monograph on early action proposals is similarly up front about the fixed-pie problem:

However, as a general matter, the Kyoto Protocol does not provide credit for ghg [greenhouse gas] reductions that occur before the first budget period. The only two exceptions are the CDM and

certain afforestation credits. As a result, any U.S. program to

provide credit for early reductions...will have to provide participants credit solely out of the credits available to the U.S. in the first budget period. For that reason, the credits needed to "fund" the early action crediting program will have to be taken out of (or "drawn down" from) the U.S. allocation for the first budget period.⁶

Concerned that an early reductions program might leave too few credits available to non-participants in the budget period, the Center for Clean Air Policy and Niagara Mohawk Power Corporation recommend limiting the amount of early action credits to 5 percent of the total U.S. emissions budget.⁷ Robert Friedman of the John Heinz III Center, noting that "Domestic reductions before 2008 cannot offset post-2008 requirements," concludes that the politics of domestic early action "will focus on who gains from credits and who 'pays' for them."⁸

Resources for the Future views the zero-sum problem as so serious that it advocates amending the Kyoto Protocol so that early domestic reductions will create internationally recognized bankable emission credits.⁹ But as the Pew report points out, the Kyoto Protocol cannot be amended until it has been ratified and enters into force. If amending Kyoto is a prerequisite to establishing an early reduction program, then the program will not be adopted quickly enough to encourage early action.¹⁰

Growing the Kyoto Lobby. Since early reducers will be rewarded at the expense of those who do not participate, many businesses that otherwise would never dream of "volunteering" may be constrained to do so for purely defensive reasons. Companies that see no particular benefit in early reductions may participate just so they won't be stuck in the shallow end of credit pool in 2008-2012. This dynamic is exactly what Kyoto partisans desire, as it would build up a large mass of companies holding costly paper assets that are completely valueless unless Kyoto is ratified.

At Small Business' Expense. Since early reduction programs penalize those who do not act early, it is worth asking who the non-participants are likely to be. The answer is really quite obvious. Only the big boys – utilities and major manufacturing firms – have the legal and technical expertise and the discretionary capital to invest in "voluntary" emission reduction projects. Most small businesses simply will not be players in the early credit game. But in a Kyoto world, small businesses will have to pay higher energy costs and many will have to reduce their energy-related emissions. Indeed, meeting the U.S. Kyoto target will be far more difficult if EPA does not regulate the one million or so small to mid-sized manufacturing companies, farms, medical and educational facilities that individually generate at least 100 metric tons of fossil fuel emissions per year.¹¹ Credit for early reduction would not only make Kyoto more likely to be ratified, it would also make Kyoto more costly to small business.

Conclusion. Credit for early action may seem at first glance to be a benign, voluntary, market-oriented program. It is actually a political strategy to implement a non-ratified treaty, fuel pro-Kyoto business lobbying, and penalize companies that don't jump on the global warming bandwagon. Far from a "win-win" environmental program, it would produce a zero-sum game in which small business can only lose.

Early action crediting is a staking horse for the Kyoto Protocol. Policy makers and

business leaders cannot consistently profess to oppose Kyoto and support early action crediting.

¹Marlo Lewis (Mlewis@cei.org) is Vice President for Policy and Coalitions at CEI and Chairman of the Cooler Heads Coalition.

²For additional background, see Marlo Lewis, Jr., "Credit for Early Implementation: Kyoto Through the Front Door," CEI *On Point* No. 23, January 25, 1999.

³See, e.g., United States General Accounting Office, *Climate Change: Basic Issues in Considering a Credit for Early Action Program*, GAO/RCED-99-23.

⁴Center for Clean Air Policy, *Rewarding Early GHG Emissions Reductions*, p. 1 (emphasis added).

⁵Tim Hargrave, personal communication, February 2, 1999.

⁶Robert R. Nordhaus and Stephen C. Fotis, *Analysis of early action crediting proposals*, Prepared for the Pew Center on Global Climate Change, October 1, 1998, p. 21.

⁷*Ibid.*, p. 22.

⁸Capitol Hill briefing, sponsored by Northwest Midwest Institute, February 5, 1999.

⁹*Analysis of early action crediting proposals*, p. 42.

¹⁰*Ibid.*, p. 43.

¹¹Mark P. Mills, *A Stunning Regulatory Burden: EPA Designating CO2 As A Pollutant*, Mills McCarthy & Associates, Inc., 1998.



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UPDATE ARTICLE

From the 4/1/99 issue

Issue Area(s)
 Global Warming

Left And Right Attack "Kyoto Lite"

by

On March 4, the Competitive Enterprise Institute joined with environmental activists at Ozone Action to draft a joint statement opposing a Senate proposal to give corporations credits for "early action" to reduce greenhouse gas emissions. Both global warming alarmists and skeptics have good reasons to be skeptical of this bipartisan measure. The text of the statement, signed by fourteen organizations across the political spectrum, is below.

While free marketers see credits as a front door means of implementing the climate treaty by granting companies credits that will only have economic value if emission restrictions are put in place, environmental activists believe the "Kyoto Lite" proposal will let the biggest emitters off the hook. Either way, the scheme would allow the government to start distributing energy rationing coupons to willing participants, creating a bureaucratic nightmare incapable of satisfying anyone except the most skilled rent-seekers. CEI working together with the Sierra Club? Perhaps Hell is freezing over - providing us with further scientific evidence against the global warming theory.

Joint Statement

"Credit for Early Action" Act will Serve Neither the Interests of the Environment nor the Economy

It isn't often that free market advocates and environmental activists agree. Today, both proponents and opponents of the Kyoto Protocol on global warming have joined together in opposition to the Credit for Voluntary Early Action Act, a bill sponsored by Senators John Chafee (R-RI), Connie Mack (R-FL), and Joe Lieberman (D-CT).

Both free market proponents and environmental activists agree that:

The Credit for Early Action plan represents an accounting nightmare that could be exploited by special interests for economic advantage. The proposed crediting process is highly vulnerable to political manipulation, making this specific proposal unworkable. As written, this plan could not possibly benefit either the economy or the environment.

- A project denied credit by a Democratic administration could be certified by a Republican one, and vice versa. Criteria for what types of projects may be awarded credit are likely to be arbitrary.
- The politically astute companies that took advantage of the voluntary emissions reduction reporting provisions under current law could be awarded Early Action credits. Granting credits for unverified actions taken in the past would disproportionately benefit large, lawyer-rich corporations, at the expense of companies without the expertise or capital to participate in these programs.
- The proposal's arbitrary emissions reduction baseline period of 1996-1998 would confer economic advantages on corporations dominant at that time. Small businesses and/or newly established firms would again be victimized, without producing net environmental gain.
- Inclusion of carbon "sinks" could create opportunities for further distortions: tree planting carbon sequestration projects could be measured against an unknown baseline of what actions companies would have taken in the absence of the program. The opportunities for creative political accounting render this proposal hopelessly complex.
- The Credit for Early Action scheme would provide incentives for companies to earn credits by funding emissions reduction projects abroad. Any system that tries to account for overseas projects would open the door to corruption of the process.

Signatories:

American Policy Center • Americans for Tax Reform • Citizens for a Sound Economy • Committee for a Constructive Tomorrow • Competitive Enterprise Institute • Friends of the Earth • National Center for Public Policy Research • National Environment Trust • National Tax Limitation Committee • Ozone Action • Small Business Survival Committee • This Nation • Seniors Coalition • Sierra Club

Zero-Sum Folly, From Kyoto to Kosovo

By GEORGE GILDER

What do the ethnic cleansing in Kosovo, the global warming treaty in Kyoto, and the Social Security "crisis" of demand-side Keynesian economics have in common, apart from a convergence of K's? You can even add Theodore Kaczynski, the Unabomber. Answer: They all reflect a belief in a zero-sum world.

The concept of a zero-sum system originated in a branch of economics called game theory. In a zero-sum game, a gain by one party necessitates a loss for another party. It is the economics of a fixed pie that can be redistributed but cannot be enlarged. The gains and losses always add up to zero.

For most of history, most people have believed that economics is ultimately a zero-sum game. Predicting a zero- or even negative-sum struggle for food, Thomas Malthus was the most famous exponent of the view that population increases geometrically while agricultural output rises arithmetically. Karl Marx saw all economies ultimately reducing to a class struggle, with zero-sum assumptions and results. Throughout much of this century, dictators and warlords from Hitler to Stalin sought power and prosperity through the capture of neighboring territories.

Marxist Marinade

The Kosovo "cleansing" is an obvious continuation of this zero-sum mentality. The Serbs and Albanians have endured 50 years of marination in Marxist doctrine and kleptocracy. These people cannot even imagine a capitalist world, where people prosper by serving their neighbors rather than killing or evicting them.

Zero-sum assumptions have led inevitably to conflict. If wealth cannot expand, the nation must. Countries must choose between famine and decline, or aggression and war. It was only capitalism that overcame this immemorial predicament. As Walter Lippmann put it, capitalism "for the first time in human history," gave men "a way of producing wealth in which the good fortune of others multiplied their own." At long last "the golden rule was economically sound. . . . Until the division of labor had begun to make men dependent on the free collaboration of other men, the worldly policy was to be predatory. . . . [But now] the ancient schism between the world and the spirit, between self interest and disinterestedness, was potentially closed."

Sophisticated thinkers in the U.S. imagine that they have transcended the mode of thought that underlies Marxism, Malthusianism and ethnic cleansing. Many grasp the zero-sum futility of trade protectionism. But the U.S. intelligentsia is now adopting a posture even more dismal. The Kyoto treaty embodies a new zero-sum theory of ecology as stifling and sterile as the worst excesses of Marx and Malthus. Kyoto's planned cutbacks in energy use would inflict zero-sum triage on the lives and opportunities of billions of poor people clinging to the bottom rungs of the economic ladder.

The irrationality of the global-warming theory is now entirely evident. A 3,000-year record of thermally dependent isotope patterns in fossil sediments demonstrates that current temperatures are about average, or possibly cooler than average, a conclusion confirmed by the known historical record. During previous centuries, temperatures were as much as four degrees Fahrenheit higher than today. A thousand years ago temperatures were two degrees

*Utterly unsupported
by serious science, the
claims of zero-sum ecology
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war.*

warmer than today. Far from the disasters now predicted to result from far smaller temperature increases, these clement conditions allowed the colonization of Greenland and the expansion of European populations. A further series of measurements shows that global temperature changes are almost entirely attributable to changes in solar activity. A 0.038% rise in solar intensity over the last decade unleashed an energy impact on the earth 70 times larger than that of all human activity put together.

Far from science, global warming is a recrudescence of the zero-sum *Zeitgeist*, in which gains for comfort and wealth of some are assumed to cause losses for other people, other species or the environment. This perverse impulse has also aroused chimerical scares about DDT, nuclear power, acid rain, radon, chlorofluorocarbons, PCBs, Alar, power lines, cellular phones, personal computers and other crucial effects and artifacts of modern capitalism. All these scares later proved to lack any empirical foundation. DDT, for example, saved some 500 million lives from malaria without probably killing a single bird. Indeed, San Jose State ornithologist J. Gordon Edwards has marshaled impressive evidence that DDT *increased* bird life (infectious mosquitoes happen to be bad for eagles too). With cutbacks in DDT use, malaria is now coming back.

Utterly unsupported by serious science, the claims of zero-sum ecology can lead to only one result: war. China and India currently use about one-tenth as much energy per capita as the U.S. To tell these Asian nations that their billions of citizens cannot even match current Western use of fuels, fertilizers, pesticides and other chemicals is to tell them they cannot feed their people, let alone get rich, without war. The initial Chinese response to their alleged zero-sum predicament—draconian policies of population restriction, abortion and infanticide—is only a foretaste of possible

horrors to come. If the Chinese are willing to deplete generations of their own children, they will not balk at attacking the populations of the West as the implications of the "closing circle" of ecology become clearer.

Similarly, infatuated by Keynesian concepts of demand and debt, former Commerce Secretary Pete Peterson would compound the evils of Kyoto with a tightening noose of fiscal austerity. In his influential book "Gray Dawn," he foresees draconian tax hikes, forced governmental savings, and redistributive measures that would bring growth to a screeching halt even in the U.S. All to resolve a predicted \$1.3 trillion shortfall in funds for Social Security and an \$8.9 trillion shortfall in funds for Medicare—75 years from now.

This total of \$13 trillion is about the amount of net new wealth created by U.S. households in the past five years. In the past year alone, enough new wealth was generated in the stock market to dispose of the entire 75-year Social Security shortfall. The Internet economy at least doubles in value every year, while Internet traffic doubles every 100 days or so. Within 75 years, the emerging technologies of the information age, together with improvements in the necessarily energy-intensive technologies of transport and food production, will make possible wealth beyond today's imagination.

Total Wars

The only real threat to this process of capitalist enrichment is the same zero-sum economic theory that made the 20th century an era of total wars. Focusing on accounting liabilities but ignoring the trillions of dollars worth of new assets, Mr. Peterson pursues a zero-sum economics that will produce the very war between the generations that he fears. Projected onto the international stage, zero-sum theory is even more pernicious, because it brings not merely the sterility of redistribution and economic stasis but the horrors of militarism and holocaust.

We are getting a taste of it in Kosovo today. If we want more, we should follow the Luddite inspiration of Kyoto. Just as Marxists and Nazis were willing to sacrifice millions of lives to their zero-sum "science" of class and ethnic conflict, so the new prophets of a "delicate balance of nature" are willing to sacrifice millions of lives and trillions of dollars to an equally spurious pseudoscience of ecology. Arising at the very moment that technology promises new horizons of unparalleled wealth and opportunity world-wide, this amazing movement would halt the very economic progress that historically has made the redress of environmental problems relatively simple and cheap. And nothing so pollutes the world as war.

Mr. Gilder is editor of the *Gilder Technology Report* and a fellow at Seattle's *Discovery Institute*.



Why not bake another pie?

Dig more coal—

Being digital was supposed to mean less demand for hard energy.

BY PETER W. HUBER AND MARK P. MILLS



SOUTHERN CALIFORNIA EDISON, meet Amazon.com. Somewhere in America, a lump of coal is burned every time a book is ordered on-line.

The current fuel-economy rating: about 1 pound of coal to create, package, store and move 2 megabytes of data.

The digital age, it turns out, is very energy-intensive. The Internet may someday save us bricks, mortar and catalog paper, but it is burning up an awful lot of fossil fuel in the process.

Under the PC's hood, demand for horsepower doubles every couple of years. Yes, today's microprocessors are much more efficient than their forerunners at turning electricity into computations. But total demand for digital power is rising far faster than bit efficiencies are. We are using more chips—and bigger ones—and crunching more numbers. The bottom line: Taken all together, chips are running hotter, fans are whirring faster, and the power consumption of our disk drives and screens is rising. For the old thermoelectrical power complex, widely thought to be in senescent decline, the implications

are staggering.

About half of the trillion-dollar infrastructure of today's electric power grid exists to serve just two century-old technologies—the lightbulb and the electric motor. Not long ago, that meant little prospect for growth in the power industry. We have about as many motors and bulbs as we need. "The long-run supply curve for electricity is as flat as the Kansas horizon," declared green guru Amory Lovins in 1984.

While Lovins surveyed the prairies, however, IBM and others were just beginning to roll out serious numbers of PCs. Today, worldwide annual production stands at 50 billion integrated circuits and 200 billion microprocessors (many of those special-purpose controllers that run things like car engines and telephones). Every last one of these chips runs on electric power. On its surface, where bits are incarnated as electrons, a chip runs at enormously high power densities—up to one-tenth those at the surface of the sun. Lucent, Nortel, Cisco, 3Com, Intel, AMD, Compaq and Dell have become the new General Electrics behind a resurgent demand for power.

Your typical PC and its peripherals require about 1,000 watts of power. An IntelliQuest study reports that the average Internet user is on-line 12 hours a week. (Most data relate to home users; business usage is very hard to pin down, but almost certainly is higher.) That kind of usage implies about 1,000 kilowatt-hours of electrical consumption in a year.

PHOTO: GUY LAWRENCE

the PCs are coming

It isn't turning out that way.

There are already over 50 million PCs in households, and 150 million more computers in businesses. Another 36 million are sold each year with 20 million going on the Internet.

And for every piece of wired hardware on your desk, two or three pieces of equipment lurk in the network beyond—office hubs and servers, routers, repeaters, amplifiers, remote servers and so forth. The heavy iron that powers a Schwab or Amazon typically requires a megawatt. There are already over 17,000 pure dot-com companies (Ebay, E-Trade, etc.). The larger ones each represent the electric load of a small village.

Getting the bits from dot-com to desktop requires still more electricity.

Cisco's 7500 series router, for example, keeps the Web hot by routing an impressive 400 million bits per second, but to do that it needs 1.5 kilowatts of power. The wireless Web draws even more power, because its signals are broadcast in all directions, rather than being tunneled down a wire or fiber. The digital PCS network—still in its infancy—will need a projected 70,000 radio base stations within a few years and twice that in a decade. Each of those stations burns at least a couple of kilowatts. The wireless handheld market (next-generation Palm Pilots and such) will reach 20 million units in annual sales within a few years.

Individually, many of these boxes only sip power; handhelds now run for weeks on a couple of AAA batteries.

Cisco's newest gigabit router, the 12000 series, can handle 16 times the bandwidth of its predecessor, with the same electric power appetite. But total demand for computational power is outrunning any efficiency gains. According to the Semiconductor Industry Association, today's state-of-the-art integrated circuit can



For the thermoelectrical power complex, rising digital demand has staggering implications.

contain 21 million transistors and run at 400 megahertz, on 90 watts of power; it will give way, in a decade or so, to an 1,800-megahertz/1,400-million-transistor chip that draws 175 watts. And even if Hewlett-Packard's Toronado and Nokia's Internet cell phones end up running on body heat, they'll pump bits in and out of the Web, driving power demands upstream.

Traffic on the Web has indeed been doubling every three months. About 17 million homes already have two or more PCs. Communicating chips are now migrating off the desktop. Electrolux recently announced its "Internet refrigerator," an embedded PC replacing the scribbled note and door magnet. GE has an Internet microwave oven. EmWare, a software company, is working with Sybase, 3Com and Micron to bring vending machines on-line to make stocking and management more efficient.

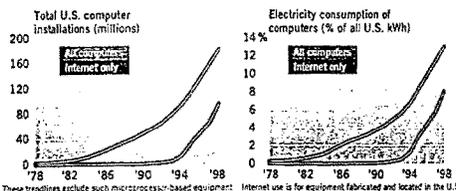
Just fabricating all these digital boxes requires a tremendous amount of electricity. The billion-dollar fabrication plants are packed with furnaces, pumps, dryers and ion beams, all electrically driven. It takes 9 kilowatt-hours to etch circuits onto a square inch of silicon, and about as much power to manufacture an entire PC (1,000 kilowatt-hours) as it takes to run it for a year. (We're counting just the things that really go into the box—chips, boards and so forth—not the water cooler or the rest of the sur-

rounding infrastructure.) A typical fab is already a 10- to 15-megawatt electric beast—about as big as a steel mill, electrically speaking. And there are at least 300 of these factories in the U.S. Collectively, fabs and their suppliers currently consume nearly 1% of the nation's electric output.

The infoelec-

Energizing the Internet

An explosion in Internet traffic propels computer sales and use. The Internet's electric appetite is already making a big dent in total consumption.



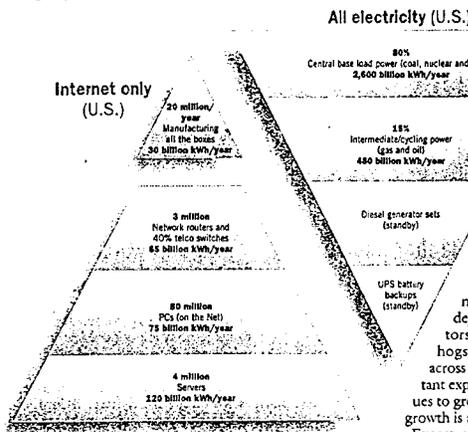
These trends include such microprocessor-based equipment as smart phones, video games, PDAs, machinery, etc.

Internet use is for equipment fabricated and located in the U.S. only, and does not include foreign equipment on the Internet.

Sources: Information Technology Industry Council.

Utilities sucked into the vortex of the Internet

The Internet-driven computer explosion has generated a stealth revolution in kilowatt-hour demand. The Net had 1,000 host computers 15 years ago; tens of millions are on today, with millions more kWh-gobbling boxes energizing Web sites, "dot-com" companies and the network.



economy, are cutting demand for gasoline, diesel and heating fuels. But not for electricity, which is generated mostly with coal (56%), nuclear (20%), hydro (10%) and gas (10%). Heating loads in winter are reduced by computers themselves, since the electricity that

runs the chips ends up as heat dissipated out the back. But these gains are more than offset by the additional cooling loads computers impose in the summer.

Thus, despite years of dramatic improvement in lighting, cooling and heating efficiencies, there has been little if any reduction in total energy use per square foot in commercial office buildings. The typical home office gets set up in addition to the one downtown, not instead of. Canon's new digital X-ray machine, recently approved by the Food & Drug Administration, will replace millions of X-ray films and tens of thousands of machines—but it will also likely accelerate the deployment of X-ray machines in many more doctors' offices. These new units will be bandwidth hogs, too, as they pump high-resolution pictures across the Web in search of second opinions from distant experts. Overall, total electric consumption continues to grow about 3% a year—and more than half of that growth is attributable to the rise of the microprocessor.

Expect, as well, fundamental change in another aspect of the power grid: quality and reliability. The conventional grid tolerates power hiccups of a single cycle for 60-cycle power. With refrigerators, lightbulbs and ovens, a blip in the current is merely an inconvenience. With computers and routers, it can be a catastrophe.

That's why a company like American Power Conversion, of West Kingston, R.I., has seen revenues jump 70-fold in ten years by selling uninterruptible power supplies for everything from desktop machines to dot-com servers to routers and enterprise data centers. There's a parallel boom in the systems and electronics that keep power clean. Active Power of Austin, Tex. makes a flywheel-based electric storage system sized to isolate and protect entire office buildings and factories from "dirty" power. The 1.4 ton flywheels spin at 7700 rpm. American Superconductor of Westborough, Mass. uses a two megawatt superconducting magnet, weighing three-quarters of a ton, to do a similar job. It is inevitable that a lot more very heavy atoms will be deployed to keep our bits on their appointed rounds.

Futurists have been promising us an information highway, not unit trains loaded with coal. Fiber-optic cables, not 600-kilovolt power lines. We're going to get both. ■

tric convergence is already having a visible impact on overall demand. At least 100 million nodes on the Internet, drawing from hundreds to thousands of kilowatt-hours per year, add up to 290 billion kWh of demand. That's about 8% of total U.S. demand. Add in the electric power used to build and operate stand-alone (unnetworked) chips and computers, and the total jumps to about 13%. It's now reasonable to project that half of the electric grid will be powering the digital-Internet economy within the next decade.

The global implications are enormous. Intel projects a billion people on-line worldwide. That's \$1 trillion in computer sales—and another \$1 trillion investment in a hard-power backbone to supply electricity. One billion PCs on the Web represent an electric demand equal to the total capacity of the U.S. today.

But won't all this new digital intelligence reduce energy demand in other ways? Telecommuting and e-mail, for example, reduce consumption in other sectors of the economy. Energy demand has indeed flattened somewhat in the transportation sector. Less warehousing, and the overall tuning of the



A billion PCs on the Web means electric demand equal to total U.S. output today.

Beware of the Kyoto Compromise

By Jack Kemp and Fred L. Smith Jr.

In November the Clinton Administration signed a treaty, negotiated in Kyoto, Japan, that purports to temper global warming by imposing a schedule of greenhouse reductions on so-called greenhouse gases. The action was widely regarded as a public relations move, pure and simple, because the Senate has voted overwhelmingly—95 to 0—to reject the treaty.

But if there is no chance of the treaty's protocols going into effect, why are large blocs of corporate America booking seats on the Kyoto Express? The explanation is that they are getting excited over the possibility of getting credits for any reductions in emissions they achieve before the Kyoto treaty would take effect in 2008, and in some cases for reductions already achieved.

For some time, the Senate has been considering the emissions credits contained in the Kyoto treaty. The credits would be applied against the strict limits they would face later. And corporations able to make even deeper cuts in emissions now could sell their surplus credits to other companies. The Clinton Administration wants to set up, under a trading system that the Clinton Administration wants to set up, would benefit, while the petroleum industry would be hurt.

Jack Kemp is a co-director of Empower America. Fred L. Smith Jr. is president of the Competitive Enterprises Institute.

environmentalist in the Senate, who worked with Senator Joseph Lieberman of Connecticut, a Democrat, and Senator Connie Mack of Florida, a Republican.

These three Senators, honorable men all, seem to believe they have found a "third way" between pro-Kyoto and anti-Kyoto forces.

Their approach is to award early credits to companies that reduce emissions. This might encourage a trend toward cutting back on greenhouse gas production.

Emission credits would draw us into a bad treaty.

This would win more seats for the Kyoto crowd. And the plan also looks attractive to industries, which would find it advantageous to reduce in advance the long-term costs of the Kyoto treaty, or some domestic version of it, and to secure some tangible benefits.

As usual, though, there is no real third way. Proposals like the one introduced by Senator Chafee and his colleagues will inevitably divide the business community between winners, who can achieve large windfalls, and losers, who will be the brunt of any emissions controls. The result will be to push the pendulum toward a plan closer to that drafted in Kyoto.

Unfortunately, this dynamic of giving special breaks to individual com-

panies is all too familiar. It explains why, for example, we have a Federal tax code with rates much higher than they need to be, but with many exemptions, privileges, and special rules accorded to favored industries.

The Kyoto treaty is unlikely to be approved by the Senate because control over much of the American economy would be forfeited to international bureaucrats. It would also impose on that same economy a cap on growth.

The Kyoto treaty is unlikely to be approved by the Senate because control over much of the American economy would be forfeited to international bureaucrats. It would also impose on that same economy a cap on growth.

Ceding power to unelected global authorities would be a hard sell, even if the science behind Kyoto were compelling. Surrendering power on that scale for the sake of a vague, arbitrary promise of modest financial gains makes no sense for any American business.

We must therefore guard against a

Will corporations fall for global-warming trickery?

milder version of the Kyoto treaty that would serve the same purpose, offering concessions to companies that acquiesce in creating the big-green regulatory regime yet avoid the Kyoto treaty's more appealing face on a treaty that might possibly help our economy and is likely to do it immense harm.

Mr. MCINTOSH. Let me explore with you a little bit the point that you were making that this really isn't a market mechanism that is being created. One of the things that amazes me about the proposals for early action crediting is that they create something that could have a value in the marketplace only if the Kyoto Protocol is ratified and it becomes law. And so I don't know what label you would give to it, some kind of future I guess, some sort of credit that at a future date would have a value if the Senate ratifies the treaty. To me that creates a problem of incentives in that people who are granted those credits from the government have a great deal of incentive to want the treaty to be ratified because this piece of paper gains value in the marketplace when those restrictions go into place. For those who don't have the piece of paper, then the restrictions are all the more costly because they have to comply with the treaty.

Others have characterized it as sort of an insurance policy. I'd like to ask you to comment on the validity of that assumption, the argument that if the Senate does the wrong thing and ratifies the treaty, at least some of us in the marketplace will get a little money back.

Mr. KEMP. That really is—again, I have great sympathy, hopefully some understanding of their position. And with all due respect, Mr. Chairman, I think you were the first to really bring this issue to the forefront of public opinion, at least to the business community, that they had better watch out because it is a slippery slope into which they are, in my opinion, being “incentivized” is a good word, seduced is a pejorative. I think it is seduction, it is very seductive to think that you can gain an advantage when you get that credit. And you have got to be big, Mr. Chairman. You have got to be a big guy on the block in order to take advantage. You are going to have lots of lawyers and lots of accountants and lots of folks focusing on this issue. That rules out the men and women of entrepreneurial talent who are trying to move up that ladder.

I want to say something, and be careful that I say it correctly. If you stop and think about the history of freedom of enterprise, from Adam Smith in the 18th century to today in Milton Friedman, I don't think there is an economist at least one who is market-oriented who doesn't have some fear or distrust of laws that make it easy for people to collaborate in order to keep other competitors out.

I don't mean that to pick on anybody. I just think that it's a very human condition. When I was quarterback of the Buffalo Bills, I did not want any competition with me. I only wanted one quarterback on each football team. But it really gives advantage to the big guy. I can't imagine the party of Lincoln giving an advantage to the big guy over the little guy. This is what it does. It really does. It's economically unsound, it is politically seductive, and it is going to give tremendous power not only to the bureaucracy of the United States—and I don't want it for a Republican administration or a Democratic administration. I wouldn't want to give this to any of our Republican candidates nor give it to the two Democratic candidates or the Independent party. I guarantee, Mr. Chairman, and you know this far better than Jack Kemp, this gives tremendous power to the international bureaucracy. Tremendous power.

Mr. MCINTOSH. Well, both directly and indirectly, because it assumes the ratification of the treaty, which empowers them tremendously.

The second question I have is would you agree that before we implement any type of early action credit where the benefit is related to emission reductions complying with Kyoto, that we have to make the decision whether or not we are going to adopt Kyoto as policy? I have introduced a bill that says essentially before any further action can be done to set up this type of credit program, the Senate has to be given a chance to debate and ratify the Kyoto Protocol—

Mr. KEMP. Yes, absolutely.

Mr. MCINTOSH [continuing]. So we know whether it is going to be the policy of the country or not. To reverse that means that you are making the decision without debate, without any normal course under the Constitution.

Mr. KEMP. I was absolutely shocked, Mr. Chairman, with all due respect, to have the President of the United States of America saying in December 1997 that we are going to have a program to pursue our course, and we are going to do it whatever happens at Kyoto.

It's unbelievable. Unbelievable. He said the other day we are going to intervene in any part of the world in which there is a violation of human rights irrespective of any vote in the U.S. Congress. We have converted NATO from a defensive organization to an offensive organization without a debate in the U.S. Congress. This is what I call third-way politics, as pursued by this administration, the Blair administration, the Schroeder administration in Germany. Someone has got to stand up, Mr. Chairman, and question what is happening to political economic policies in the world today through third-way politics. It's seductive. It's mesmerizing, but it's really sacrificing the sovereignty of the United States of America.

Mr. MCINTOSH. I think one of the great things that you have contributed to the sovereignty debate is that you point out it cuts across apparent ideological lines. When you trample on the safeguards in the Constitution, the division of powers, for whatever ends, whether they are ostensibly conservative or ostensibly liberal, government does a great injustice to liberty.

Those are the two questions that I have. Mr. Kucinich, do you have any questions?

Mr. KUCINICH. Yes, I do.

Again, thank you, Mr. Kemp, for your testimony. I have to say that I am with you on the sovereignty questions. As a matter of fact, Mr. McIntosh and I have had a chance to work together on some of the more serious sovereignty and constitutional issues in this Congress. I also have a great deal of respect for the legislative process and for the Senate's prerogative. As someone who favors Kyoto ratification, I would not want to see the Senate in any way be usurped. The decisions have to flow from the U.S. Senate on this treaty, or any kind of treaty for that matter. I happen to believe that a treaty should have some force then, but to try to implement it in other ways, I wouldn't favor that either.

I would wonder, though, what your views would be—let's say, for example, if Kyoto was a dead issue here, and we were just talking about a condition in this country where we could incentivize aggressive behavior on the part of corporations who—

Mr. KEMP. I would be in favor of that. I have even talked about allowing for the full expensing of the cost of equipment used to clean up the air and the water. Why shouldn't someone be incentivized? I think there should be incentives—

Mr. KUCINICH. I think that we agree on that, too. The concern here, and I understand the concern the chairman expressed, that you would not want to see an incentive mechanism put into place that might be an excuse for bypassing the process in the Senate.

Mr. MCINTOSH. That's right. In fact, I have talked with colleagues about the possibility of substituting incentives. If you gave somebody basically a tax deduction and say, move quicker toward reducing air pollution, assuming that is a goal that we all share, that might be a more appropriate way to achieve the goal.

Mr. KEMP. The President just spent a week running around the country. I'm not belittling it. In fact, I was invited on that tour to show bipartisan support for trying to attract capital into areas that are without capital. I would prefer that we do it through changing the Tax Code as opposed to having an international bureaucracy force India, China, Asia, Latin America and Third World and Fourth World countries to cut their use of energy before they ever get a chance to get out of the grinding poverty into which centuries and millennia have been allowed to occur.

Mr. KUCINICH. What I think is interesting is that where we can get some concurrence on the importance of incentivizing environmentally and even socially beneficial conduct, the question is this debate over Kyoto. One of the reasons why I favor it is because I would like to see the United States take leadership in this area. Let me state why: Because I think that we can use this as an opportunity to create greater efficiencies and enable our industries here to capture new markets and to enable us to continue our leadership and perhaps the controlling of and even transformation of pollution industries.

Mr. KEMP. Well, I like what you say, and I think that you have raised a very important point, and obviously you have been talking with Mr. McIntosh.

I would remind everybody that may be listening or watching or maybe who will hopefully read this testimony, as convoluted as it may sound, do you know what the cost of MIPS in the United States on the eve of the new century, millions of instructions per second computerwise? Less than \$1. Do you know what it was 10 years ago? \$10,000; \$250,000 20 years ago. We are now, with our ability technologically, able to deliver instructions through computers in those little microprocessors at a cost of less than \$1 for millions of instructions per second. Wow. Why don't we, the greatest Nation on the face of the Earth, with all our faults and all of our problems and all of the work that we have got to do, why don't we recognize that freedom of enterprise, freedom of trade, and incentives for men and women to invent and innovate is the greatest example that we can have to help the rest of the world enjoy some of the benefits of the wealth-creating society?

What bothers me about this, Dennis, is that it's predicated upon using less energy at a time in which we are going into an Internet century in which the needs of electricity are going to be exponentially increasing in the 21st century. The answer is not rationing. The answer is wealth creation and freedom of enterprise.

Mr. KUCINICH. I would agree with you on wealth creation. I would also suggest, Mr. Kemp, that perhaps the answer is also in new technologies which do not have the same by-product in terms of pollution. One of the things that I notice British Petroleum is doing is looking more and more at solar research as opposed to the increased consumption of fossil fuel.

Mr. KEMP. Just don't give them a tax credit, please. We have too many tax credits in the Tax Code. It's the worst Tax Code that I have ever even seen in my life.

I apologize. I have absolutely—lucky for you all—run out of time. I apologize. But I know a lot of people want to testify.

Mr. KUCINICH. Could I give a one-sentence benediction from William Buckley? He is talking about these ideas that we are speaking of today. He says, "It's quite a brilliant application of the idea, putting a cash price on inordinate consumption, which is very different from forbidding it."

So that's—I have been reading him since I was in high school.

Mr. KEMP. There is hope for you yet, Dennis.

Mr. KUCINICH. And for you.

Mr. MCINTOSH. Thank you. We appreciate you very much for coming and joining us today.

Mr. KUCINICH. Could I put Mr. Buckley's column into the record, Mr. McIntosh?

Mr. MCINTOSH. I would be honored to include that in the record. It says, "Conservatives Should Hail Kyoto Pact." I will have to give it close scrutiny.

[The information referred to follows:]

Richmond Times-Dispatch

RICHMOND, VIRGINIA 23290

ESTABLISHED 1877

VIRGINIA'S NEWS LEADER

10 CENTS

TUESDAY, DECEMBER 23, 1997

SOUND APPROACH

Conservatives Should Hail Kyoto Pact

NEW YORK

Concerning the Kyoto Protocol, a few observations:

Although the shape of the thing instinctively repels conservatives, they should resist apocryphal denunciations. Yes, it sounds like big-think *conviva naturam* enterprises like the League of Nations and the off-and-on disarmament conventions that flizzed and were douted by such as Nazi Germany and Tojo's Japan. The proceedings gave off the smell of non-stop sweat-conferences at which from time to time the real objective dissipates, and bureaucratic fantasies take its place.

But the Kyoto Protocol has dealt with very serious problems. Nature

able comfortably to assimilate the greenhouse gases the world is merrily programmed to produce.

The conference hit upon, argued for, and narrowly prevailed on an absolutely central mechanism, which is the usefulness of money in maneuvers such as projected.

Many years ago, a geographer at the University of Arizona came up with a graphic model, useful to describe cosmic enterprises even though sketched by a cartoonist's pen. He observed that the great skies above the Earth provide us with a considerable bin into which refuse can be disposed — up to a point. The American Indians could be pretty informal in disposing of 17th-Century detritus. All you had to do was, well, toss it all into the river and forget about it.

But when the bin overflows, there are instant ecological repercussions — for instance, oil on the water, garbage on the beaches, irritating particulates in the air, wa breathes. What needs to be done is to discourage people from causing that bin to overflow, and the indispensable approach to doing this rationally and within the framework of liberal procedures is pricing policy.

AN EXAMPLE: Imagine that the air above the continental United States can absorb without aggressive side effect 1 trillion horsepower automobile hours per year. The

"Nature isn't able comfortably to assimilate the greenhouse gases the world is merrily programmed to produce."

correct approach, then, is not to forbid any one automobile from having more than X horsepower of engine power. It is to tax progressively the incremental horsepower until the consumer effects his own moderation, under his own impulses.

The Kyoto people have adopted that approach wonderfully well by the concept of saleable quotas. If one country uses up less than its allotted share of heat-trapping greenhouse gases, then it has a surplus — which can be sold to a country threatened with excess consumption. It is a quite brilliant application of the idea: putting a cash price on inordinate consumption, which is very different from forbidding it, the mistake of successive administrations in regulating the size of Detroit engines.

The absence of stories from Japan on the use of nuclear energy is astonishing. When nuclear energy is discussed, one is supposed to think about Jane Fonda or Chernobyl, and maybe Three Mile Island. All that our experience with nuclear energy has clarified is that inattentive care can cause frightful damage.

But for every thousand references to Chernobyl, there is only one to the success of nuclear power in France, where 75 percent of electrical energy is generated year after year by quiet nuclear engines that emit not any heat-trapping greenhouse gases.

The Kyoto commentary has been heavy with references to wind power. Yes, wind power is terrific, as anybody who has spent any time windless at sea on a sailboat will attest. But we are thought-ages removed from cars that can be moved by little propellers on the roof.

But the superstitious refusal to go nuclear must be an awful aggravation to the gods that dispose such great beneficence upon our world, as if the atom were forbidden fruit.



WILLIAM BUCKLEY, JR.

CONSERVATIVES must not dig in on the assumption that any great program about which Bill Clinton is enthusiastic is slightly dangerous or both. The Kyoto Protocol will be very costly and very inconvenient in way not even discerned. But this is the moment at which conservatives should exhibit traits we like to think of as our very own: the one being fortitude; the other, optimism.

We are a wonderfully inventive race of people and can reasonably hope that 5 years from now we can still remain cool in summer, warm in winter and fuel up the joy when we want to go joyriding.

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Mr. MCINTOSH. The next panel is Mr. Jay Hakes, who is the Administrator of the Energy Information Administration.

Welcome, Mr. Hakes. If you want to stay standing, I will administer the oath.

[Witness sworn.]

Mr. MCINTOSH. Thank you. And please share with us a summary of your testimony. We will include the full written remarks into the record and then get to the question and answers.

**STATEMENT OF JAY HAKES, ADMINISTRATOR, ENERGY
INFORMATION ADMINISTRATION**

Mr. HAKES. Thank you, Mr. Chairman, for inviting me, and I certainly have pared down my remarks. I am happy to talk about the voluntary reporting of greenhouse gas emissions, which is a program that is administered by the Energy Information Administration. In the past year interest in this program has grown, but this hearing is the first time that I have testified before a congressional committee on the subject.

The Energy Policy Act of 1992 in section 1605(b) established this data collection which allows individuals or companies at their option to report annually on the reductions in the emissions of carbon dioxide, methane, or any of the other greenhouse gases. They can also report on carbon sinks such as forestation activities. The details of this program can be found in my written testimony, and I won't repeat that.

I would talk perhaps about what I think has been some of the success of the voluntary reporting program. This program has been designed to be user-friendly. Using integrated software, we have made it relatively easy to report, given particularly the complexity of this fairly new issue. It's been easy to access and analyze the data that has been submitted. To encourage participation, reporters are offered many different ways of reporting and are allowed considerable flexibility in how they calculate their savings.

As you may be aware, many companies report under this program and the number is growing. So far this year we have 172 companies that report under this program, and that's well above the 108 that submitted reports in 1994, the first year of the program. Participation is particularly high in the electric utility industry where companies accounting for two-thirds of utility emissions do report under the program.

Although there is no third-party verification of the reports, the energy expertise of EIA has allowed us to work with the companies to develop data that we do believe to be accurate. The hope that the reports would document useful examples of how to reduce emissions that could be emulated elsewhere seems to have been at least partially realized. For example, the recycling of sulphur hexafluoride first reported in the 1996 cycle now seems on the way to becoming a widespread industry practice. In turn, we have been able through numerous phone calls, e-mails and other communications to educate many companies on how to measure the emissions of greenhouse gases, and this is significant because until recently there was no reason for them to track them and, therefore, no experience.

Despite the successes, using the existing program for new purposes such as documenting credits for early reduction would face a number of formidable challenges. Since these credits would have economic value, the standards for reporting them would probably have to be much more rigorous than under the current program. The flexibilities that have made the voluntary program a success so far may limit its adaptation to a program requiring greater uniformity.

Let me just give a couple of illustrations of the issues that would arise. First is the issue of baselines. To award credit for early action, there would need to be a common agreed-upon baseline from which savings are calculated. To know how much emissions are being reduced, we need to know the number from which the resulting emission levels should be subtracted to calculate the savings. The current program allows flexibility in baselines that would be difficult to maintain in a more rigorous system to award credit. The current program allows reporters to calculate savings by subtracting the current emissions from their expected levels in the absence of voluntary activities.

Although these reports provide useful information, they leave unresolved the issue of what is sometimes called additionality; that is, how can you tell whether the action would have been part of a normal business practice even without the voluntary program or whether it would have produced the savings that went—or whether it produced savings that went beyond or were additional to what would have been expected in a business-as-usual case. If reporters are rewarded for something they would have done anyway, it is conceivable that a large number of credits would be awarded without significantly reducing the expected trajectory of rising U.S. emissions. EIA projects that under current policies, emissions are likely to be 33 percent higher in 2010 than 1990.

The current voluntary reporting program also allows reporters to use historic levels of emissions as their baselines for calculating savings. A reporter could, for instance, subtract his 1998 emissions from his 1990 emissions and use the remainder as his savings. During that period, however, the reporter may have sold part of its operations responsible for a large part of its emissions to a second entity. The second entity is not required to report and wouldn't be penalized; therefore, there could be leakage of savings.

I would be glad to conclude at that point, seeing the red light on, and answer your questions.

Mr. TERRY [presiding]. You can keep going.

Mr. HAKES. I just had a few more comments. The second problem was the problem of leakage, which I think, along with additionality, are the two big conceptual problems that these approaches are going to have to wrestle with. There are other complex issues such as property rights that are discussed in my written testimony, and I would refer you to that.

The voluntary data that EIA has collected has been done in a very transparent manner, and it may be possible to go back after

the fact and recast it with new assumptions. But I think that is a challenge that would be difficult, but not necessarily impossible. So that is basically what I plan to comment on, and as I said, I would be glad to answer your questions.

[The prepared statement of Mr. Hakes follows:]

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**STATEMENT OF
JAY HAKES
ADMINISTRATOR
ENERGY INFORMATION ADMINISTRATION
U.S. DEPARTMENT OF ENERGY
BEFORE THE
COMMITTEE ON HOUSE GOVERNMENT REFORM
SUBCOMMITTEE ON NATIONAL ECONOMIC GROWTH, NATURAL
RESOURCES AND REGULATORY AFFAIRS
U. S. HOUSE OF REPRESENTATIVES
July 15, 1999**

Testimony of Jay Hakes
Administrator, Energy Information Administration
U.S. Department of Energy
before the
House Government Reform Committee
National Economic Growth, Natural Resources, and Regulatory Affairs Subcommittee
on
The Voluntary Reporting of Greenhouse Gases Program
July 15, 1999

Thank-you for the opportunity to testify on the Voluntary Reporting of Greenhouse Gases Program. The 1605(b) Program, as it is sometimes called, has been a considerable departure from the energy surveys and analysis that the EIA normally undertakes. The program can best be viewed as a limited exercise in measuring and reporting greenhouse gas emissions and in calculating and reporting those emissions. As the program is entirely voluntary, and participants receive nothing more than a thank-you letter and certificate from the U. S. government, the evidence of the 170+ companies and organizations that have reported on more than a thousand projects should be viewed as a mark of success.

The Development of the Voluntary Reporting Program

The Voluntary Reporting Program is conducted pursuant to Section 1605(b) of the Energy Policy Act of 1992. The law requires the Secretary of Energy to "...issue guidelines for the voluntary collection and reporting of information on sources of greenhouse gases." The guidelines are to cover reporting of emissions from "...1987 through 1990; and for subsequent calendar years on an annual basis." In addition to emissions, the guidelines must also cover "...annual reductions of greenhouse gas emissions and carbon fixation achieved through any measures, including...[a long list of specific measures]."

Once the Department of Energy's guidelines are in place, the statute requires that the EIA "shall develop forms for voluntary reporting under the guidelines...and shall make such forms available to entities wishing to report such information. Persons reporting under this subsection shall certify the accuracy of the information reported."

Finally, the EIA "...shall establish a data base comprised of information voluntarily reported under this subsection. Such information may be used by the reporting entity to demonstrate achieved reductions of greenhouse gases."

The Department of Energy's Policy Office held a series of public hearing during 1993-1994, in order to develop the guidelines. As published (in October 1994) the guidelines took an inclusive view of what might be reported and how emissions and reductions should be reported. The guidelines counseled reporters to consider the full fuel cycle emissions of their activities and to report whatever portions of the fuel cycle emissions the reporter deemed necessary to produce an

accurate portrayal of the full effects of their activity. The EIA developed reporting forms concurrently with the guidelines. After a public comment process, the forms were approved by OMB in May 1995.

At about the same time, many Climate Change Action Plan voluntary program managers and participants felt the need for a registry to record and document their actions. Many participants in the electric utility "Climate Challenge" program were also part of the 1605(b) public review process. In early 1995, Climate Challenge participants and program managers elected to forgo developing their own reporting system, and to rely instead on the 1605(b) program as their reporting mechanism. The Climate Wise program for manufacturers subsequently did the same. Climate Challenge and Climate Wise participants are instructed to report their reductions to the Voluntary Reporting Program. Other U.S. government voluntary programs encourage, but do not require, participants to file reports with the EIA.

Features of the Voluntary Reporting Program

The most important features (and some of the key ambiguities) of the Voluntary Reporting Program are established by the language of the statute. "Who can report?" is answered in the statute with the word "entities," which has been interpreted to mean any U.S. legal person who wishes to report emissions or has taken action to reduce emissions. "Reporters shall certify the accuracy of their reports" has been taken to mean that the reporter is ultimately responsible for the accuracy of the information submitted. The numerous categories of reportable emissions and reductions listed in the statute require that the forms permit multiple approaches to accounting for emissions and reductions.

The Voluntary Reporting Program is intended to be a general purpose registry and reporting program for greenhouse gas emissions, reductions, and reduction actions. Its features include:

- Reporting of emissions of all greenhouse gases from 1987 onward, and emission reductions and sequestration achieved from 1991 onward. Each gas is separately reported. The EIA has made provision for reporting additional greenhouse gases as necessary.
- Three broad categories of reporting:
 - Entity Reporting: the emissions (and reductions) of an entire company or facility;
 - Project Reporting: the emissions consequences of specific actions; and,
 - Commitments to reduce emissions in the future.
- A two-page short "EZ" form for small or less sophisticated reporters.
- Emissions and reductions are divided into two categories: "direct" and "indirect." Direct emissions are those emitted by equipment or facilities owned by the reporter. Indirect emissions and reductions are caused, but not owned by the reporter. All emissions and reductions in the Voluntary Reporting Database are defined as either direct or indirect.

- Reporters must calculate their emission reductions against a baseline. Two kinds of baselines are permitted: an absolute baseline (emissions this year are less than emissions in some prior year, usually 1990) and a relative baseline (emissions less than they would have been in the absence of some specified action). Participants must identify the baseline used to calculate every reduction reported to the program.
- Collateral information is collected for ten categories of projects, including electricity generation and transmission, cogeneration energy end use, transportation, methane capture, halogenated substances, and carbon sequestration from forestry or agricultural soils. The additional information includes energy consumed, saved, or switched by fuel, relevant operating data, participation in U.S. government voluntary programs, other firms that might be able to report the reduction, information on estimation methods and a free-form text entry section for project details.
- While reporting is limited to U.S. legal persons, both domestic and foreign emissions may be reported. However, the reporter must clearly segregate and distinguish between domestic and foreign emissions and reductions.

The EIA has developed an integrated software system, comprising an electronic form used by reporters to fill out, edit check, and file their reports electronically, and a public use database of the reports received. The electronic form and database are distributed via the Internet and CD-ROM. The EIA also prepares an annual report, *Voluntary Reporting of Greenhouse Gases*. The Voluntary Reporting Program's portion of the EIA web site (www.eia.doe.gov/oiaf/1605/frntvrgg.html) contains the reporting software, public use database, annual report, and other useful documents and calculation aids.

Results of the Program

Since the program's inception in 1995, participation in the Voluntary Reporting Program has steadily increased (see Table 1).

Table 1. Indicators of Participation in the Voluntary Reporting Program, Data Years 1994-1998

Indicator	1994	1995	1996	1997	1998P
Number of Entities Reporting	108	142	149	156	172
Number of Projects Reported	645	967	1,038	1,229	1,420
Number of Entity-Level (Organization-Wide) Reports Received	40	51	57	56	64
Entity-Level Reductions Reported (10 ⁶ Tons CO ₂ Equivalent)	78	120	132	128	NA
Project-Level Reductions Reported (10 ⁶ Tons CO ₂ Equivalent)	74	146	154	166	263

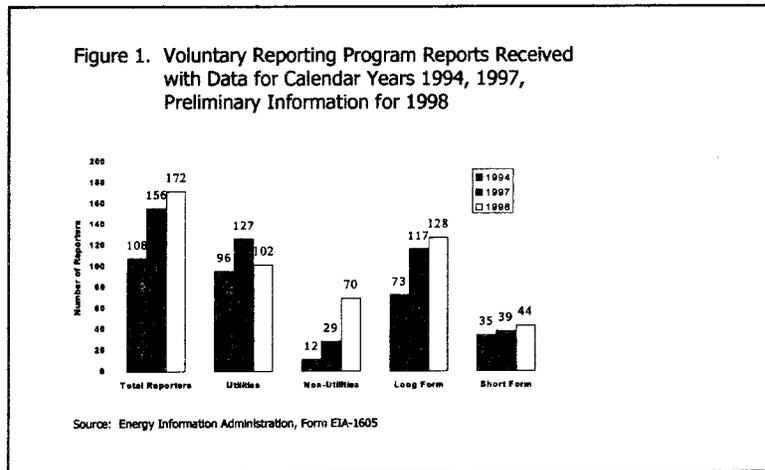
Source: Energy Information Administration, Forms EIA-1605 and EIA-1605EZ

P=Preliminary. 1998 data is based on reports received to date.

Data from the 1998 reporting cycle is being received and reviewed now. While not all the reports

promised for 1998 have yet been received and only a fifth of the reports received have been reviewed, it is already clear that the number of participants will be at least ten percent greater than last year, with increases in the number of projects reported and the size of reported reductions growing more than proportionately.

Many reporters (about 72 percent) are electric utilities, and almost all electric utilities are participants in Climate Challenge (Figure 1). The Voluntary Reporting Program covers about two-thirds of the emissions of the electric utility industry, but a much smaller fraction of the emissions of the rest of the economy, with the exception of a very specialized group: landfill methane operators, who, as an industry, have chosen to embrace the Voluntary Reporting Program. The balance includes an array of firms: large manufacturers who participate in the Climate Wise voluntary program such as General Motors, Johnson & Johnson, BP America, IBM, Dupont, and Dow; aluminum smelters, semiconductor manufacturers, cement plants, coal mining companies such as Peabody and Consol, two trade associations (the Minnesota Resource Recovery Association and the Integrated Waste Services Association), several private voluntary organizations such as American Forests, two universities (Rochester Institute of Technology and Oregon State University) and one household. Some reporters are single facilities, such as Alcan's Sreebree (Tennessee) aluminum smelter or Motorola's Austin (Texas) semiconductor fab. Most reporters participate in U.S. government voluntary programs.



Most reporters used the Voluntary Reporting Program to report on emissions reductions projects. Last year, some 1,229 projects were reported to the EIA, with emissions reductions and

sequestration totaling some 166 million tons of carbon dioxide equivalent claimed for 1997. Some 56 companies reported on entity-wide emissions and reductions totaling 127 million metric tons of carbon dioxide equivalent. Since about 45 companies reported on both project-related and entity reductions, the two figures are not additive. Rather, they correspond to alternative approaches to estimating and reporting emissions and reductions.

Some 39 reporters used the two page short or "EZ" form. The short form is intended to provide a simple reporting format for individuals, small businesses, and voluntary organizations. In practice, the short form is also occasionally used by large organizations who wish to limit their reporting burden.

The Voluntary Reporting Program is unique among the many voluntary programs initiated during the early 1990's in its diversity of project types, participation, and approaches. The Voluntary Reporting Program's database provides a wealth of examples of the types of concrete actions that organizations can undertake to reduce greenhouse gas emissions. Some of the most important benefits of the Voluntary Reporting Program:

- The program has served to teach staff at many of the largest corporations in the United States how to estimate their greenhouse gas emissions, and educated them on a range of possible measures to limit their emissions. This is an important requirement for future action to reduce emissions;
- The program has helped to provide concrete evidence for the evaluation of the activities reported to the many government voluntary programs launched since 1993;
- Reporters have been able to learn about innovative emission reduction activities from the experiences of their peers;
- The program has created a "test" database of approaches to emission reductions that can be used to evaluate future emissions limitation policy instruments;
- The program has helped to illuminate many of the poorly appreciated emissions accounting issues that must be addressed in designing any future approaches to emission limitations.

Accounting Issues Raised by The Program

The Voluntary Reporting Program has been the subject of increasing interest since the White House announced, in October 1997, that the President favored some form of "credit for early action." The interest in "credit for early action" has generated evaluations of the features of the Voluntary Reporting Program as a possible vehicle for providing regulatory credit. For example, the Chafee-Lieberman bill (S. 547) would empower the President to offer credit for voluntary reporting participants, providing the President finds that the reductions reported to the EIA

“represent actual reductions, are “accurately reported,” and “not double counted.”

It should be noted that the EIA’s Voluntary Reporting Program was never designed as an emissions trading program, or as a “credit for early reductions” program. It was primarily designed as a registry for claims of reductions. Neither the Department of Energy nor the EIA have attempted to resolve the many contentious that would arise in attempting to construct a set of reporting rules that would create a set of comparable, verifiable, auditable emission and reduction reports that represent “actual reductions” and are “not double counted.”

Rather than attempt to resolve these issues, the Voluntary Reporting Program permits multiple alternative answers to a few simple questions.

Who Can Report?

The original legislation mentioned only “entities.” In the public hearings, several overlapping concepts of “who can report” surfaced. These included:

- **A legal person: i.e., an individual, household, corporation, or trade association.** In this approach, emissions and reductions would be calculated and reported at the corporate level. This approach mimics the approach historically used by state or local public utilities commissions to regulate electric utilities. It is also the approach adopted by S.547, the Chafee-Lieberman bill.
- **A facility or group of facilities.** Emissions and reductions are calculated as those of a particular facility, defined as a single plant in a specified location, or perhaps even a single stack within a plant. A corporation or legal person acquires responsibility for emission and reductions through ownership of one or more specified facilities. This is the approach adopted to regulate sulfur dioxide emissions under the Clean Air Act.
- **A “project” or activity.** Reductions are defined by comparing the emissions from some set of sources deemed relevant by the analyst with an estimate of what emissions would have been if a particular action or bundle of actions had not been undertaken. This approach, with origins in cost-benefit analysis, has been used for “Activities Implemented Jointly” under the Framework Convention, would be used for the Clean Development Mechanism and has also been widely adopted for evaluating electric utility demand side management programs by state public utility commissions.

All of these approaches are permitted in the Voluntary Reporting Program, and all are actually used by reporters. Some reporters use more than one approach. Each approach has advantages and disadvantages for particular types of programs. However, if multiple approaches are permitted to coexist, then it is possible to legitimately account for emissions in more than one way (permitting multiple acceptable interpretations of the same set of facts).

What is a Reduction?

Reporters use multiple and not necessarily consistent concepts of the nature of a reduction, and each concept has differing consequences.

The most intuitive definition of a reduction is a reduction against an historical baseline, or using a "basic reference case." In this case, the emissions of a corporation (legal person) or facility in a current year are less than in a prior, baseline year, usually 1990. The reduction is defined as the difference between current year and baseline year emissions. This approach is best suited to reporters defined as corporations or facilities whose activities have not appreciably changed since the baseline year. It presents particular problems for firms that have participated in mergers, acquisitions, or divestitures, or have made significant changes in the composition of their business. Start-up companies or new facilities that have no history cannot use historical baselines. The historical baseline approach is also not well suited to measuring the reductions achieved by projects, since projects are often entirely new activities with no history.

Alternatively, many reporters define their reductions by comparison with what would have happened in the absence of a specified set of actions. Thus, corporate emissions may have risen, but they are less than they would have been in the absence of corporate action. This approach is called, in the Voluntary Reporting Program, a "modified reference case" or a "hypothetical baseline."

The "unit of production" approach is a variant of the fixed historical baseline. In a unit-of-production approach, the reporter measures emissions per unit of output, if his emissions per unit of output have declined, either by comparison with levels in a prior year or by comparison with what they would have been in the absence of some actions, then the reporter has a reduction. This approach works reasonably well for organizations that have a well-defined product that is homogenous across companies and over time: for example, kilowatt-hours generated or sold, or tons of steel, or barrels of crude oil. As products increase in complexity, this approach gradually breaks down. Tons of semiconductors, for example, is a meaningless measure of output.

As in the case of defining the reporting entity, these alternative measures of reductions have their advantages and disadvantages. Basic reference cases are objective and relatively easily verifiable. On the other hand, absolute reductions are often the product of circumstance rather than action, while modified reference cases (which are more difficult to verify) explicitly measure the results of actions. Unit-of-production reference cases are only useful in a limited number of cases, and can combine some of the disadvantages of both basic and modified reference cases.

Most of the reductions reported to the EIA use a modified reference case. Among the 56 firms that reported on entity-level emissions (the emissions of the entire organization) only 11 claimed reductions against a basic reference case. Almost all of the project reductions reported necessarily used a modified reference case.

Who Owns the Reduction?

Another issue addressed in the development of the Voluntary Reporting Program was the question of ownership of emissions and reductions. Two theories of emissions ownership coexist in the Voluntary Reporting Program. The most intuitive, and commonplace, is called "direct emissions" and "direct reductions." More simply, if a reporter owns or uses (e.g., leases) the emission source, the reporter owns the emission as well as any reductions from this source.

However, there is an alternative theory of ownership based on causation. This theory holds that if a firm causes an emission or reduction, it is responsible for that emission, even if it does not own the emission source. When one reporter causes an emission or reduction from a source it does not own, it is called an indirect emission or reduction. The most important example of indirect emissions are emissions arising from the consumption of electricity. If firms and households reduce their consumption of electricity, they cause their electric utility to reduce its emissions.

This approach has both advantages and problems. It places responsibility for emissions with firms and households that can affect emissions, and permits reporting of actions that have a significant influence on national emissions. On the other hand, the concept of "causing an emission" is inherently more ambiguous than "owning the smoke stack," and, consequently, more than one firm may have helped to cause an emission or reduction.

Some electric utilities define "their" emissions as the emissions from facilities that they own. Other utilities define their emissions as emissions from plants that they own, plus indirect emissions from electricity that they purchase. Still other utilities define their emissions as emissions from plants that they own, plus net emissions from electricity purchases minus electricity sales. Each of these definitions would provide a different figure for the emissions of the company, and different estimate of emissions and reductions. No single definition is obviously more correct or accurate than the others.

The advantage of limiting ownership to direct emissions is that it generally prevents multiple ownership of the same emission or reduction, and reporters can usually know the actual level of their emissions. On the other hand, public utilities with an obligation to serve have less than complete control over their direct emissions.

Further, limiting the ownership of emissions and reductions to direct emissions excludes many important emission reduction methods: including all activities that tend to reduce electricity consumption, the activities of energy service companies, and the provision of energy-efficient or emission reducing capital goods.

Definitions that incorporate indirect emissions and reductions are potentially or actually subject to multiple or overlapping ownership, since one person's indirect emissions is generally another person's direct emission, and there may be multiple sources of causation. Thus, "double counting" of emissions and reductions is possible. However, since the EIA requires that reporters explicitly identify all emissions and reductions as either direct or indirect, potentially double-

counted reductions can be identified. Indirect emissions and reductions account for only a small portion of the total reported to the EIA.

Would the Reduction Have Happened Anyway?

This issue has subsequently been often discussed in the context of Joint Implementation and the Clean Development Mechanism under the term "additionality." It is sometimes argued that many of the projects reported to the EIA don't represent "real" reductions because the companies would have done them "anyway" in the normal course of business.

However, creating an operational definition of additionality is difficult, because the "normal course of business" is a hypothetical concept. The activities that reporters are currently undertaking are the kinds of activities that would be required to limit national greenhouse gas emissions. The current level of activity limits the growth of emissions, and an even higher level of the same activities would be required to stabilize or reduce emissions. For the purposes of the Voluntary Reporting Program, this distinction is unnecessary. The learning and incentive benefits of voluntary reporting do not depend on being able to identify individual projects as "business as usual" or "additional." For the purposes of an early credit program, it might be necessary to revisit this issue.

How Does One Verify Reports?

Another topic that generated considerable discussion then and now is generally described under the heading of "third party verification." It is sometimes argued that reports cannot be considered reliable unless they are verified by an independent third party.

This issue was considered in the guidelines development process, and the Department of Energy decided not to require third party verification. Reports submitted to EIA are generally factually accurate, and, filing a false statement on a U.S. government form is illegal. The key issue, however, is not verification, but verifiability.

If the accounting treatment for indirect emissions from electricity purchases is undefined, then a particular set of facts about a reporter would support two different estimates of emissions: one including electricity purchases, and one excluding electricity purchases. A third party verifier can verify the facts about the reporter, but cannot say whether or not indirect emissions from electricity purchases ought to be included, and consequently cannot say whether the bottom-line total is correct or not.

If a reporter uses a hypothetical "modified reference case," then the reduction is calculated against a counterfactual reference case, which (since it never happened) cannot be objectively shown to be true or false. The third party verifier can characterize the reference case as "more

likely” or “less likely,” but cannot verify its accuracy.

Therefore, verifying the accuracy of 1605(b) reporting would not really be a matter of whether the verifier is independent or objective, but of putting in place common baselines and accounting standards that would limit the scope for the application of judgment in preparing and reviewing claims of emission reductions.

The Voluntary Reporting Program and Credit for Early Reductions

The Voluntary Reporting program has achieved considerable success in the purposes for which it was intended. It is a working example of a completely voluntary emissions and reductions registry: it has generated a considerable body of useful information, and it helped to educate reporters, policy makers, and the public about a set of difficult and poorly understood issues.

Because the issues described above have not been resolved, it is possible for the same company to report its emissions and reductions in several different ways, and for more than one reporter claim the same reduction. Some commentators on the Voluntary Reporting Program have characterized this aspect of the program as a defect: a problem needing a solution. On the other hand, it can be viewed as one of the most useful attributes of the program, and one of the keys to its success, because,

- The educational and public recognition aspects of the program do not require a complete and fully defined system of baselines, accounting rules and property rights.
- The Voluntary Reporting Program can be viewed as a survey of emission accounting methods and theories actually in use, and a set of illustrations of the potential accounting and baseline problems that must be confronted in designing future policy instruments. A more structured approach would have been less useful for identifying and analyzing accounting issues.
- The Voluntary Reporting database illustrates the range and diversity of concrete actions that firms can undertake to limit greenhouse gas emissions, including many not imagined by the designers of the program. A more structured approach would have excluded many of the more original and innovative projects reported to the program.

The features make the voluntary reporting program particularly useful in evaluating the design and consequences of any proposed “credit for early action” program. By creating a data base of real world emissions reduction actions and actors, the voluntary reporting data can be used to gain insight into the incentive effects and beneficiaries of a proposed program. The Voluntary Reporting database also provides a mechanism, as we have seen, for identifying some of the issues that it would be helpful to resolve, both for retrospective and future credit programs.

If the Voluntary Reporting Program were to be used as the accounting system for an effective credit for early action program, the baseline, accounting, and additionality issues described above

would need to be resolved. In addition, an effective program would have to match the incentives offered to the entities and actions that could actually reduce emissions, and ameliorate the leakage problem. (Not all firms will participate in a voluntary program. If participants reduce their emissions, while non-participants increase emissions, emissions may “leak” to non-participants).

As a general purpose registry, the EIA's voluntary reporting system could be modified to account for the results of a credit program. The extent of the modifications required would depend on the definition of the program, but might be quite extensive and costly. Because the EIA lacks the legal authority to resolve the numerous issues that would be raised by moving towards a crediting program, its role would be to implement decisions about these matters made by policy-makers.

A related topic of great interest to those who have reported reductions to the program is whether an early reduction credit program would provide credit for actions already reported to the EIA. This is clearly an issue for policy-makers, rather than for the EIA, to determine. However, the voluntary reporting database has been designed to preserve information about the underlying operating data, baselines, accounting principles and emission estimation methods actually used by reporters in filing their reports. If policymakers could set objective criteria by which to judge emission reporting, then it may be possible to identify reports that meet the criteria. The eligibility of past reported reductions need not be settled on an “all or nothing” basis.

Mr. TERRY. I thank you very much. I will start with one question. In your oral testimony here, you had mentioned some of the difficulties in making initial determinations to set baselines and what I envision is a deepening bureaucracy. Have you been able to establish how much staff it takes now, full-time staff, to do a voluntary reporting program? How much it would have to grow and expand to make it into an overseeing regulating system?

Mr. HAKES. We do both the annual inventory reporting of the greenhouse gases and the voluntary reporting, which are two different programs with three different employees and a budget of \$600,000. The acid rain program at the EPA, which does sulfur trading, which is a much more elaborate program, I think is about \$10 million. What we're talking about here is probably substantially larger than that. We have not had a reason at that point to calculate what those resources would be. I think that the range could be considerable, depending on how this was designed. I think a lot of people are designing programs; there are just a lot of options. But it would certainly be much bigger and more expensive than what we're talking about with the voluntary program.

Mr. TERRY. Well, does the sulfur dioxide emissions trading program provide a basis for estimating the administrative complexity and costs of the greenhouse gas emissions credit program?

Mr. HAKES. Well, I think it's been used as an example and I think it has some advantage. It shows that there are some advantages to trading. But the sulfur system is much more complex because up to the present period it's covered about 115 utilities and so that's a fairly manageable universe. It's about to expand to 2,000 utilities and that makes it bigger. But if you look where energy is used and combusted, that's obviously a much bigger, more complex universe than people who are emitting sulfur. There are ways of designing the system to limit the number of reporters but the more you do that you lose the downstream ability to trade. So there's a lot of compromises that would probably have to be made.

Mr. TERRY. I appreciate that.

Mr. Kucinich.

Mr. KUCINICH. Mr. Hakes, thank you very much for your testimony. I think the Energy Information Administration should be commended for all of its hard work in implementing the 1605(b) voluntary reporting program, and I agree with your testimony that we could learn a lot from that program as we debate any plan for early action credits. I have just a few questions for you.

Mr. HAKES. Thank you.

Mr. KUCINICH. When did the Federal Government start its voluntary reporting program?

Mr. HAKES. 1994.

Mr. KUCINICH. That would be in the Bush administration, correct?

Mr. HAKES. Well, that was when it started to operate. It was established by the Energy Policy Act of 1992.

Mr. KUCINICH. It was established during the Bush administration.

Mr. HAKES. It was authorized statutorily in the Bush administration, yes.

Mr. KUCINICH. Do you believe that offering incentives to companies that voluntarily reduce their emissions has been successful?

Mr. HAKES. It's a hard question to answer. I would say that during the 1990's that emissions have continued to grow at more or less the pace they were growing before. We have had increases in emissions every year since EPACT was passed. And as I say, our projections are that emissions are likely to reach 33 percent above 1990 levels. So I think there have been some successes but the overall trajectory of the emissions increases does not seem to have changed very substantially.

Mr. KUCINICH. What about for companies that participate in a program?

Mr. HAKES. Well, those companies have reported large savings and undertaken activities. I think the question of additionality has not really been addressed because there's no real baseline against which the savings can be calculated that's uniform. So it's hard to say whether these are activities that they would have done under normal business practices or whether they were additional activities that they undertook because of the voluntary programs.

It's clear that there's a success story here in that the economy has been growing at a very rapid rate, more rapid than was expected, and emissions have been rising much slower than economic growth. So certainly the companies and the technologies are very successful in the sense of keeping emissions well below the economic growth. The economy has been growing quite rapidly, but they have not been successful in changing that trajectory so that the emissions are either stable or going down.

Mr. KUCINICH. So you don't really take a position on the incentivization?

Mr. HAKES. Well, EIA is a statistical agency, not a policy agency.

Mr. KUCINICH. I understand that. I'm just interested in your opinion.

Mr. HAKES. Well, it would be hard for me to give an opinion apart from my official position I think.

Mr. KUCINICH. Oh, give it a try. OK, my next question.

Mr. HAKES. OK.

Mr. KUCINICH. As you noted, the 1605(b) program was designed to encourage entities to take voluntary action to reduce their emissions and reward them with publicity. This is very different, however, as I think we know, from an early action credit program that would award these entities with tangible assets for tangible verifiable emission reductions. In fact, a GAO report found that "Many of the claims for reducing greenhouse gas emissions that have been submitted to the voluntary reporting program would probably be ineligible for credit."

With this in mind, is it possible to set up an accounting system to implement a credit program?

Mr. HAKES. Yeah, I think it is possible.

Mr. KUCINICH. Thank you. Thank you, Mr. Chairman.

Mr. MCINTOSH [presiding]. Actually that was going to be my first question. Do you think it's possible to implement a credit program? Actually, before I get into that, let me say I commend you for the work you are doing in terms of keeping an honest track of what

is done out there in this area and not trying to be a heavy handed bureaucracy but merely truly implementing a voluntary program.

You know, I'm an optimist too. I think lots of things are possible. But let's explore that. In your testimony you mentioned that it might be quite extensive and costly to do. Can I—and I know Mr. Terry explored some of those costs, but are the barriers essentially conceptual? And you mentioned a couple in terms of being able to discern whether it was something that would occur in the normal course of a business practice. Are the problems mainly technical in measuring the reductions, or are they political where you might get entities gaming the system?

Mr. HAKES. Yeah, I think that they're really all three. I mean, I actually have tried to attend a lot of technical sessions on this issue, more than I normally would because I think the technical issues are so wrapped up into the conceptual and political, and there are a lot of decisions that have to be made that create winners and losers. I mean, how you calculate the baseline that may help one company and another way of calculating might help another company? And that's why I think it would be inappropriate if such a system would have the EIA make a decision about what the baseline should be. I mean that's a decision I would think the Congress would make.

Mr. MCINTOSH. Let me interject. You think therefore there's such inherent tradeoffs that it needs to be a political decision by Congress rather than a technical decision?

Mr. HAKES. In the best sense of the word, yeah. I mean, it's a policy decision much as the tax code is a policy decision. Who gets taxed. It has technical issues, it has conceptual issues, and it has political issues.

Mr. KUCINICH. Mr. Chairman, no one ever games that system.

Mr. MCINTOSH. My office is in Longworth and having been blocked for 2 days now getting in and out with all the lobbyists over there as the tax bill is being written, that's a scary thought.

But I think you make an interesting and important point that it can't merely be thought of as a technical decision because there are winners and losers that result from the choices being made.

Mr. HAKES. That's definitely my view, yes.

Mr. MCINTOSH. Any estimate of how expensive it would be once those winners and losers were chosen to actually implement the system?

Mr. HAKES. Well, let me explain why that's a difficult question to answer. When we think about this question initially, the thought is, well, everybody that drives an automobile is emitting carbon and therefore if we had to track every automobile in the United States that would be a very expensive system and very onerous. The technical people that I've seen that have looked at this have usually moved away from that and moved back to more of an upstream approach where they might say tax at the oil refinery, which then sends a price signal up through the system. And that makes it a lot easier to administer.

You lose some of the advantages of trading. So the policymakers have to design a system, and I'm sure they would take into account the administrative complexity of it, and my suspicion is that you might move more to an upstream system. But until we know the

answers to those questions it would be hard to know how big this reporting system would have to be. If you do it at the upstream where there's a more limited number of refineries, it's certainly a lot easier than keeping track of every automobile.

Mr. MCINTOSH. Right. And so given the pervasiveness of energy consumption in society, to do it with 100 percent accuracy you would essentially need to have a tracking system for every activity.

Mr. HAKES. I don't know if the issue is so much accuracy as it is to maximize the trading potential. Because the person who is driving the automobile has choices about the efficiency of that automobile. And I think if we were measuring things at the refinery that it probably would be possible to get accurate counts. But energy is so widespread that one can think of areas where things might fall through the cracks. And this would certainly be a formidable challenge I think to make sure that everyone was treated fairly.

Mr. MCINTOSH. Let me move in a different direction. The administration has told us all over and over again that the Kyoto Protocol is a work in progress. They're still negotiating with the other foreign countries hoping to get some of the Third World countries to sign up for mandated reductions in energy use or global warming gases being emitted. Is there a risk that if we adopt an early action credit at this time, that it will impact the negotiations over the implementing rules of the Kyoto Protocol?

Mr. HAKES. Well, I think there are two major areas of that treaty that are unsettled, that it would be extremely useful to know the answer to before setting up this program. One of them is the level of domestic effort that will be required. The treaty contains a lot of offsets against what you have to do domestically. The most obvious one is the trading. And we could, for instance, purchase credits from Russia, which is by most estimations going to have a lot of credits to sell because their economy has collapsed and they haven't been using energy as much. But there are other offsets such as sequestration and other things that might allow emissions to grow in this country and still meet the Kyoto limits. But since the treaty is not interpreted the same way by all parties, we really don't know the answer to that yet.

The second thing that would be very useful to know is what would be the equivalency between activities like forestation and the reductions in emissions. Because many of the programs that the utilities are reporting right now, for instance, are things like reforestation activities, but we don't—we do have formulas for comparing say methane emissions with carbon emissions but we don't have a formula for comparing sequestration activities with emissions activities. So it would be difficult to construct a system that would fairly reward these different activities until we had that.

Mr. MCINTOSH. One other question that's a pet personal issue. Assuming you were going to credit all different sources, you mentioned the formula between methane and carbon, would this system create an incentive for eliminating wetlands because they are a source of methane gas?

Mr. HAKES. My technical expert says that it is an extremely small matter statistically and probably would not be a big factor in the larger numbers.

Mr. MCINTOSH. That is what I see in terms of the amount of methane gas produced, but I don't know what the formula between carbon dioxide and methane is.

Mr. HAKES. We would be glad to get those calculations to you subsequent to the hearing and compare notes on that.

[The information referred to follows:]

Wetlands account for 15-20 percent of total global natural and man-made methane emissions. However, these emissions are concentrated in tropical (rather than temperate zone) wetlands. According to researchers Matthews and Fung, worldwide temperate zone methane emissions are about 5 to 10 million metric tons. Dividing the U.S. figure for temperate zone wetlands from the Department of Interior's *Status and Trends of Wetlands in the Conterminous U.S.* by the Matthews and Fung's figure for world temperate zone wetlands, results in the U.S. having about 57 percent of world temperate zone wetlands. This implies U.S. natural wetland emissions of 3 to 6 million tons of methane, equivalent to 63 to 126 million tons of carbon dioxide equivalent (using 1 ton of methane equals 21 tons of carbon dioxide, the Intergovernmental Panel on Climate Change's 100-year integration global warming potential of methane), or 17 to 34 million tons of carbon equivalent. This is equal to about 1 to 2 percent of U.S. GWP-weighted anthropogenic greenhouse gas emissions.

Mr. MCINTOSH. Thank you. That would be helpful. I don't have any other questions.

Do you have anything?

Thank you very much, Mr. Hakes, and we will followup and let me ask unanimous consent now to keep the hearing record open for 10 days on some of the technical questions.

OK. Our third and final panel for the day is the big one. Let me call forward Mr. David Ridenour, Mr. Fred Krupp, Mr. Frederick Palmer and Mr. Kevin Fay. You all stay standing as I administer the oath. As I explained, Chairman Burton requires us to swear in each of the witnesses here.

[Witnesses sworn.]

Mr. MCINTOSH. Let the record show that each of the witnesses answered in the affirmative, and what we will do is ask each of you to summarize in 5 minutes or less your written testimony and put into the record the complete testimony. Let's simply go left to right and start with—my left to right at least—Mr. Ridenour. Welcome. If you would like to begin, share with us a summary of your testimony and then we'll include the whole thing into the record.

STATEMENTS OF DAVID RIDENOUR, VICE PRESIDENT, NATIONAL CENTER FOR PUBLIC POLICY RESEARCH; FRED KRUPP, EXECUTIVE DIRECTOR, ENVIRONMENTAL DEFENSE FUND; FREDRICK PALMER, GENERAL MANAGER AND CHIEF EXECUTIVE OFFICER, WESTERN FUELS ASSOCIATION; AND KEVIN FAY, EXECUTIVE DIRECTOR, INTERNATIONAL CLIMATE CHANGE PARTNERSHIP

Mr. RIDENOUR. OK. Thank you. Mr. Chairman, thank you for the opportunity to testify on early action crediting. I'm David Ridenour, vice president of the National Center for Public Policy Research, a Washington, DC, think tank. The National Center has never received government funding and we have no financial stake in the decisions of this subcommittee. In addition to representing the National Center, I'm representing 12 members of the Cooler Heads Coalition, coalition of nonprofit groups concerned with consumer costs of the Kyoto Protocol. Together these groups represent nearly 4 million Americans. It's not often that free market groups like

mine agree with the Sierra Club, Ozone Action, Friends of the Earth, and National Environmental Trust. But when it comes to early action crediting proposals under discussion, we agree on several points.

First, such programs can't possibly benefit the environment, second, they can't possibly benefit the economy. Even if one assumes that man-made greenhouse gas emissions are responsible for global warming and neither satellite nor weather balloon data support this, early action crediting could prove counterproductive. These programs would make it more difficult for small businesses and family farms to comply with Kyoto's emissions targets. They would allow the President to offer companies reducing emissions prior to 2008, when the Kyoto Protocol is slated to take effect, emissions credits that these companies could either use or sell during Kyoto's first emission budget period 2008–2012. But unlike the developing countries, the United States would not be entitled to more credits during the first budget period for any emissions reductions occurring prior to 2008. In other words, every early action credit the President grants would mean one less credit in the U.S. pool during 2008–2012. Since most small businesses lack the political context and expertise to negotiate deals with the Clinton administration, and lack the financial resources to reduce their emissions early, large businesses would likely garner most of the early credits. Thus, the burdens of Kyoto would rise for small firms while dropping for large ones.

By making compliance more difficult for small firms early crediting will make it less likely the United States could meet the Kyoto targets and unless of course we were willing to kill the goose that lays the golden egg: Small businesses which create two-thirds of all new jobs.

Early action crediting appears designed more to create a pro-Kyoto corporate lobby than to reduce emissions. As you know, prospects for Kyoto's ratification has been poor thanks in part to industry opposition. In response the Clinton administration included provisions in its fiscal year 2000 climate change budget designed to build corporate support for Kyoto. For example, the budget included a \$273 million program to make buildings more energy efficient. This provision may explain why Honeywell, which was recently awarded a DOE contract to work on building efficiency, now supports the treaty. Other examples of the administration's efforts are included in the National Policy Analysis No. 233, which I have here that I would be grateful if it could be entered into the record.

[The information referred to follows:]

White House Tries to Buy Support for Greenhouse Gas Reductions

One of the more surprising developments in the ongoing global warming debate is the Clinton Administration's success in lining up major corporate support for the greenhouse gas reductions stipulated under the Kyoto Protocol.

Signed by the United States and 158 other nations in Kyoto, Japan in December 1997 but as yet not ratified by the U.S. Senate, the Kyoto Protocol would require industrialized nations to make significant reductions in carbon dioxide and other greenhouse gas emissions — emissions some policymakers allege are causing dangerous warming of the planet. The United States would be required to reduce its greenhouse gas emissions by more than 30 percent over 15 years, resulting in the loss of millions of jobs, loss of global competitiveness and rampant inflation.

Despite such dire economic consequences, at least 19 companies have endorsed the emissions reductions, including some of the biggest names of American industry such as Boeing, Sunoco, Weyerhaeuser and DuPont. The key to the White House's success in co-opting industry lies in the fact that every corporation that has endorsed emissions reductions stands to profit from these climate change policies.

Although it is obvious why companies specializing in alternative energy sources, such as Enron (natural gas, wind and solar power), were immediate supporters of emissions reductions, the Administration's success in securing the backing of key oil companies was

a surprise. In May 1997, British Petroleum (now British Petroleum Amoco) became the first major oil company to endorse the White House's view that global warming represented a major problem and announced it would take steps to reduce its own greenhouse gas emissions. Later that year, Royal Dutch Shell also announced its support for reducing emissions.¹ Another explanation, however, for their concern over the environment may be found in the fact that Royal Dutch/Shell and British Petroleum Amoco believe that there is money to be made in renewable energy. A 1998 Royal Dutch/Shell study concluded that renewable energy could supply half the world's energy by the middle of the 21st century. With an eye on this future market — and aware of how emissions reductions would increase its profitability — both companies announced that they were increasing their investments in renewable energy development by \$1.5 billion soon after endorsing the Administration's calls for cutting man-made emissions.²

One of the most significant developments in the emerging White House-industry alliance occurred in May 1998 when the Pew Center on Global Climate Change (backed by Enron) announced that 13 corporations agreed to join it in proselytizing the Administration's global warming policies. These companies included Toyota, 3M, Lockheed Martin, American Electric Power, Intercontinental Energy Corporation, U.S. Generating Company, Whirlpool, Maytag and United Technologies.³ The common

denominator uniting these disparate corporations is that each would profit in some manner from implementation of emissions reductions.

For example, Toyota's decision to endorse emissions cuts makes perfect business sense as it has already developed a product with lower emissions, thus giving the company a major edge over U.S. competitors. This year, Toyota unveiled the Prius sedan, a "hybrid" car that runs on a combination of gas and electricity and gets 66 miles per gallon. Emissions limits would be a godsend for the Japanese carmaker as the Prius could easily meet the higher government-mandated fuel mileage standards that such cuts would require.⁴ Aerospace giants Boeing and United Technologies also stand to gain from restrictions on greenhouse gas emissions as both are leaders in developing technologies such as lightweight metals that reduce fuel use, which the Clinton Administration has publicly cited as necessary to reducing greenhouse gas emissions in the auto industry. No doubt, Boeing and United Technologies presumably recognized the potential new markets that could open for their technological expertise when it endorsed the Administration's emissions reductions strategy.⁵ Similarly, Maytag has just developed a new — and

expensive — washing machine that is more energy efficient than older models and could conceivably be in high demand in a more energy-conscious economy.⁶

Other companies support the emissions limits simply because they have federal contracts that depend on supporting the Administration's global warming agenda. Lockheed-Martin, for instance, operates several of the Department of Energy's research laboratories where validating the global warming theory is a top priority.⁷ Likewise, Honeywell contracts with the Department of Energy to upgrade federal facilities to make them more energy efficient, an activity that would be in higher demand if the Administration has its way.⁸

Clearly, the Administration is employing a classic divide-and-conquer strategy that plays upon narrow considerations of corporate self-interest to gradually undermine, through a process of attrition, a constituency vital to fighting ratification of the Kyoto agreement in the U.S. Senate. Although much of the business community remains opposed to Kyoto, the Clinton White House's skillful lobbying campaign could continue to cause businesses to defect to the Administration's position and place additional pressure on reluctant companies to end their opposition to the treaty.

*by John K. Carlisle
director of The National Center
for Public Policy Research's
Environmental Policy Task Force*

¹ Bette Hileman, "Nations, Business Interests Struggle Over Policies Before Kyoto Meeting," *Chemical & Engineering News*, November 17, 1997.

² Hileman.

³ "Pew Center Takes On Climate Change," *Inside the Greenhouse*, U.S. Environmental Protection Agency, Fall 1998 (<http://www.epa.gov/globalwarming/greenhouse/pew.html>).

⁴ Miguel Llanos, "Are 'Green' Cars Finally Maturing?" *MSNBC News* Internet web site (www.msnbc.com), January 5, 1999.

⁵ Secretary of Energy, Federico Pena, "PNGV and NATT: Contributions to the Future," Speech at the Northwest Alliance For Transportation Technologies Kick-Off Conference, Seattle, Washington, August 27, 1997.

⁶ Michael L. Martin, "FY 1999 Budget Appropriation For Energy Efficiency Programs, U.S. Department of Energy," Testimony before House Appropriations Committee Interior Subcommittee, March 4, 1998.

⁷ "Wesiport Innovations Inc. and the U.S. Department of Energy's Idaho National Engineering and Environmental Lab Announce Strategic Alliance," press release, Idaho National Engineering and Environmental Laboratory, May 26, 1998.

⁸ Martin, March 4, 1998.

Mr. RIDENOUR. Early action crediting is another means of building corporate support for Kyoto. Early crediting would help build corporate support because it would give companies earning credits a vested interest in seeing to it that the credits are worth something. Without Kyoto ratification, the credits would be worthless. Early credits are the industry's insurance against the possibility that Kyoto will be ratified. But in buying the insurance, Kyoto ratification would become even more likely. It's analogous to buying auto insurance to increase your chances that you'll actually be in a car crash. The fact that early action credits could influence or preordain the outcome of the Senate's consideration of the Kyoto Protocol is particularly distressing. As Senator Byrd said of a high profile Senate deliberation, don't tamper with this jury.

We shouldn't tamper with Kyoto's jury either.

The final issue concerns accounting and verification. Independent third parties would be permitted to measure corporate emissions reductions but there are no guidelines for who would qualify for this work. This certainly brings the validity of any accounting into question in my view.

We're also concerned with the very people pressing for early action crediting and for third party monitoring could profit from it. According to the environmental group Nonprofit Accountability Project, the Environmental Defense Fund, through its quote Satellite Group Environmental Resources Trust, would provide monitoring services for a fee.

Of greater certain to me, however, is the incentives that would be created for corporations to give and give generously to the EDF or similar group. Corporations will be tempted to pay tribute to monitors knowing that they are the final arbiters of who does and doesn't deserve emissions credits, who is a good corporate citizen and who is not.

Third party monitoring could compromise not only the integrity of accounting and verification but our political process.

I want to thank the chairman very much for the opportunity to address this hearing. Thank you.

[The prepared statement of Mr. Ridenour follows:]

Testimony of David A. Ridenour Before the House Subcommittee on National Economic Growth, Natural Resources and Regulatory Affairs on Early Action Crediting

July 15, 1999, 2:30 P.M.

Mr. Chairman, thank you for inviting me to testify today on the important issue of global warming and early action crediting. I'm David Ridenour, Vice President of The National Center for Public Policy Research, a non-partisan, non-profit educational foundation based here in Washington.

Before I begin, I think its important that you know that The National Center has never received government funding in support of its work, nor do we ever plan to seek such funding in the future. Our support has come principally from some 200,000 individuals. We therefore have no financial stake in the decisions of this subcommittee or indeed of the U.S. Congress as a whole.

In addition to representing The National Center, I'm here today representing the Cooler Heads Coalition, an alliance of some two dozen non-profit public policy groups concerned about the implications of the Kyoto Protocol for consumers. The Cooler Heads Coalition also accepts no government funding.

It's not often that free-market organizations like The National Center for Public Policy Research and the Cooler Heads Coalition can agree with the Sierra Club, Ozone Action, Friends of the Earth and National Environmental Trust on anything – much less on climate change policy. But when it comes to early action crediting bills like the ones introduced by Senator John Chafee in the Senate and drafted by Rep. Rick Lazio, we agree with these groups on several key points. First, these early action crediting programs can't possibly benefit the environment. Second, they can't possibly benefit the economy. Perhaps they were never intended to.

Even if one assumes that man-made greenhouse gas emissions are responsible for increases in the planet's temperature – and this does not appear to be supported by the satellite and weather balloon data – early action crediting programs would provide little relief and could even prove counterproductive. The reason? These programs would make it more difficult for many small businesses and family farms to comply with the Kyoto Protocol's emissions targets by allowing the largest firms to shift a greater proportion of the burden on to small enterprises. Under current early action proposals, the President would be permitted to offer companies making voluntary reductions in their greenhouse gas emissions prior to 2008, when the Kyoto Protocol is slated to take effect, emissions credits that these companies could either use or sell during Kyoto's first emission budget period (2008-2012). But unlike the situation for developing countries, U.S. emissions reductions occurring prior to 2008 would not entitle the U.S. to more credits during the first budget period. In other words, every credit the President grants under early emissions crediting would mean one less credit in the U.S. pool during 2008-2012. Since most small businesses and family farms lack the political contacts and clever lawyers necessary to negotiate credit deals with the Clinton Administration and lack the financial wherewithal to make immediate reductions in their emissions, large businesses would likely garner the lion's

share of early credits. Thus, the burdens of Kyoto – if the treaty is ultimately ratified – would rise for small firms while dropping for larger ones.

If early crediting would make compliance with Kyoto more difficult for small businesses, then why initiate such programs? One of the principal motivations behind early crediting may be a desire to build a pro-Kyoto lobby within the corporate community.

It's no secret that the early prospects for Kyoto's ratification in the Senate were poor and industry opposition to the treaty was a key factor. That's why the Clinton Administration included a number of provisions in its FY 2000 Climate Change budget designed to build corporate support for Kyoto. For example, the Administration budget included tax incentives for consumers purchasing energy efficient products. This provision may explain why Maytag, which has developed a more efficient but very expensive washing machine, recently endorsed the Kyoto Protocol. Similarly, a \$273 million program included in the Administration's budget to make buildings more efficient may explain why Honeywell now supports the treaty. Honeywell was one of two firms -- the other being Pacific Enterprises -- that was awarded contracts by the Department of Energy to do such work. Toyota, which also recently endorsed the Kyoto Protocol, might have been enticed to do so by the Administration's promise of tax credits for hybrid automobiles. Toyota recently developed a vehicle that operates on gas and electricity that gets 66 miles to the gallon. Further examples are included in *National Policy Analysis* number 233. I would be grateful if this could be entered into the record.

The Administration has also endorsed early crediting, which appears to be the most effective means of building corporate support for Kyoto. The reason is simple: Once a company earns early credits the company would want them to be worth something and the credits won't be worth anything unless the Kyoto Protocol is ratified. Early credits are industry's insurance against the possibility that Kyoto will be ratified. But in buying the insurance, industry actually would make Kyoto ratification more likely. Its analogous to buying auto insurance to increase the likelihood you will be in a car crash.

I have great concern that early action crediting would give federal officials greater leverage with the corporate community to affect the outcome of important deliberations before the U.S. Senate.

As Senator Robert Byrd said of a high-profile Senate deliberation, "Don't tamper with this jury." We shouldn't tamper with the Kyoto Protocol jury either.

The final issue concerns accounting and verification issues. Under current proposals, independent third parties would be permitted to measure and track reductions on behalf of corporations. As the National Environmental Trust has noted, "[there are] no guidelines for who would qualify as an auditor." This in my mind certainly brings the validity of any emissions accounting into question. Another environmental group, the NonProfit Accountability Project, has even suggested that the Environmental Defense Fund -- which the group says helped formulate the early credits proposal -- would stand to gain financially from the plan, saying, "...EDF has financial interests at stake in the 'early action' bill -- its satellite group [Environmental Resources Trust] will profit from services it will render..." Of greater

concern to me, however, is the incentives such a system would provide to corporations to give – and give generously – to the EDF or similar organization. Even if it was not the intention of the early action plans to create such a dynamic, corporations will be tempted to pay tribute to environmental groups knowing full well that they are the final arbiters of who does and does not deserve emissions credits, who is a good corporate citizen and who is not.

As presently constituted, third party monitoring could compromise not only the integrity of accounting and verification, but our political process.

Thank you again for the opportunity to speak.

**Members of the National Consumer Coalition "Cooler Heads" Coalition
Endorsing David Ridenour's Testimony**

House Subcommittee on National Economic Growth, Natural Resources and
Regulatory Affairs on Early Action Crediting

July 15, 1999

American Policy Center
Americans for Tax Reform
Association of Concerned Taxpayers
Citizens for a Sound Economy
Competitive Enterprise Institute
Consumer Alert
George C. Marshall Institute
National Center for Public Policy Research
Seniors Coalition
60 Plus
Small Business Survival Committee
The Heartland Institute

These members represent at least 4 million consumers around the country.

(Seniors Coalition has 3 million; 60 Plus, 500,000; CSE, 250,000; NCPPR 200,000)

Frances B. Smith, executive director
Consumer Alert
1001 Connecticut Ave., NW
Suite 1128
Washington, DC 20036
Phone: 202-467-5809
Fax: 202-467-5814
e-mail: fsmith@consumeralert.org

Mr. MCINTOSH. Appreciate that very much, Mr. Ridenour.

Mr. Krupp, welcome to this subcommittee and please summarize your testimony. We'll put the entire written testimony into the record.

Mr. KRUPP. Appreciate that. Mr. Chairman, members of the subcommittee, thank you for the invitation to testify on behalf of the Environmental Defense Fund. I am the executive director of the Environmental Defense Fund. We're an organization of 300,000 members with offices located across the country. Our formal involvement with climate policy extends back at least 15 years as our scientists, economists and attorneys have worked to understand the problems and suggest workable solutions.

I would like to begin with a statement for those who seem to believe that the possibility of human induced climate change is non-existent and that all questions surrounding that issue already have been settled once and for all. To those who are comfortable in such a position, who believe that no risk is posed even by the questions raised by the body of accumulating science on global warming, I would offer that the notion of rewarding companies for voluntary actions to reduce greenhouse gas emissions is patently absurd. If there is no possibility of a problem, then no policy consideration is even necessary.

On the other hand, for those who are either convinced that climate change is a problem, or, perhaps this is the most important group, for those who believe that we as a society are now operating in a context of change and uncertainty concerning climate change, a credit for voluntary action program offers a compelling management option to a set of serious environmental and economic risks.

With that in mind, let me provide some history on this issue. In early 1997 before the Kyoto negotiation began, my group developed a proposal for rewarding businesses that undertook voluntary actions that resulted in greenhouse gas emission reductions. The proposal reflected two key beliefs: First, that the threat of human induced climate change demands prompt and vigorous action to curb greenhouse gas emissions; second, that for the sake of both the environment and the economy, policy tools used to accomplish this should tap to the maximum extent possible the ingenuity and resources of the private sector instead of relying solely on the mandates of politicians and government.

Our proposal reflected an existing reality as well that, to put it mildly, there has been no or little consensus here in Washington to support decisive action. Thus, our own preference for strong aggressive policies to achieve greenhouse gas emissions reductions is simply not in our view politically feasible in this time.

In short we thought this would be a modest, prudent proposal. Accordingly, EDF's proposal to achieve immediate reductions now through a voluntary basis offered U.S. businesses the chance to use voluntary actions to create real economic benefits for themselves. Let me emphasize these two critical points, voluntary, real reductions in emissions and those real reductions occurring now, not a decade from now. At the same time by creating this environmental and economic quid pro quo a credit for voluntary action program also gives policymakers here in Washington a strategy for managing the high stakes issue. Again unless one is firmly convinced that

climate change is not and will never be a problem, then climate change represents an environmental and economic risk as well as a potentially calamitous track for future policymakers. Credit for voluntary action is nothing more than a tool for managing this suite of risks. The basic concept that we proposed is reflected in Senate bill 547, introduced by Senator Chafee along with a bipartisan group of 11 cosponsors and echoed in legislation that was introduced yesterday by Representatives Lazio and Dooley.

The concept is simple. A company could earn emissions reduction credits if it succeeds in reducing its greenhouse gas emissions below current levels or sequestering greenhouse gases over the next decade. The logic of this approach and the related legislation is reflected in simple arithmetic. According to the leading analysis, U.S. greenhouse gas emissions could be more than 30 percent above 1990 levels if our economy continues on a so-called business as usual course. While the expected economic growth is essential, the prospect of the attendant emissions growth represents a triple threat to the environment, to business, and public policymakers.

The credit for voluntary action proposal is aimed at diffusing the threats implicit in the projected emissions growth while preserving economic progress. Here's how. If greenhouse gas emissions represent a serious standard to danger to the environment the prospect of at least 9 more years of unchecked emissions increases represents an ever increasing environmental risk. Under a credit for voluntary action approach, the environment would benefit directly as companies work to earn credits by achieving real greenhouse gas reductions. At the same time for any businesses contemplating a future greenhouse gas limitation regime, whether created under the Kyoto Protocol or other domestic or international policy, that same unchecked emissions increase poses an economic threat. For if future U.S. policymakers should decide to either ratify the protocol or otherwise adopt comparable emissions limitations, then those additional emissions represent that much more of an expense that will have to be incurred in meeting such emissions limitations.

The credits businesses could earn under the proposed program represent nothing less than a form of insurance against the high cost of a future regulatory regime since businesses could use those credits as a means of complying with such a regime. In addition, we believe that the incentive to earn credits that could be used in such a way would spark a private sector led process of searching for the most cost effective strategies and techniques for reducing greenhouse gas emissions in turn, creating a larger economic momentum toward lowering greenhouse gas reduction costs.

Finally, for policymakers 9 more years of greenhouse gas emissions increases on the scale projected also represent a threat. Even the most adamant and categorical opponents of Kyoto Protocol characterize the science surrounding global warming and climate changes uncertain. Current uncertainties in fact may be masking a grave threat. This uncertainty does not provide justification for inaction. Credit for voluntary action provides the opportunity to manage that uncertainty.

Simply put, the chance to earn emissions reduction credits for emissions reductions achieved in the short term would allow the environment, businesses and policymakers to opt out of the game.

The alternative, so long as today's policy stalemate resulting inaction persists, sounds like the title of a movie from a few years ago, "No Way Out." Not even those companies who see substantial economic risk from future compliance liability will have any options or tools for managing the risk.

Finally, Mr. Chairman, let me close by saying that like many, if not all members of this committee, the Environmental Defense Fund believes that the greatest opportunities to make discoveries about true costs, about cost savings and about technological innovation are created when the resources of the private sector are engaged in market based incentives. This is precisely the strategy that would be embodied in the credit for voluntary action program. It's voluntary, it's market based, it can provide certainty where none now exists. It can let the market work. We strongly encourage this Congress to make that possible. Thank you for the opportunity to be here and of course I would be happy to answer questions.

[The prepared statement of Mr. Krupp follows:]



Capital Office
 1875 Connecticut Ave., N.W.
 Washington, DC 20009
 (202) 387-3500
 Fax 202-234-6049
 www.edf.org

Testimony of Fred Krupp, Executive Director

Environmental Defense Fund

before the

**Subcommittee on National Economic Growth, Natural Resources and Regulatory
 Affairs**

Committee on Government Reform

United States House of Representatives

on Credit for Voluntary Action to Reduce Greenhouse Gas Emissions

July 15, 1999

Mr. Chairman and Members of the Subcommittee:

Thank you for extending to the Environmental Defense Fund the opportunity to testify here today on the subject of credit for voluntary action to reduce greenhouse gas (GHG) emissions.

My name is Fred Krupp. I am the Executive Director at EDF. We are an organization of some 300,000 members around the country, with offices located in New York, Washington, California, Texas, North Carolina and Colorado, and affiliated operations in Massachusetts and the Pacific Northwest.

EDF's formal involvement with climate policy extends back at least 15 years. We have built an interdisciplinary team of scientists, economists and attorneys who are working to expand society's understanding of the problems associated with warming of the planet and to develop economically sensible policies for reducing emissions of the greenhouse gases that are contributing to this warming.

EDF's VOLUNTARY ACTION STRATEGY

To that end, in early 1997, before the negotiation of the Kyoto Protocol, EDF developed a proposal for rewarding businesses that undertook voluntary actions that resulted in GHG emissions reductions.

<i>National Headquarters</i>				<i>Project Office</i>	
257 Park Avenue South New York, NY 10010 (212) 505-2100	5655 College Ave. Oakland, CA 94618 (510) 658-8008	1405 Arapahoe Ave. Boulder, CO 80302 (303) 440-4901	2500 Blue Ridge Rd. Raleigh, NC 27607 (919) 881-2601	44 East Avenue Austin, TX 78701 (512) 478-5161	6 Faneuil Hall Marketplace Boston, MA 02109 (617) 723-2996

The proposal reflected two key beliefs. First, EDF believes that the threat of human-induced climate change demands prompt and vigorous action to curb greenhouse gas emissions. Second, we believe that for the sake of both the environment and the economy, the policy tools used to accomplish this should tap, to the maximum extent possible, the ingenuity and resources of the private sector, instead of relying solely on the mandates of politicians and governments.

Our proposal reflected an existing reality as well: however strong our conviction and that of the scientific community and American public may be about the importance of taking action to forestall climate change, there has been little consensus here among policy-makers in Washington to support decisive action. Thus, our preference for policies mandating GHG emissions reductions is simply not politically feasible, in our view, at this time – yet, we believe that the need for achieving actual reductions immediately is urgent.

Accordingly, EDF's proposal was designed to achieve real reductions in GHG emissions starting immediately by offering U.S. businesses the chance to use voluntary and fully flexible actions to create real economic benefits for themselves. Let me emphasize the two critical points: real reductions in emissions and those reductions occurring now, not a decade from now.

At the same time, by creating this environmental and economic quid pro quo, a credit for voluntary action program also gives policy makers here in Washington a strategy for managing this high stakes issue that is also deeply contentious and remains fraught with a range of economic and political uncertainties. It is for this reason, that we see this proposal as capable of inspiring a near-consensus. Unless one is firmly convinced that climate change is not a problem and thus views the issue as already settled once and for all, then climate change represents an environmental and economic risk as well as a potentially calamitous trap for future policy-makers. Credit for voluntary action is nothing more than a tool for managing that suite of risks.

The basic concept that we proposed is reflected in S. 547, introduced by Senator Chafee along with a bipartisan group of 11 co-sponsors, and echoed in legislation that may be introduced soon by Representatives Lazio and Dooley (as of the time this written testimony was submitted). The concept is simple. A company could earn emissions reduction credits if it succeeds in reducing its GHG emissions below current levels, or sequestering greenhouse gases, over the next decade.

The program would be implemented through agreements entered into between participating companies and landowners and the President (or his/her delegates). Such agreements would specify each company's target in the form of a cumulative, multi-year emissions budget. These budgets would be calculated by multiplying the company's annual average emissions over the current three-year period and the number of years that the program is in operation. At the end of the program period, those companies whose cumulative emissions were below the level of their emissions budgets would be awarded emissions reduction credits. Such credits could be used by the companies to offset any GHG-limitations or regulatory requirements they might face after the program ended, or they could be sold to other companies facing regulatory requirements.

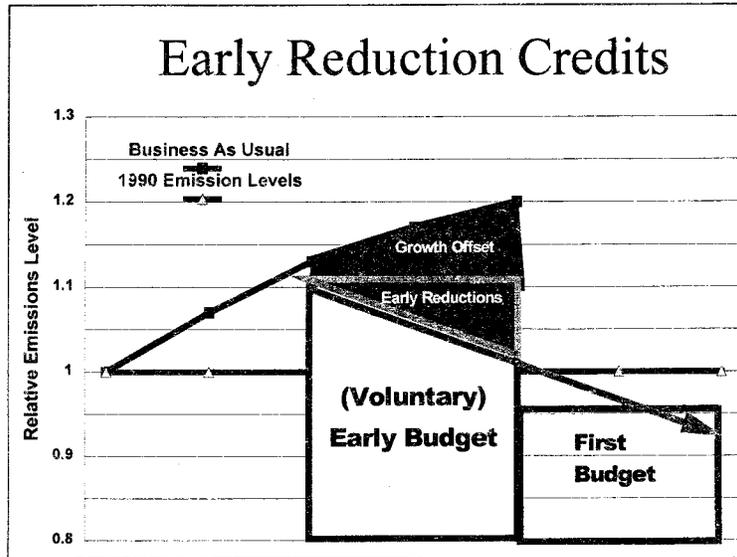


Figure 1

Under such a program, near-term greenhouse gas reductions would have tangible financial value. That value would lie in the cost-savings the company would enjoy as a result of substituting a cost-effective reduction in the near-term for compliance with a potentially more expensive regulatory limit in the future. As a result of that value, companies with immediate opportunities to make greenhouse gas reductions would have a definitive financial reason for doing so.

CREDIT FOR VOLUNTARY ACTION: A STRATEGY FOR ADDRESSING RISKS

The logic of EDF's proposal, and the related legislation, for awarding credit for voluntary action is reflected in Figure 2. According to the leading analyses, U.S. greenhouse gas emissions could be more than 30% above 1990 levels if our economy continues on a so-called business-as-usual course. While the expected economic growth is essential, the prospect of the attendant emissions growth represents a triple

threat to the environment, to business and to public policy-makers. The credit for voluntary action proposal is aimed at defusing the threats implicit in the projected emissions growth while preserving economic progress.

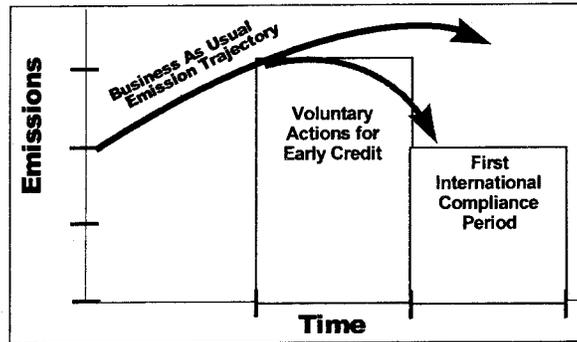


Figure 2

Since GHG emissions represent a serious danger to the environment, the prospect of at least nine more years of unchecked GHG emissions increases represents an ever-increasing environmental risk. In fact, EDF's current analysis of global GHG emissions trends and atmospheric concentrations strongly suggests that if too much more time passes without action, then human beings simply may lose the opportunity to avoid damaging changes in the earth's climate – no matter how compelling new scientific evidence of this damage turns out to be in the future. Greenhouse gases do their damage by staying in the atmosphere for long periods of time, from decades in the case of a carbon dioxide to centuries in the case of other greenhouse gases. Preventing their release in the first place is vital. At the same time, for any business contemplating a future GHG limitation regime, whether created under the Kyoto Protocol or other domestic or international GHG policy, that same unchecked increase poses an economic threat. For, if U.S. policy-makers should decide to ratify the Protocol or otherwise adopt comparable GHG emissions limitations in a comparable timeframe, then the additional emissions increases represent that much more expense that will have to be incurred in meeting such emissions limitations. For GHG-intensive industries that added expense could be substantial, especially if rigorous compliance measures requiring abrupt change are put in place.

Finally, for policy-makers, nine more years of GHG emissions increases on the scale projected also represent a threat. Even the most adamant and categorical opponents of the Kyoto Protocol characterize the science surrounding global warming and climate change as uncertain. Uncertainty, however, does not offer justification for inaction. Current uncertainties, in fact, may be masking a grave threat. Ongoing scientific research, not to mention climate-driven catastrophes in nature itself, could replace today's alleged uncertainties with a widespread sense of urgency for action to reduce GHG emissions. Yet, if that message of urgency is heard only after another five

or ten years of unchecked emissions increases, then those charged with responding to it will find themselves facing potentially tragic choices between achieving the necessary reductions and preserving the health of the nation's economy.

Sustained inaction on GHG emissions, the product in no small part of a classic political deadlock, forces both businesses and the overall economy as well as the environment into a game of "Gun-Barrel Roulette". The chance to earn emissions reduction credits for GHG emissions reductions achieved in the short-term, however, would allow businesses to opt out of that game. The credits businesses could earn under the proposed program represent nothing less than a form of insurance against the high costs of a future regulatory regime, since businesses could use those credits as a means of complying with such a regime if their use was the most cost-effective option. In fact, the incentive to earn credits that could be used in this way would spark a private-sector-led process of searching for the most cost-effective strategies and techniques for reducing GHG emissions, creating, in turn, a larger economic momentum toward lowering GHG reduction costs.

In addition, since the only way a company could earn such credits is to achieve real GHG reductions, the environment also would benefit directly from this approach. The alternative – so long as today's policy stalemate and resulting inaction persist – is that even those companies who assess as substantial the economic risk of future liability for compliance with GHG limitations have few, if any, options or tools for managing that risk.

A national credit for voluntary action program could help add a new, constructive element to the ongoing debate on climate policy. To date, that debate has been dominated by conflicting interpretations of complex scientific evidence and a variety of claims about the economic consequences of imposing GHG emissions limitations or other requirements related to GHG emissions. For the most part the latter have relied almost exclusively on academic studies – as opposed to real-world experience – or those advanced by interested parties, including those with undisguised partisan political interests.

A credit for voluntary action program, in contrast, could yield a new dimension – learning by doing in the private sector. Rather than perpetuating a debate that so far has been largely speculative and highly politicized, offering companies a tangible reason of take voluntary actions would allow the private sector itself to weigh in with results of its voluntary GHG reductions efforts. Like many, if not all, Members of this committee, EDF believes that the greatest opportunities to make discoveries about true costs and cost-saving and technological innovation are created when the resources of the private sector are engaged by market-based incentives. This is precisely the strategy that would be embodied in a credit for voluntary action program.

WINNERS AND LOSERS?

Should the Kyoto Protocol or a similar regime imposing overall limits on GHG emissions ever come into effect, the credits awarded under a voluntary action program would become valuable to the program participants. At the same time, in order to "balance the emissions budget", awarded credits would have to be deducted from any

overall national "emissions budget", express or implied. To many, this outcome would create a classic case of unjustifiable government favoritism to some economic interests over others.

In our view, however, such a criticism is misplaced. First, the task that a company would have to accomplish in order to earn credits – limiting its actual cumulative GHG emissions over a multi-year period to current levels – is environmentally rigorous. Thus, the emissions reduction benefits achieved in order to earn credits are substantial. The entitlement of a company to an award of credits, therefore, would be based strictly on the actual achievement of a sharply and rigorously defined objective. In addition, the economic and policy benefits potentially created by companies that participated in such a program amply justify favoring those companies that undertake these actions by awarding them emissions reduction credits.

Second, the opportunity to participate in such a program, as indicated by provisions in S. 547, is open to any business, large or small and in virtually any sector, that in its view of its own self-interest decides to participate in the program. S. 547 also includes provisions that would allow participants to use emissions trading or the collective "pooling" of their respective commitments to facilitate the achievement of GHG emissions reductions to levels below their voluntary "budgets". Such arrangements would enable businesses facing a wide variety of economic and technical circumstances to participate profitably. To the extent that such provisions would allow small businesses to aggregate their participation, thus reducing transactions costs, they too could participate in the program.

Third, the ultimate objective of the program would be to create a slowing down in the currently projected increase of U.S. GHG emissions, if not an actual decline, over the course of the next decade. It is precisely because such an outcome would make the overall economy-wide cost of compliance with any future regulatory regime lower that this program is economically attractive in the first place. If, in fact, the program yields significant emissions avoidance or reduction, even non-participants in the program, including small businesses, would enjoy some form of economic benefit since the overall burden of compliance on the national economy would be lessened. In addition, widespread investment in techniques and strategies for avoiding or reducing GHG emissions during the voluntary program well could drive the costs of these methods down in a way from which all those subject to subsequent GHG limitations could benefit.

Fourth, the U.S. inventory of GHG emissions is overwhelmingly dominated by the energy, heavy manufacturing and transportation sectors, comprising for the most part major corporations, not small businesses. Any future climate-related regulatory regime, especially one focused on emissions, is highly unlikely to impose significant requirements, if any, on small businesses. As a result, small businesses that do not participate themselves in the voluntary credit program are not likely to be affected by the allocation of credits for voluntary actions and any resulting diminution in a future U.S. emissions "budget".

PROSPECTS FOR SUCCESS

Given EDF's long-standing commitment to the use of market mechanisms as a tool for environmental regulation, we took special cognizance of the experience created by the sulfur dioxide (SO₂) emissions program under Title IV of the Clean Air Act in weighing the wisdom and design of a voluntary reduction credit proposal for GHG emissions. Figure 3 illustrates the environmental performance of the SO₂ emissions trading market so far. Under the program, utilities have cut their sulfur dioxide emissions by approximately 30% *more* than required – at least in part because the emissions trading market makes those extra reductions valuable. This degree of overcontrol is a vivid demonstration of how powerful the incentives of an emissions

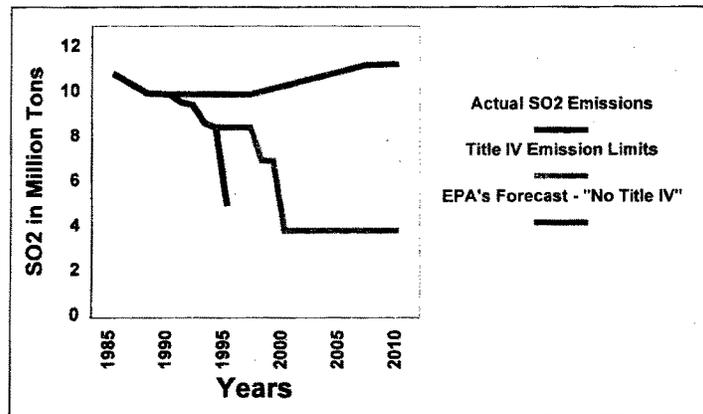


Figure 3

trading and "banking" market can be. These extra, early reductions obviously represent an environmental benefit beyond that provided by the required emissions reduction levels. The same incentive power also provides the impetus for mobilizing a broad range of low-tech creativity and high-tech innovation of precisely the sort needed to reduce greenhouse gas emissions in an economically affordable way.

More important, the experience of the SO₂ program offers a direct analogy for a voluntary credit program for GHG. The incentives created by the SO₂ program are the result of the opportunity that program offers utilities to "bank" extra reductions achieved

in the 1995-2000 period and to use those reductions to offset substantially more stringent requirements set by law to begin in 2000. A voluntary credit program for GHG reductions would apply precisely the same "banking" incentive that has yielded such a great volume of early or extra SO₂ reductions. While a host of factors distinguish the existing SO₂ program from the proposed voluntary GHG program, U.S. experience with the former offers at least prima facie evidence of the powerful incentive created by the opportunity to "bank" emissions reductions against future costs.

CREDIT FOR VOLUNTARY ACTION AND THE KYOTO PROTOCOL

EDF supports the Kyoto Protocol and favors its ratification and implementation. We do so under the belief that early and significant action to reduce greenhouse gas emissions would put the nations of the world on an emissions trajectory that could avoid unacceptably damaging impacts of climate change and unnecessarily disruptive adaptation strategies for the U.S. economy.

It is in this context that we see the Kyoto Protocol as a remarkable international political commitment, and as an essential first step in dealing with this most significant of global environmental problems. While a second step, namely that of obtaining significant emissions limitations in the developing world, needs to be taken in short order after the first step, a decision by the United States to forestall action would greatly increase the risk that drastic and much more expensive emissions cuts will be needed in the future. We are hopeful that the United States and the world community will continue efforts to build on the important first step taken in Kyoto.

As a part of the effort to achieve and preserve this international agreement, EDF's own work both before and after Kyoto has focused on the use of emissions trading in the design and implementation of the international regime for managing greenhouse gas emissions. In EDF's view, both the position of the U.S. government and the text of the Kyoto Protocol incorporate most of the critical elements needed to establish a successful global greenhouse gas emissions trading regime – one that can bring about important environmental benefits in an economically affordable way. In addition, the flexibility inherent in the overall structure of the protocol would enable policy-makers to assess and re-assess continuously over time new, unfolding information about climate change and climate policy. Again, as outlined above, prompt action to reduce GHG emissions would only add to that critical decision-making flexibility in the long-term. Finally, the economic dynamics of a global GHG emission trading market could create incentives for developing countries to participate in the Protocol.

Obviously, we would not be advancing a voluntary action proposal if we believed it to be inimical to the prospects of ratifying and implementing the Protocol. In fact, we believe that a voluntary credit program could ensure a constructive debate on the Protocol in a way that would enhance the chances that the proponents of ratification, like EDF, could prevail. As already outlined above, the aim of the program is to create two effects – the lowering of U.S. GHG emissions in the short-term and the fostering of private sector experience in identifying and using measures to reduce GHG emissions. If either or both of these outcomes are achieved, then ratification of the Kyoto Protocol would be a that much more economically reasonable choice for the U.S., and the range

of choices available for implementing the Protocol would be that much wider and more cost-effective.

ACCOUNTING AND VERIFICATION

Critical to achieving the environmental and economic objectives of a voluntary reduction credit program is the adoption of reliable emissions quantification, verification and reporting methods by the participating companies. Fortunately, we have already seen a steady rise in the level of resources devoted to GHG emissions monitoring and verification, resulting largely from the handful of speculative GHG trades that have been described in the public and trade press. Although this collection of essentially demonstration trades may constitute a thin market, the participating sellers and buyers are assigning a premium to quality. This premium is directly influencing the development and public vetting of methods and practices for measuring, reporting and tracking GHG emissions reductions. As a result, a number of accounting and engineering firms are developing GHG "practices". In addition, existing voluntary programs such as the Department of Energy's 1605b reporting programs and EPA's Climate Wise programs have led firms to develop experience with GHG emissions estimation and reporting. All of this suggests that the private sector resources needed to sustain rigorous and reliable GHG emissions monitoring and verification are potentially available to support a voluntary credit program.

CONCLUSION

While EDF is convinced that a program of credit for voluntary action to reduce GHG emissions offers critical environmental benefits, we also believe that it represents both a substantive policy and a prudent policy-management or decision-making strategy that even climate skeptics and Kyoto opponents could support. In addition, we believe it offers economic benefits to a U.S. business community that faces real uncertainties about its ultimate exposure to eventual GHG emissions regulation. It is not often that such divergent interests and agendas can converge around a solution to an otherwise highly divisive issue and we hope that Congress moves expeditiously to explore this strategy and adopt sound legislation reflecting it.

Mr. MCINTOSH. Thank you, Mr. Krupp. And we will get to questions after the end of the panel presentations.

Mr. Palmer, welcome to the committee, and please share with us a summary of your written remarks.

Mr. PALMER. I appreciate it, Mr. Chairman. I want to congratulate you on your leadership on this important issue. Let me briefly describe who I am here representing today, Western Fuels Association. I am CEO of it. Western Fuels is a coal cooperative. We are owned by rural electric cooperatives and municipal electric utilities. These utilities put in coal fired power plants some 15 and 20 years as the result of project energy independence in the Carter years. They have invested billions of dollars in these assets. The Rio Treaty, the Kyoto Protocol, the Chafee early action legislation are all designed to curtail the utilization of coal as a boiler fuel in the United States. And that's what brings me to the committee today.

My message to the committee today is a very simple and straightforward one and it is this: I think what's happened in the last 5 years with the development of the Internet and the telecommunications revolution and technology that surrounds it may very well moot the issue of the Rio Treaty and Kyoto Protocol. The growth of the Internet is now generally recognized. Indeed very recently the Commerce Department produced a study called the Emerging Digital Economy II. It's an excellent study. I have it here in front of me. I refer to it in my testimony. It's 42 pages of detailed information on the explosive growth of the Internet in the United States and abroad. Intel's vision is for a billion people to be connected on line within the next 5 to 10 years. That would entail not only a billion people but tens of millions of businesses doing E-Commerce on line. The next 50 years the world's population is projected to grow to some 10 billion people. So in the next 50 years we will have well in excess of a billion people on line.

The people that we work with on energy matters we went to them and asked them what the electricity implications of this means with respect to the explosive growth of the Internet. And I would note here that the Department of Commerce left out a huge part of the examination in their study. Nowhere in this study will you see any discussion about the electricity implications of the growth of the Internet. It's simply not there, and it's something that needs to be addressed.

Our preliminary work suggests, Mr. Chairman, that for a billion additional people to be connected on line worldwide would require the installation of generating capacity in the world equal to what exists in the United States today. That's not going to be solar and it's not going to be wind and it isn't going to be biomass. It's going to be primarily coal fired electricity and natural gas. This discussion we're having today over global warming or the threat of catastrophic global warming is one that began in 1988 before the Internet emerged. The Internet didn't emerge until 1995. It is now becoming clear that the Internet is going to cause a tidal wave of electricity demand worldwide that will result in more and more carbon dioxide emissions going into the air, created by human beings. Whether the Environmental Defense Fund, the Sierra Club, the Natural Resources Defense Council, the Clinton administration or anybody else likes it or not, it's going to happen, and the impedi-

ment to the Internet and the development of the American economy will only come from our own government if we make another major mistake in energy policy the way we did in the 1970's with the Fuel Use Act and stand in the way of the market that is developing this wonderful technology and the energy assets that are required worldwide to serve it. For that reason, Mr. Chairman, we oppose the Chafee early action legislation. We oppose the Kyoto Protocol, and we believe that the Rio Treaty will be soon recognized to be an anachronism.

In closing let me say this. There have been references to the science here today. I'm not going to talk about it. I have my own views on it. I think the science is bogus on the question of catastrophic global warming. Of course people are going to impact climate. No question about that, no argument from me. That's not the issue. The words of the Rio Treaty, however, focus on dangerous interference with the climate, not will there be any climate change by humans. Of course we change the climate. We impact the climate. But there has been no science suggested, developed, examined, or underscored by any of the environmental groups, by any of the government agencies that are involved in it, by any of the governments that are involved in the U.N. deliberations that should or could deny to the American people the robust utilization of fossil fuels as our economy has enjoyed over the years.

Thank you, Mr. Chairman.

[The prepared statement of Mr. Palmer follows:]

Testimony of
Fredrick D. Palmer
General Manager & Chief Executive Officer
Western Fuels Association, Inc.
Before
Subcommittee on National Economic Growth,
Natural Resources and Regulatory Affairs
U.S. House of Representatives

July 15, 1999

Last month, to much media fanfare, the Commerce Department released its second annual report on "the emerging digital economy." In the report, Secretary William M. Daley extols electronic commerce.

Every day, more people are finding new ways to provide innovative products and services *electronically*. The Internet is changing the way businesses do business... It is revolutionizing our access to information and the way we communicate, shop, and entertain ourselves.

This year's report provides...information about [the] growth and changes that are taking place in our economy. It details the extraordinary contribution that telecommunications and information technology are making to the longest peacetime economic expansion in history.

Secretary Daley anticipates working with the private sector – businesses, non-profits, academic institutions – to identify ways to best measure the emerging digital economy.

Mr. Chairman, as President of Greening Earth Society and General Manager and Chief Executive Officer of Western Fuels Association (one a business and the other a non-profit), I would suggest the Department of Commerce take a look at a report by Mills-McCarthy & Associates entitled *The Internet Begins With Coal: A Preliminary Exploration of the Impact of the Internet on Electricity Consumption*.

Nowhere in the Commerce report – in fact, nowhere to the best of my knowledge – is anyone considering the burgeoning electricity appetite of telecommunications and information technology. As detailed in the report I submitted to the Subcommittee as the basis of my testimony ("Early Action is a Road to Nowhere"), proponents of "early action credits" to be used in building

pressure for eventual ratification of the Kyoto Protocol will shortly find their seductive proposal (1) can't be done, (2) won't work, and (3) won't matter. And, I might add, (4) is a fruitless impediment to the Information Age.

Neither early nor later action can achieve the greenhouse gas (carbon dioxide) emissions reduction goals set forth by global warming advocates. Starting early buys nothing except an earlier departure on a dead-end road.

The primary source of carbon dioxide emissions from human activity is the combustion of fossil fuels. Fossil fuels supply 85% of the nation's energy and are forecast to supply 90% of all increases in energy supply vital to the economy. To "start early" making "substantial" reductions in fossil fuel use only can have one important effect: It will depress the U.S. economy. This nation will not and cannot abandon fossil fuels in the foreseeable future.

Any policy discouraging production or consumption of coal-fired electricity threatens the technological infrastructure of the "new" information economy. Information technologies are electrically fueled. Over half of the electricity in the country is generated using coal – a figure exceeding 80% away from either coast and approaching 90% in some areas – so early action credits attack "the longest peacetime economic expansion in history."

Preliminary calculations contained in *The Internet Begins With Coal* reveal that the electricity appetite of equipment on the Internet by itself has grown from essentially nothing a decade ago to 8% of total U.S. electric consumption today. In all likelihood, the Internet is responsible for one-half to two-thirds of all growth in U.S. electricity demand in those ten years. When other uses of computers are included (many of which are linked directly or indirectly to the Internet economy), the share of all U.S. electricity consumed by computer-based microprocessors jumps to 13%.

This story is lost in the rhetoric of the power of "bits" to transform industries. And, sad to say, I think it's lost on Vice President Gore and Secretary Daley. I hope it is not lost on this Subcommittee.

One may be tempted to dispute the numbers or estimates I've provided. I would urge you first to absorb the information contained in both reports I've referenced. In the meantime, use a commonsense approach. As I make a series of nine simple declarative statements, ask yourself if I am right or if I have said anything you don't know to be true, or can't quickly prove or disprove.

- (1) The Internet is pure electricity; no other energy source is involved.
- (2) Companies like Microsoft, Intel, Cisco, Dell, AT&T, Lucent, Sun, IBM, America Online, Yahoo, Amazon.com, Qualcomm, MCI WorldCom, Etrade and Netbank all thrive on electricity.

- (3) Electricity is the lifeblood of the information economy.
- (4) The telecommunications and information technologies revolution represented by the Internet has created over \$2 trillion of wealth for ordinary Americans through their stockholdings in technology companies.
- (5) In the next ten years, trillions of dollars more will result from the emergence of the Internet as a driving force in the world's economy.
- (6) Without the abundant electricity supplied by the nearly 500 coal-fired power plants in the United States, the Internet, the wealth it has created, and the wealth it will create would not be possible.
- (7) Those 500 power plants burn close to a billion tons of coal each year to provide 57.3 percent of the electricity in the United States.
- (8) Carbon dioxide emissions are the unavoidable consequence of burning coal (or natural gas and oil, for that matter) to make electricity.
- (9) Coal-fired power plants represent the source of one-third of U.S. carbon dioxide emissions.

The motive for carbon dioxide emissions reduction is anchored in an assumption or prediction that apocalyptic global warming will occur sometime in the future. The bases of this assumption are the innerworkings of complex, flawed, and flux-adjusted computer models seeking to simulate the atmosphere's physical and chemical processes in interaction with oceans and the rest of the biosphere. These "general circulation models" are the basis for the apocalyptic scenarios portraying a world wracked by severe drought, frequent flooding, intensified storms, melting ice caps, rising sea levels, and the spread of tropical disease. I'm fond of quoting MIT's Dick Lindzen when it comes to the computer models: It's not as if I would only believe them if they gave me cooling; there simply is no basis for believing them.

In closing, let me note that Intel projects one billion Internet connections will be in place within the next five years or so. While many of the people who make those connections will live here, many more will be counted among the 10 billion people expected to inhabit the earth within 50 years. Even those first billion connections will require an additional electricity-generating base the size of that we enjoy in the U.S. today. To "wire" the world, we will have to electrify the world.

Is "connectivity" to be rationed? How could we avoid increasing the gap between those who are online and those who are not? Renewable non-carbon-based generating technologies have their place, but they can never provide sufficient electric density to power the "24-by-7" uninterruptible power source e-commerce and high-tech Information Age devices require.

To wire the world, we must electrify the world. To electrify the world, most of the world's people will turn to their most abundant domestic resource: coal. That's because coal is electricity and electricity is the Internet. The Kyoto Protocol and the Rio Treaty (Framework Convention on Climate Change) itself doom all that. Anyone for early action credit for putting us on the road to nowhere? Thank you, Mr. Chairman.

Mr. MCINTOSH. Thank you, Mr. Palmer, and I will have a couple questions for you when we get to that session. Our final witness on this panel is Mr. Fay. Welcome. Please summarize your written remarks and we'll put them entirely into the record.

Mr. FAY. Thank you, Mr. Chairman. My name is Kevin Fay. I serve as executive director of the International Climate Change Partnership, the coalition of U.S. industries and associations as well as international associations interested in the policy development process with respect to global climate change, and we appreciate the opportunity to be here today. We were organized in 1991. We're one of the largest industry coalitions in the world dedicated to this issue. We have consistently stressed the need to provide legally binding assurances that voluntary actions to reduce greenhouse gas emissions be credited in the event any future mandatory scheme is to be adopted by the government.

It's been suggested that supporting credit for early action may unwittingly create support for the Kyoto Protocol or that instituting a credit for early action program is tantamount to implementation of the Kyoto Protocol. We do not agree. ICCP believes that the Kyoto Protocol is incomplete and should not be ratified in its current form and should not be implemented without the advice and consent of the Senate. While the treaty does make a good start, we believe, in establishing a market based framework for addressing the issue on a global basis, it is a work in progress. It sets ambitious targets to be met in a most difficult timeframe and does not yet provide for developing country participation. Further, the treaty negotiators have also failed to yet identify an appropriate long term objective.

We believe that credit for early action legislation can and should be Kyoto Protocol neutral. Regardless of the fate of the treaty, investments made in energy efficiency, in the reduction of greenhouse gas emissions should be legally protected if and when any mandatory program is implemented. The predicate for this stems not from the Kyoto Protocol but from the Framework Convention on Climate Change which the United States signed during the Bush administration and sent to the Senate and was ratified in 1992. This agreement is what establishes 1990 as the baseline for measuring greenhouse gas emissions and also requires signatories to make measures to reduce them. Responding to this commitment and to the subsequent U.S. climate change action plan, many companies have already taken steps to reduce their greenhouse gas emissions. Enactment of credit for early action legislation represents in our view open door compliance with the Framework Convention and sends a positive public policy message that those who acted in response to this national commitment will not be penalized. Companies that have already taken action or are contemplating doing so want to ensure these contributions are not ignored if and when a mandatory phase of emission reductions begins. Failure to recognize these contributions could unfairly force companies to make even greater reductions through increasingly more costly options. This would have the perverse effect of penalizing those companies who acted early. Assurance of baseline protection is an important step in this process. In addition to removing existing disincentives to action, a credit for early action program could provide

an additional incentive for technical as well as policy innovation. Now is the time to experiment with the broad range of options and to more precisely determine the costs and benefits of various opportunities for reductions.

This type of experimentation and innovation, which only occurs in the United States, in terms of dealing with these issues in our view not only spurs economic growth but could provide an insurance policy against truly wrenching economic impacts in the event that much deeper cuts in the emissions were to become necessary in the future.

Finally, while many have touted the success of market based mechanisms in reducing environmental compliance costs, the fact remains that our experience with such mechanisms is very limited. An active credit for early action could provide useful experience and educate both government and industry alike as to policies that perhaps should be avoided. It has been argued that small businesses and farmers will be hurt by a credit for early action program. Again we do not agree. ICCP is currently encouraging a simplified approach to credit for early action that will allow small businesses to participate with minimal administrative or bureaucratic burdens. Discussions have also included the issue of credit for changes in land management practice that could allow farmers to participate. In addition, the program should create a market for the technical innovations that are often made by small entrepreneurial companies. And last but not least we should keep in mind that is an entirely voluntary program. There are no mandates for small business or farmer participation.

We believe the precedent for crediting early action was established in the 1990 Clean Air Act Amendment when companies who moved early on sulfur dioxide emission reductions received additional consideration in the subsequent sulfur trading program. Drawing on the statutory precedent is important for the climate change issue. However, given the scope of industries covered and the enormous task to be undertaken, the government should go on record now by developing experience in advance of any regulatory requirements.

The United States is on record in support of a responsible action to address greenhouse gas emissions. We have ratified the Framework Convention on Climate Change. Congress has funded a variety of activities under the climate change action plan, and other significant government programs. It is not unreasonable to request assurance from the government these activities, whether past or in the future, not place the voluntary actors in future regulatory jeopardy. There are a number of legislative proposals that seek to address this short term aspect of climate change policy. We commend S. 547, introduced by Senators Chafee, Lieberman and Mack and others, to create—to eliminate these disincentives and provide credit.

We commend the efforts of Senators Murkowski and Hagel in their legislation to compel more systematic attention to the long term challenge of climate change and to focus on the necessary role of research and technology in meeting that long term challenge. We also commend the newly introduced legislation by Representatives Lazio and Dooley to help advance the debate on these issues in the

House. None of these initiatives meet all of our objectives but we are committed to working with the appropriate parties to address these concerns, such as provision for growth and product coverage.

We believe it is time to start forging a bipartisan national strategy for addressing the climate change challenge. That strategy should begin by liberating the leadership, which Jack Kemp called for earlier in his testimony, of U.S. industry in this global cause. U.S. industry will be a major player in developing technologies to reduce greenhouse gas emissions, making investments in equipment, facilities and products, and generating reductions in their operations. Enactment of legislation that removes disincentives for early action and that preserves investments already made will help to retain our competitive edge and provide significant economic and environmental benefits for our Nation as well as for the world.

Thank you very much.

[The prepared statement of Mr. Fay follows:]

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Statement of

**Kevin J. Fay
Executive Director
International Climate Change Partnership**

Before the

**House Committee on Government Reform
National Economic Growth, Natural Resources
and Regulatory Affairs Subcommittee**

July 15, 1999

**Statement
of
Kevin J. Fay
Executive Director
International Climate Change Partnership**

before the

House Committee on Government Reform

**National Economic Growth, Natural Resources
and Regulatory Affairs Subcommittee**

July 15, 1999

Good Afternoon, Mr. Chairman and members of the Subcommittee. My name is Kevin Fay and I serve as Executive Director of the International Climate Change Partnership (ICCP), a coalition of U.S. industry representatives and associations, as well as international associations, interested in the policy development process with respect to global climate change. We appreciate the opportunity to appear before the Subcommittee today on the subject of credit for early action to voluntarily reduce greenhouse gas emissions.

ICCP was organized in 1991 to provide a forum to address the issue of global climate change and to be a constructive participant in the policy debate. We continue to recognize the climate change issue as an important matter with which governments should be concerned. We are one of the largest industry coalitions in the world dedicated to this issue.

ICCP has consistently stressed the need to provide legally binding assurances that voluntary actions to reduce greenhouse gas emissions will be credited in any future mandatory scheme adopted by the government. Such "credits" should be granted to those companies that achieve verified reductions between 1990 and the commencement of any mandatory program.

Voluntary efforts to reduce emissions of greenhouse gases now can slow the rate of growth of emissions and contribute to the longer-term goal of achieving appropriate greenhouse gas concentration levels. Because of the long atmospheric lifetimes of these substances, there are significant environmental benefits associated with reductions made today versus sometime in the future. In addition, by flattening the trajectory of the "business as usual" curve, we reduce future economic disruption and dislocation. In circumstances where there is marginal economic value in an emission reduction investment, granting credit may provide the incentive for such investments.

It has been suggested that supporting credit for early action legislation may unwittingly create support for the Kyoto Protocol, and that instituting a credit for early action program is tantamount to implementation of the Kyoto Protocol. We do not agree.

ICCP believes that the Kyoto Protocol is incomplete, should not be ratified in its current form, and should not be implemented without the advice and consent of the Senate. While the treaty is a good start in establishing a market-based framework for addressing the issue on a global basis, it is a work in progress. It sets ambitious targets to be met in an unrealistic timeframe and does not provide for developing country participation. The treaty negotiators have also failed to identify an appropriate long-term objective.

Concern has also been raised that by granting credit for early action, companies who participate will have an economic interest in ratification of the Kyoto Protocol and will become supporters of the treaty. ICCP believes that credit for early action legislation can be "Kyoto Protocol-neutral". Regardless of the fate of the treaty, investments made in energy efficiency and the reduction of greenhouse gas emissions should be legally protected if and when any mandatory program to control greenhouse gas emissions is implemented.

While the U.S. debates whether certain government actions constitute "back door" implementation of the Kyoto Protocol, other countries such as Japan and European Union nations are actively designing and implementing policies and measures that will reduce greenhouse gas emissions. These initiatives will spur technology and innovation in these nations thus potentially giving them a future competitive edge. U.S. companies that compete in these markets are forced to respond to these conditions regardless of their views on the Kyoto Protocol. The competitiveness of these companies could be affected by the lack of resolution of the credit issue and the lack of support in Congress for climate-related research, development, and technology programs.

Under the Bush Administration, the U.S. signed the United Nations Framework Convention on Climate Change (UNFCCC or Rio treaty), which was ratified by the Senate in 1992. This agreement establishes 1990 as the baseline for measuring greenhouse gas emissions and requires all signatories to take measures to reduce them. Responding to this commitment and to the subsequent U.S. Climate Change Action Plan (CCAP), many companies have already taken steps to reduce their greenhouse gas emissions. Enactment of credit for early action legislation represents "open door" compliance with the Framework Convention and sends a positive public policy message that those who acted in response to this national commitment will not be penalized.

Companies that have already taken action or are contemplating doing so want to ensure that these contributions are not ignored if or when a mandatory phase of emission reductions begins. Failure to recognize these contributions could unfairly force companies to make reductions through increasingly more costly options. This would have the perverse effect of penalizing those companies who act early.

The current legal vacuum provides a disincentive to companies that wish to reduce greenhouse gas emissions or enhance carbon storage. Based on past experience, there is a real fear that early actions will be punished by lower emission baselines as the starting point under an eventual regulatory program.

In addition to removing the existing disincentive to action, a credit for early action program could provide an additional incentive for technical innovation. This is the time to experiment with a broad range of options and to more precisely determine the costs and benefits of various opportunities for reduction. This type of experimentation and innovation not only spurs economic growth, it provides an insurance policy against truly wrenching economic impacts in case much deeper cuts in emissions are necessary in the future.

Finally, while many have touted the success of market-based mechanisms in reducing environmental compliance costs, the fact remains that our experience with such mechanisms is very limited. An active credit for early action program could provide useful experience and educate the government and industry alike as to policies that should be avoided.

It has been argued that small businesses and farmers will be hurt by a credit for early action program. We do not agree. ICCP is currently encouraging a simplified approach to credit for early action that will allow small business to participate with minimal administrative or beauracatic burdens. Discussions have also included the issue of credit for changes in land management practices that could allow farmers to participate. In addition, the program should create a market for the technical innovations that are often made by small, entrepreneurial companies. Last but not least, we should keep in mind that this is an entirely voluntary program. There are no mandates for small business or farmers' participation.

It has been argued that companies that do not act early will be hurt if the government provides credit to those that do. Again, we do not agree. A successful early action program will reduce the overall level of reductions required under any regulatory program. Companies that don't make early reductions will thus have fewer reductions to make and will benefit from the lessons learned by the early actors and the innovations and new technologies that have resulted from these experiments. Moreover, because there will be a pool of reduction credits available, non-early actors will have much lower-cost compliance options available to them.

ICCP believes that credit for early action legislation should not discriminate against "non-actors". The window of opportunity for investment in more energy efficient equipment, processes or products varies among companies. Credit for early action legislation should not force premature capitol stock turnover or penalize companies that choose not to make reductions voluntarily.

The precedent for crediting early action was established in the 1990 Clean Air Act amendments, when companies who moved early on sulfur dioxide emissions reductions received additional consideration in the subsequent sulfur trading program. Relying on this statutory precedent is important for the climate change issue. However, given the scope of industries covered and the enormous task to be undertaken, the

government should go on record now by developing experience in advance of any regulatory requirements.

The United States is on record in support of responsible action to address greenhouse gas emissions. We have ratified the Framework Convention on Climate Change. Congress has funded a variety of activities under the Climate Change Action Plan and other significant government programs. It is not unreasonable to request assurance from the government that these activities, whether past or in the future, not place the voluntary actors in future regulatory jeopardy.

There are a number of legislative proposals that seek to address this short term aspect of a domestic climate change policy. ICCP commends:

- The efforts of Senators Chafee, Lieberman and Mack to eliminate the disincentives and provide credit for voluntary actions to reduce greenhouse gas emissions and the enhancement of carbon storage.
- The efforts of Senators Murkowski and Hagel to compel more systematic attention to the long-term challenge of climate change and to focus on the necessary role of research and technology in meeting that long-term challenge.
- The efforts of Representatives Lazio and Dooley to advance credit for early action on the House side.

While none of these initiatives meets all of our objectives, we are committed to working with the appropriate parties to address specific ICCP concerns such as provision for growth and product coverage. (ICCP's principles on credit for early action and our simplified approach to credit legislation are attached.)

It is time to start forging a bipartisan national strategy for addressing the climate change challenge. That strategy should begin by liberating and systematically rewarding the leadership of U.S. industry in this global cause.

U.S. industry will be a major player in developing technologies to reduce greenhouse gas emissions, making investments in equipment, facilities and products and generating reductions in their operations and products. Enactment of legislation that removes disincentives for early action and that preserves investments already made will help to retain our competitive edge and provide significant economic and environmental benefits for our nation and the world.

Position Paper on Credit for Early Action
International Climate Change Partnership

Overview

Voluntary efforts to reduce emissions of greenhouse gases prior to the commencement of a mandatory commitment period can slow the rate of growth of emissions and contribute to the longer-term goal of achieving appropriate greenhouse gas concentration levels. In circumstances where there is marginal value in an emission reduction investment, granting credit may provide the incentive for such investments.

Companies that have already taken action or are contemplating doing so want to ensure that these contributions are not ignored when a mandatory phase of emission reductions begins. Failure to recognize these contributions could unfairly force companies to make reductions through increasingly more costly options. This would have the perverse effect of penalizing those companies who act early, while potentially benefiting competitors who save their least costly reductions to respond to regulatory mandates.

Industry's aim is to ensure that these early investments that result in emission reductions are recognized and "credited." Such credit could be used to offset future obligations that may arise from any domestic allocation, cap, tax or permit program or sold to parties unable to meet their obligations in a cost-effective manner.

It should be noted that credit for early action programs could have important linkages to potential domestic or international emissions trading systems and international flexibility mechanisms such as Joint Implementation and the Clean Development Mechanism. For example, a company might earn credits through the Clean Development Mechanism prior to 2008 and want to apply them against domestic obligations. Or a "downstream" company may accrue early credits and not be allocated a budget. It would therefore want the right to trade such credits either domestically or internationally.

ICCP Credit for Early Action Principles

Credit for early action programs will require new statutory authority. Failure to enact a credit program at the Federal level may stop companies from making commitments now and encourages a patchwork of inconsistent Federal, state, and local initiatives.

No limit should be placed on the amount of emissions reductions or enhancement of sinks for which early action credit can be earned.

Credit should be granted for actions resulting in verified emissions reductions or enhancement of sinks that occur between 1990 and the beginning of any official budget commitment period, whether or not such actions were part of a government-sponsored voluntary initiative.

A process should be established to determine and "lock-in" appropriate baselines for emission reduction activities including facility operations, product-based initiatives, and enhancement of sinks. Such a process should be flexible enough to reflect special circumstances, including unique considerations related to reductions already achieved.

Credits granted prior to a first budget commitment period should be available without discount as offsets against any greenhouse gas emission allocation, cap, tax, permit, or other requirement to limit or reduce greenhouse gas emissions that subsequently may be imposed.

Credits granted prior to a first budget commitment period should be usable in any national emission budget that may be subsequently imposed. Credits should remain with the earning entity for use at their discretion.

Emissions reductions or enhancement of sinks produced from participation in the Clean Development Mechanism, Joint Implementation, or a domestic emissions trading program should be eligible for early action credit if they occur prior to a first budget commitment period.

Credits generated from credit for early action programs should be eligible for emissions trading.

Credit accounts should be updated on an annual basis.

Credit programs should be integrated to ensure consistency and to avoid "double counting".

The International Climate Change Partnership (ICCP), organized in 1991, is a global coalition of companies and trade associations from diverse industries committed to constructive and responsible participation in the international policy process concerning global climate change. The ICCP recognizes that the continued growth in emissions of greenhouse gases is an important concern for all nations and that efforts are underway internationally and in national governments to develop policies that address this concern. ICCP also understands the importance of working within the process to achieve important environmental objectives while fostering continued economic development and improvement in living conditions for all.

October, 1998

For more information, please contact: ICCP, 2111 Wilson Blvd., Ste. 850; Arlington, VA 22201;
Telephone: 703-841-0626; FAX: 703-243-2874; e-mail: iccp@alcalde-fay.com

Streamlined Credit for Early Action Legislation

Efforts to enact credit for early action legislation would be enhanced by pursuing a simplified approach.

The goal of the legislation should be to accomplish three things:

1. Provide legal guarantees to any entity that acts voluntarily to achieve verifiable reductions related to products, processes, or operations, that it will not be disadvantaged by a future regulatory program to control greenhouse gas emissions.
2. Provide a mechanism for verifying any actions that occurred between 1990 and 1999, under Energy Policy Act Section 1605 (b), as part of the US Climate Change Action Plan, or any other activity in which the entity is able to demonstrate verifiable reductions.
3. Provide a mechanism for prospective actions which, subject to negotiation of an agreement with the government, produce verifiable reductions.

With respect to past and future reductions, a series of principles should be delineated to guide the private sector, other entities, and government officials to use in both verifying past reductions and negotiating agreements for future reductions.

The intent of the program should be to encourage experimentation on the part of government, industry, and the environment community, and not to constrain the ability to develop new and creative methods for implementing and achieving verifiable reductions.

While this program may require flexibility in terms of the precise value of the credited reductions, it should be firm that the credits exist as a matter of legal right.

In order to ensure an open process, it should also provide for public participation in the verification procedure, notice and comment, and public disclosure of future negotiated agreements.

The program should not limit government participation by any particular department or agency. The principles of the bill could be used by any department or entity to craft verification agreements.

For purposes of prior acts, the bill should require all those who seek credits for prior acts to file a request with the government within 6-12 months of enactment. The government would be required to certify the credited reductions within 6-12 months after submission in a direct final rule. The direct final rule would be subject to comment and would take effect unless challenged during the comment period.

Mr. MCINTOSH. Thank you, Mr. Fay. And let me say that Mr. Kucinich had to go to Rules Committee about an amendment he is putting forward and will try to be back, but he wanted everyone to know that is why he's not here right now. My first question is to Mr. Fay, and picking up on your closing statement, are you saying that American businesses will not take leadership in reducing emissions without the type of incentive provided by the early action credit program?

Mr. FAY. I think the American business is taking leadership every day in developing technologies every day, but the fact remains that what's happened with the passage—with the ratification of the Framework Convention and the establishment of 1990 as the baseline for measurement of any future action on climate change—it potentially puts any actor in jeopardy if their economic activity has increased, even if they have tremendously reduced their emissions, if in fact a future regulatory program is adopted that establishes a different baseline. No. 1.

No. 2, that baseline, 1990, is starting to get pretty far away. What most business are finding, it is tremendously difficult to go back and even produce a significant data base to establish what the emissions were at that point. And so it is time to get experience with what are the emissions that are occurring for those entities, and how do they measure that. We don't have a good handle on that.

Mr. MCINTOSH. So to solve both of those problems you don't need a credit, you need a baseline.

Mr. FAY. We think at a minimum as a credit for early action it should be some baseline action or baseline assessment process, yes.

Mr. MCINTOSH. Which seems reasonable—to find out exactly how many emissions we do have. Very different beast than a credit program. You think in the absence of a credit program that businesses would reduce their level of experimentation with new technologies?

Mr. FAY. I think that it's not a question of whether they would reduce their experimentation. I think it's a question of whether they would take overt steps different from their businesses as usual course. We're innovating all the time. That's not a question. Could it affect product implementation? Perhaps it could, yes.

Mr. MCINTOSH. What do you mean by affect product implementation?

Mr. FAY. If it could affect the investments that achieve say short term changes versus research in the longer term, technological evolution, that most would suggest, if you agree with the climate change theory, are going to be necessary in order to reduce the emission concerns.

Mr. MCINTOSH. Which way does the credit program change that?

Mr. FAY. We think the credit program eliminates both disincentives and possibly creates some incentives. I think it works first toward eliminating disincentives for some of the short term actions.

Mr. MCINTOSH. OK. So with the credit program you'll have more short term actions and fewer long term investments in experimentation?

Mr. FAY. I think you'll be more willing to take some shorter term actions that may be marginal.

Mr. MCINTOSH. OK. And then finally, the commitment that your members have made to reducing emissions, will that be lessened in any way if there's not an early action credit program?

Mr. FAY. It's not a question of whether it will be lessened. It's a question of whether the impression is that they feel as though they're being placed in a position of future regulatory jeopardy. If they take steps to reduce—

Mr. MCINTOSH. Before we get to that, when you say it's not a question, does that mean the answer to the question is no?

Mr. FAY. Repeat the question again.

Mr. MCINTOSH. Will your members do less or have less of a commitment to reducing greenhouse gas emissions if we don't pass an early action credit program?

Mr. FAY. I think it does affect short term investment on marginal investment, yes.

Mr. MCINTOSH. So some of your members will in the short term do less to reduce their emissions.

Mr. FAY. I think it's a question of where they apply their capital. It could affect where they apply their capital.

Mr. MCINTOSH. And that could lead to fewer—

Mr. FAY. In the short term, yes.

Mr. MCINTOSH. Which of your members would reduce their efforts?

Mr. FAY. Well, I will not get into speaking for individual company decisions on capital investments decisions.

Mr. MCINTOSH. So you don't know of any that would do that, you think there might be some.

Mr. FAY. No, I will not get into speaking for individual company investments decisions. I would be happy to come back and talk with you on that. I'm not prepared to address that specific topic in terms of those companies today.

Mr. MCINTOSH. OK. And we have unanimous consent to keep the record open. Why don't you give us a complete answer to that within the next 10 days so we can put that into the record.

[The information referred to follows:]



INTERNATIONAL CLIMATE CHANGE PARTNERSHIP

August 16, 1999

The Honorable David McIntosh
United States House of Representatives
Washington, D.C. 20510

Dear Representative McIntosh:

As a follow-up to the July 15 hearing, you asked for information concerning industry's willingness to undertake emission reduction activities if credit for early action legislation is not enacted. In response to U.S. ratification of the United Nations Framework Convention on Climate Change in 1992, industry has participated in a number of government-sponsored voluntary programs and independent company initiatives to reduce greenhouse gas emissions. As an example of these activities, enclosed is a list of the projects originally initiated under the Administration's Climate Change Action Plan.

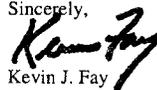
For many of the activities undertaken by industry that reduce greenhouse gas emissions, the benefits other than emissions reductions justify the costs. These include improvements in energy efficiency in general, reductions in raw material usage, or changes to product profile or performance.

In other cases an activity may have no benefit other than emissions reductions, or the non-emission reduction benefits are not sufficient to justify the cost. Examples include elimination of HFC manufacturing emissions, elimination of flaring operations by oil refineries or production facilities, or conversion of electric power plants from coal to natural gas.

These activities require multi-million dollar investments by individual corporations. Absent a specific mandatory requirement or an assurance of early action credit, corporations that are trying to flourish or simply survive in an increasingly competitive global market will be hesitant to make these investments. We believe that credit for early action increases the incentives, or at least reduces the disincentive, towards taking these actions.

It is possible, as we discussed during the hearing, that assurance of baseline protection could positively impact these environmentally sound decisions. We look forward to discussing this matter with you in the very near future.

Sincerely,


Kevin J. Fay
Executive Director

Enclosure



State and Local
National
 Administration's Program
 Climate Change Action Plan
 Solar
 You Can Make a Difference
Global

Climate Change Action Plan (CCAP)
 State and Local Program | Climate Wise | Energy Star Programs | Methane and Utility Outreach Programs
 Waste Reduction and Recycling | Transportation Partners | U.S. Country Studies
 U.S. Initiative on Joint Implementation

*The U.S. Climate Change Action Plan -
 A menu of innovative public-private partnerships to combat
 global warming and strengthen the economy.*

Buildings

- Energy Star Buildings
1-888-782-7937
- Rebuild America
1-800-363-3732
- "Cool Communities" Program
(202) 586-6501
- ENERGY STAR Office Equipment
1-888-782-7937

Forestry Sector

- Reduce Depletion and Accelerate Tree Planting in Non-Industrial Private Forests
(202) 205-1376
- Promote Recycling and Pollution Prevention in Pulp and Paper Industry
(202) 205-1565

- Energy Star Product Labeling
1-888-782-7937
 - Enhanced Appliance Standards
(202) 586-7140
 - Home Energy Rating Systems and Energy Efficient Mortgages
(202) 586-9204
 - Upgrade Residential Building Codes and Standards
(202) 586-0517
 - Energy Star Homes
(202) 233-9786
 - Green Lights
1-888-782-7937
 - Cost Shared Demonstrations for Emerging Technologies
(202) 586-5253
 - Energy Efficiency and Renewable Energy Information & Training, Customer Service
1-800-363-3732
 - Technology Introduction Partnerships
(202) 586-5253
- Industrial Sector**
- Climate Wise (202) 260-4407 or (202) 586-2097
 - Accelerate Source Reduction, Pollution Prevention and Recycling
1-800-EPA-WISE
 - NICE³
1-800-363-3732
 - Waste Wise
1-800-EPA-WISE
 - Motor Challenge
1-800-862-2086
 - Industrial Assessment Centers
(202) 586-1298
 - Reduce Pesticide Use
(202) 720-7173
- Transportation Sector**
- Federal Parking Cash Out
(202) 260-9247
 - Transportation Efficiency Strategy
(202) 260-3729
 - Promote Telecommuting
(202) 366-4823
 - Develop Fuel Economy Labels for Tires
(202) 366-0846
 - Clean Cities
(202) 586-1885
- HFC, PFC, and NOx Emissions**
- Create Partnerships to Eliminate HFC-23 Emissions
(202) 233-9061
 - Voluntary Aluminum Industrial Partnership
(202) 233-9631
 - Improve Efficiency of Fertilizer Nitrogen Use
(202) 720-4539
 - Narrow Use of High GWP Chemicals
- Energy Sector**
- Climate Challenge
(202) 586-2588
 - Commercialize High-Efficiency Gas Technologies
(301) 903-2832
 - Promote Integrated Resource Planning
(202) 586-1491
 - Improve Hydroelectric Generation at Existing Dams
(202) 586-5659
 - Energy Efficient Electric Transformers
(202) 586-8119
 - EPA's Energy Star Transformers
(202) 233-9002
 - Increase Natural Gas Share of Energy Use through Federal Regulatory Reform
(202) 586-6690
 - Promote Seasonal Gas Use for Control of

Nitrogen Oxides (NOx)
(202) 260-2784

- Renewable Energy Commercialization
(202) 586-2588
- Reduce Electric Generation Losses Through Transmission Pricing Reform, Office of Electricity Policy
(202) 586-4871

International, State and Local Programs

- U.S. Initiative on Joint Implementation
(202) 426-0072
- State and Local Outreach Program
(202) 260-4314
- U.S. Country Studies Program
(202) 426-0072

Using the Clean Air Act and Product Stewardship to Reduce Emission
(202) 233-9134

Methane Reduction and Recovery

- Natural Gas Star
(202) 233-9044
- Landfill Rule and Landfill Methane Outreach Program
(202) 233-9631
- Coalbed Methane Outreach Program
(202) 233-9468
- RD&D for Methane Recovery from Coal Mining
1-800-363-3732
- RD&D for Methane Recovery from Landfills
1-800-363-3732
- AgStar Program
(202) 233-9041
- Ruminant Livestock Methane Program
(202) 233-9043

Mr. MCINTOSH. The reason I've asked you these questions is because I want to know what behavior will change versus what desire there is for people to make money. Because it strikes me that when companies make money off of an early action credit, somebody else is going to have to pay for it in the future in terms of taking even greater reductions that they may make at some future date.

Mr. FAY. I don't think we're suggesting that we're trying to make money on early action credits. I think what we are suggesting is we don't want to be in a position of creating again, regulatory jeopardy in the future if their actions, if their actions that were taken today don't count 10 years from now. But the question is would they.

Mr. MCINTOSH. But the question is would they not take those actions today.

Mr. FAY. And I would have to suggest that there are actions that may not be taken today.

Mr. MCINTOSH. That's what I would like you to supply for us—some concrete examples of that. Let me now turn to Mr. Palmer. I've got a question for you. You mentioned the Internet. Have you seen any projections in terms of the percentage of the electricity generated that will be used by the Internet say 5, 10 or 15 years out?

Mr. PALMER. If you take the historical path, the studies that we did with the Internet begins with coal. And these are preliminary conclusions because no one has looked at this, and I might just add as a digression here I think it might be very useful for this committee to ask the GAO to take a look at electricity implications of what Congress has done here and the administration itself. We have to answer these questions if we're going to grow the Internet because you need electricity. But the preliminary conclusions in our study, the "Internet Begins with Coal," is that current U.S. demand is about 8 percent as related to the Internet. And 30 to 40 percent of all increased U.S. demand since the Internet became a big thing, 1995, the growth and electricity demand is related to the Internet. If you take that and extrapolate it there are about 60 or 70 million Americans on line today and there are a total of 150 million people approximately on line worldwide. You could come up with some numbers with respect to what happens when you go to a billion.

Now, the conclusion that we have in our report is that when you go to a billion, worldwide, you need electricity generating capacity equal to what's on the ground in the United States today and what is on the ground in the United States today is a very large number. We burn a billion tons of coal in the United States today in power plants.

Mr. MCINTOSH. Per year you said.

Mr. PALMER. Per year, 1 billion tons. In close to 500 power plants. I'm suggesting, Mr. Chairman, that it is going to swamp all of the policy experts' projections with respect to electricity demand. It makes people like Amery Lovins, who made his living preaching negawatts, and it makes him yesterday's news. The notion that we are going to conserve our way to a brighter future is nonsense. You have to burn fossil fuels to make electricity and the coming demand worldwide because of the Internet is enormous and it's not stoppable.

Mr. MCINTOSH. I'll have to think a little bit to wrap my hands around the billion or—

Mr. PALMER. Billion people on line.

Mr. MCINTOSH. Speaking in the United States you indicated there were about 60 million people connected to the Internet.

Mr. PALMER. 60 to 70 million are the numbers I see most commonly used.

Mr. MCINTOSH. What are the projections for the number of people "on line" in 5 or 10 years?

Mr. PALMER. Our growth is actually projected to be percentagewise not as great, so we might go to 150, you might get a little over a doubling, but it's the rest of the world where the growth is going to be the greatest. But even in the United States the growth will be dramatic.

Mr. MCINTOSH. And so if it doubled the number of users does that mean, is it fair to say that Internet-related electricity demand goes from about 8 percent to about 15 percent?

Mr. PALMER. I think that's right. Well actually it depends on what happens to the rest of the economy. And this isn't in the study, but I do think we see it in our business that the Internet driving, the economy through the new startup companies in the Internet. You see it with young people that you know, maybe members of your family that go to work for the dot coms. I have a daughter who has done that, the startups, the boutique firms. It's happening everywhere all the time. This extraordinary growth in the U.S. economy that we have is nationwide and it tends to be very even no matter where you go. I believe it is related to that. So if you have more economic growth generated by the Internet, then the Internet itself, those numbers may change. But I would say it would be safe to conclude that if you have a doubling of people on the Internet in the United States that the electricity supply required for the Internet would go to 15 to 20 percent based on the study, this preliminary study we've done.

Mr. MCINTOSH. Just so I can again get my hands around that billion people figure, the electricity that you said required to fuel that will be equal to the amount produced by the United States.

Mr. PALMER. Yes.

Mr. MCINTOSH. What percentage will that be assuming a static amount of electricity used for other purposes for worldwide consumption.

Mr. PALMER. The United States today is 25 percent of the total electricity demand worldwide. We are criticized for this by the way. The environmental community thinks we live too well, that we need to cut back the way we live. That we need to change the way we live. We use by far more energy than any other society on Earth. We're 25 percent of that total. So if you double worldwide production, in the next 5 to 10 years because of the billion people that Intel says are going to be on line, 1 billion additional people, you're adding an increment of 25 percent to worldwide electricity demand by definition. And I think that probably is going to understate it, which is going to be a lot of CO₂ in the air.

Mr. MCINTOSH. From the Internet. So therefore between 20 and 30 percent, we would have to work out the math, of worldwide electricity consumption in the future will go to the Internet.

Mr. PALMER. Will go to the Internet.

Mr. MCINTOSH. And Internet-related demand currently is a very small percentage.

Mr. PALMER. Right now it's a very small percentage.

Mr. MCINTOSH. Thank you. I wanted to get in my own mind where we were headed with that and what the magnitude was. I do have a couple more questions but let me turn now to Mr. Terry see if he has any.

Mr. TERRY. The new motto is recycle, reuse and log off?

Mr. PALMER. That's it. We're going to ration Internet access. So put in for your time slot.

Mr. TERRY. Well, I'll remember that when I want to check out the Huskers Web site the next time out. For the Environmental Defense Fund, there's no reason for you to just sit there, let me ask you a question. One of my concerns in this allocation is who are the winners and the losers by way of big business versus small businesses. I missed the first part of your testimony, but I know that you've hinted about it and or discussed it in your written testimony. Let's talk about it a little bit more.

The crediting program would if reallocate the compliance credits from firms that don't act early to those who do—I think that's the way it works—you nonetheless maintain that small businesses would enjoy some form of economic benefits, that the overall burden on the national economy would be less. I'm getting lost on that to tell you the truth. For one, it assumes that small businesses would not be able to compete in this, which is probably an accurate statement. But also it seems to recognize that they would benefit because of what I'll call a "trickle down theory." But I'm getting lost how they'll benefit from that. Perhaps you could explain to me how small businesses that wouldn't be able to compete for these will enjoy this benefit?

Mr. KRUPP. Absolutely. That's a very fair question and a good one. I think what you're really asking is a design question. Can you on the Hill together with those in the private sector design a system that allows small business a level playing field and equal access to participate. I'm confident that you can. In fact the proposal that was introduced yesterday by Congressman Lazio and Congressman Dooley and about 10 other Congressmen does allow small businesses to play and allows small businesses to earn these credits through a variety of means, first of all by making sequestration credits available. It's easy to see how sequestration credits could be monetized and parceled out and purchased by small businesses. Second, it facilitates the playing by small businesses which would be expected to face higher transaction costs by allowing a pooling concept, a bunch of small businesses, associations of dry cleaners could get together, associations of any sort could get together and pool their actions.

So, in terms of the premise that it's important that small businesses be allowed to play, I completely agree. And I think there are ways through intelligent design that a good credit for early action bill can anticipate that and I would include the proposal by the Congressmen introduced yesterday in that category.

I would say that you're quite right that as the expected emissions growth goes down because there are incentives to make that busi-

ness as usual curve go down, the burden on the whole economy, including small businesses, would go down. So that is yet another advantage.

Might I mention that I've become aware of an enterprise in Iowa recently, Sherwood Forestry, a couple of enterprises, actually, Americo 2 and Sherwood Forestry, both of which are small businesses devoted to working directly with farmers to harvest carbon dioxide sequestration credits on a strictly business basis. Now, our information is that one of these businesses is working in cooperation with the Iowa Farm Bureau.

This is the sort of participation not only by small conventional business, but also by small farmers and farming businesses that Senator Lugar, actually a Republican from your home State, as you know, Mr. Chairman, of Indiana—he has actually introduced a bill on the Senate side to facilitate such transactions to allow more small farmers to play. It's really a design question and a very legitimate concern, and one that can be addressed.

Mr. TERRY. I appreciate that. Even though I represent an urban area of Omaha, NE, it's a rural State. Our Farm Bureau was in here asking for \$14 billion in bailout because of the ag economy. I was wondering how they are going to pool those resources. Maybe the government should just go ahead and buy the credits for them. I am still at a loss of how small businesses are going to be able to accumulate the assets to participate and play in this.

Let me go on, though. I want to ask Mr. Fay one question here. One of the ICCP's credit for early action principles is no limit should be placed on the amount of emission reductions or enhancement of things for which early action credit could be earned. But all of the experts—the Center for Clean Air Policy, the Pew Center, Resources for the Future—acknowledge that the early action program would reallocate Kyoto budget period credits from those who do not act early to those who do. This principle seems downright greedy. In fact, someone might even suspect the ICCP advocates of early action crediting because ICCP member companies expect to corner the market. Fair discussion.

Is that a reasonable suspicion or not in your opinion?

Mr. FAY. It's not a reasonable suspicion at all, Mr. Terry. The reason that we have said that there shouldn't be any limits is because if entities are able to produce verified reductions, there is no legitimate reason, in our view, for them not to be credited with those reductions. That doesn't deal with the issue of—what we have set as one of our principles is that you should be credited with the reduction.

We are not saying that the value of the credit should be determined at this time. That will be determined when ultimately the Congress gets around to adopting some future programs. So there shouldn't be a question of whether you have earned the credit, did you actually reduce the ton. But what that is precisely worth, that is not going to be decided until, if and when there is a mandatory program.

But you shouldn't start discounting credits. If an industry has taken steps and reduced a million tons of carbon, they ought to be credited with reducing a million tons of carbon. It's pretty silly to start discounting that now.

If you have got to the point where there was a mandatory program, you might be limited in how many of those credits you could use at one time. That perhaps might be a reasonable proposal. But if the incentive is to encourage taking steps to reduce tons, it is—it would be a silly exercise, particularly at this stage in a voluntary program to start saying, well, you can't have credit for—you can only have credit for half of what you actually did. That, as an exercise, is—in our view, is pretty silly.

It is not a question of trying to corner the market to other people's disadvantage. We would like to see those credit programs be designed ultimately to establish the fact that the reductions occurred and not ultimately to disadvantage any future actors if there is a mandatory program. We are not saying there should be a mandatory program in the future.

Mr. KRUPP. Congressman Terry, if I might add, the idea that big businesses may stand to gain more credits, if you look at the fact, if we are trying to bend down the business's usual curve, big business who are the big emitters are the ones that we are trying to incent. So if one thinks climate change is real or may be real, if one thinks there are risks to the U.S. economy by allowing the curve to continue and face regulatory action in the future that would be harsher if we don't bend down the curve, then, yes, the idea is to come up with a system that will get big emitters to emit less. So I would acknowledge that to you.

I would also note, though, that the United Kingdom, Canada, New Zealand, Norway, Denmark, in their highest levels of governments and their parliaments are moving ahead to establish these programs. When you think of the benefits that would accrue to their economies as they develop new technologies, new ways to power the Internet with less energy, new ways to have more efficient cars, it becomes a real risk that if we don't adopt a similar system, we will be left behind competitively from a competitiveness standpoint. That troubles me.

I see this proposal as a very modest proposal in view of the risks.

Mr. TERRY. Let me give you the forum here.

Mr. RIDENOUR. I would like to throw in my 2 cents here. It has been suggested that this emissions crediting system would allow us to spread out over time and avoid the wrenching consequences of Kyoto. It is an insurance policy, we are told.

But they wouldn't allow us to avoid these wrenching consequences. Early crediting would simply redistribute them as you have wisely suggested, to small business. The plain fact of the matter is that small businesses don't have the kind of lobbying power here in Washington, DC, to be able to get early credits. The Kyoto Protocol, as you have also suggested and groups such as the Pew Center have suggested, requires that any credit that is given by the President of the United States, would have to come out of the total that is allowed for the United States under the Kyoto Protocol. That's assuming, of course, that there aren't changes to the Kyoto Protocol. But right now as it stands, it would come out of our allotment.

That is something that should concern us a great deal. Remember, small business creates two-thirds of all new jobs in this country. We are talking about competitiveness here.

I also want to point out that if we are really concerned about people who are disadvantaged in this country, blacks and Hispanics, we can't possibly support early action crediting. What kind of businesses do you suppose they have? They are small businesses. We should not snuff out their chance at the American dream.

Mr. TERRY. I have got some folks in my office, but this is fun. Can I have one more question?

Mr. MCINTOSH. Sure. You have been with us diligently all day long.

Mr. TERRY. Getting back to Mr. Fay, I guess we are going right to left from our perspective at least. In your testimony, you write that, "the failure of the credit voluntary emissions reductions could, unfairly," force early reducers to make more costly reductions later.

But isn't this a problem of your own making, a problem groups like the ICCP have brought upon themselves by promoting the concept of a mandatory global treaty?

Mr. FAY. I don't think that I am going to characterize us as promoting a mandatory global climate treaty. We were organized to provide what we consider to be responsible input into a policy process. We have attended all of these negotiations.

It is pretty amazing to go to a negotiation for 10 years to watch 170 countries, including our own government, including Republicans and Democrats, and there is no country opposed to dealing with climate change. So if you want to look big business in the eye and say, well, climate change isn't an issue, it would be pretty hard to convince them of that based on the activity that we have seen to date.

We do believe that there is some compelling scientific concern out there that this is an issue that is going to be dealt with. We also believe that technology, hopefully, will deal with this problem or survive the policy processes so that technology can deal with the problem. We think that we are going to have the technology solutions to do that.

But there is no question the policy process is moving on ahead and no one seems inclined to say there is not going to be a climate change policy. What we are saying is, if you are going to do this, it should be done on a market basis. Every economic study that I have seen says that the market-based approach reduces costs 40 to 80 percent. But if you are going to do this, that's a policymaker's decision. And at the same time we should try to do this as cost effectively as possible so that we can manage our way through this and so that we can introduce the technologies to achieve the objectives that, frankly, the policymakers have yet to identify.

Mr. MCINTOSH. Thank you for joining us, Mr. Terry; I appreciate it.

I do have a couple of more questions, just following up on Mr. Terry's and our earlier discussion, Mr. Fay. Am I incorrect in understanding that one of your core concerns is the fairness of the baseline that gets established in the future? Would that concern be solved if either at the time the protocol is ratified or as a separate policy statement in advance of that, the Senate and Congress agreed that when they establish the baseline for compliance they will adjust from 1990 forward, based on what industry changes has happened?

Mr. FAY. That goes a long way toward addressing our concerns, yes. I would also be willing to accept Mr. Kemp's offer of a tax expensing provision in lieu of a credit, if they would like to do that, too.

Mr. MCINTOSH. Well, I will tell you my concern about an early action credit program goes way down when the credit that is received is a tax credit or even a credit against other environmental compliance, because you don't have these perverse incentives in the policy debate on Kyoto. That's really a timing question. Once the decision has been made by the Senate to ratify that treaty then, sure, have the credits for actions that are already established policy. OK.

Mr. FAY. Let me just say, though, that we started talking about credit long before there was a Kyoto. We don't see this as Kyoto driven. The problem is the Framework Convention that we ratified and is the official statement of the United States on climate change: that climate change is a problem, that 1990 is going to be our baseline and we have made a national commitment to reduction measures and, now, all of the discussions about mandatory programs in the future. Well, between 1990 and whenever we get to that mandatory program, things are going to change. Companies like Intel, the semiconductor industry is five times the size they were then.

Mr. MCINTOSH. You read "Kyoto" as a shorthand for mandatory requirements in the future, which I don't think is established policy of the country.

Mr. FAY. No. I am saying that our credit protection discussion is not—our opposition is not based on the fact that Kyoto is out there. It's based on the fact that all of the discussion that we have seen on climate, every indicator that we have seen is that at some point somebody is going to propose a mandatory program. We are not saying that we want a mandatory program. We would love to do it on a voluntary basis if we could.

Mr. MCINTOSH. Let me be clear, my concern about a program for early action credit is giving you credit toward any future mandatory program because it creates perverse incentives for adopting that policy. Credits toward other things, such as tax credits, I am happy to do; I think that makes sense. You create incentives for people to do something that is socially useful. That's assuming the science is correct or assuming, as Mr. Krupp pointed out, that in uncertainty you want to take some policy action.

Thank you. I think that you have cleared up in my mind the different concerns that your group has, although I really would like some of those specifics that we talked about.

Mr. Krupp, let me ask you, have you had a chance to see a story—I think it appeared today in the GreenWire, titled, "Critics say EDF tainted by association with ERT?"

Mr. KRUPP. I have.

Mr. MCINTOSH. You haven't seen that?

Mr. KRUPP. I have seen that.

Mr. MCINTOSH. So you are familiar with it. Some critics say that EDF would profit from the policy of which it is a leading supporter, essentially this early action credit policy. Now, some people believe that EDF was the chief outside consultant in developing some of

the language of that legislation specifically over in the Senate. Is that perception a correct one?

Mr. KRUPP. I think EDF was one of a series of constituent groups that participated in discussions that led to the Senate bill.

Mr. MCINTOSH. Did you work at all or did EDF work at all on the measurement and verification section?

Mr. KRUPP. I am sure we consulted on the entire bill.

Mr. MCINTOSH. I assume that you are familiar with this. That section would permit qualified independent third parties to measure, track, and report emission reductions on behalf of participants. You are more familiar with this legislation than I am, having consulted and given opinions to the Senate in its drafting. What type of organizations are qualified to measure, track, and report emissions reductions and would EDF or Environmental Resources Trust or EEI, I guess, would any of those entities fit the description of qualified independent third party?

Mr. KRUPP. Let me—EDF, I am told, would not fit the description. It's unclear whether ERT would or not. Perhaps it would be useful, Mr. Chairman, since you have raised the question if I—I understand it is a legitimate question to ask when the money is involved, what is going on—if I explained a little bit about ERT and EDF.

Mr. MCINTOSH. I'm sorry, Mr. Krupp, but would you repeat that last—

Mr. KRUPP. Since you have raised this issue, perhaps you would like me to explain, and I would appreciate the opportunity to explain a little bit about EDF's role and ERT's role.

Mr. MCINTOSH. Absolutely. In fact, that was going to be my next question. Please do.

Mr. KRUPP. I think when money is involved people have a right to ask questions. I don't take offense at people asking tough questions of us, just as we ask tough questions of ourselves and others. Especially since there are folks who don't like emissions trading to begin with, I can understand why these questions would be asked.

Let me make three points—

Mr. MCINTOSH. Also, if I can interject, so you know where I come from, I like the concept of emissions trading in general. I commend what EDF has done in some of the other areas, in acid rain and any other policy areas. So it's not an automatic that I'm opposed to those types of ideas. I tried to explain earlier some of the factors that lead me to be concerned about this particular legislation. But you are right, there are probably some people out there who are opposed to—

Mr. KRUPP. I appreciate that, Mr. Chairman, that you were part of the Bush administration that came up with the historic innovation of acid rain emissions trading, and I am very appreciative of that. But the Environmental Defense Fund's advocacy of these market-based solutions, as is illustrated by that particular example, when we advised the White House—and “advised” is the right word in all of these cases—about how to establish a market-based policy for acid rain is part of a long tradition at the Environmental Defense Fund of believing that market-based solutions offer flexible opportunities to get performance, get environmental benefits.

We have worked with legislators on water marketing in California, part of the Miller-Bradley act that was enacted at CDPIA. We have worked with companies from McDonalds to—as various as from McDonalds to British Petroleum on various voluntary programs to get environmental gains, just as we have continued to litigate and engage a whole wide variety of tools.

So at no time has the Environmental Defense Fund's advocacy been affected by the fact that a couple of years ago we did help to create an independent 501(c)3 organization whose mission, I might say, is my second point, is also environmental protection. The whole concept that there is a supposed conflict of interest between two independent 501(c)3s, both nonprofits, both with environmental missions, one that chooses advocacy and one which chooses transactions, strikes me as odd. I just don't see it. But to the extent that the Environmental Resources Trust ever earns fees or revenues that exceed expenses, as I understand their operations, those revenues would be plowed right back into environmental projects. In no case will funds ever flow from the Environmental Resources Trust to the Environmental Defense Fund.

My third and final point is that because the missions of these organizations are both environmental missions, because both organizations believe in market-based transactions, I think the fact that EDF has a continuing relationship and that three of our staff members serve on the board of Environmental Resources Trust is a useful confluence that allows for synergies because if one believes that these market mechanisms are good ways to achieve environmental progress, as we do, then having the ability to work with an organization that is doing demonstration transactions like ERT is good from the perspective, my perspective as head of the Environmental Defense Fund.

So I don't see the case for a conflict; I see a real confluence. But there are no revenues that are going to flow back to the Environmental Defense Fund from this whatsoever.

Mr. MCINTOSH. OK. You have addressed the conclusion which that article moved toward, and I am glad that you were able to put that on the record. Let me, though, ask you a couple of questions about ERT. I think that I understand the difference between EDF and ERT. You are telling me they are separate entities with some overlap on the board, and you EDF helped ERT to get started, but they are run as independent organizations.

You may not be able to answer some of my questions about them, but let me ask you if you know. Does ERT have contracts or memorandums of agreement to monitor and certify emissions reductions with any company at this point, particularly any utility?

Mr. KRUPP. Yes.

Mr. MCINTOSH. They do? Do you know what that arrangement is and what that company is?

Mr. KRUPP. The company is Niagara Mohawk.

Mr. MCINTOSH. What is the nature of that memorandum of understanding and, in particular, how is ERT compensated for providing the monitoring services?

Mr. KRUPP. It's—there is compensation for the reporting of emissions that is provided to ERT by Niagara Mohawk under that memorandum.

Mr. MCINTOSH. And I think this came from a press release from ERT, but they were to receive some of the compensation as a commission on reductions sold or transferred, is that right, and then some emissions credits themselves?

Mr. KRUPP. That was discussed but, no, that is not the way that it works.

Mr. MCINTOSH. OK. Share with me then how it does work.

Mr. KRUPP. I think I just did. There is straight monetary compensation for the provision.

Mr. MCINTOSH. OK. It's a flat fee that they are paid?

Mr. KRUPP. Yes.

Mr. MCINTOSH. OK. And they are capable of entering into the business of monitoring those emissions credits for which they understandably would ask for a fee to do that work?

Mr. KRUPP. Yes.

Mr. MCINTOSH. Let me ask this.

Mr. KRUPP. Mr. Chairman, I guess the services that are provided really are reporting as opposed to monitoring. ERT would have to interact with others who would do the monitoring.

Mr. MCINTOSH. So the company or monitors—they hire someone else to monitor, and the ERT certifies that they are correct?

Mr. KRUPP. Essentially, yes. An independent public registry is provided by ERT.

Mr. MCINTOSH. Based on my experience in the Bush administration that you referred to, an independent registry gives people a great deal of comfort that, in fact, reductions are occurring. I understand the purpose of it.

You can understand, I think, dealing in public policy as you do, the concern that arises that there would be, if not an actual monetary benefit to the Environmental Defense Fund, an appearance that there may be a potential here to benefit from this legislation.

Would you support language being added to the legislation that prohibits companies or charitable organizations, whatever, from receiving compensation other than compensation for the monitoring service from those individuals or those entities that they monitor? In other words, people with conspiracy theories could construct a scenario where ERT is monitoring Mohawk and Mohawk is also approached by EDF for a financial contribution. Would you agree that it would be important, to maintain the integrity of the legislation, that that be prohibited?

Mr. KRUPP. I think there is a simpler solution, Mr. Chairman. Environmental Defense Fund doesn't accept contributions from anyone that emits. We have never accepted a corporate contribution from a utility or manufacturer, period.

Mr. MCINTOSH. So yours are more broad in avoiding that appearance of conflict?

Mr. KRUPP. I think that we have found, in effect, a solution. We are not supported by companies that emit pollution, manufacturing business and the oil business. Out of our \$30 million budget last year, I would be surprised if one-tenth of 1 percent of our income came from corporate foundations, and if so, I think Newman's Own gave us a gift.

Mr. MCINTOSH. Two questions then arise. I think that you are correct in pointing out that that would solve the problem for you.

I assume that you would make pledges to not change that policy if EDF or ERT entered into the monitoring business.

Mr. KRUPP. We are not going to change that policy.

Mr. MCINTOSH. Given that, do you think that it would be good to change the legislation so that other non-profit organizations would have the same legal restraints that you have adopted voluntarily?

Mr. KRUPP. I would be happy to look at any suggestions that you draft and comment on specific language.

Mr. MCINTOSH. Good. I appreciate that.

I appreciate your candor on this, and hopefully we have given you the opportunity to respond to that article.

I have no further questions. Anybody else?

Mr. Ryan.

Mr. RYAN. Where is Jack Kemp?

Mr. MCINTOSH. Catching a football.

Mr. RYAN. I just want to apologize, Mr. Chairman. Like you got dragged into an office with the Ways and Means chairman, I did with the majority leader on some important issues—important to Wisconsin. So sorry about being late.

Mr. MCINTOSH. Dairy farmers?

Mr. RYAN. It has something to do with part of our daily diet; let's put it that way. At this time I really have no questions.

Mr. MCINTOSH. Thank you, Mr. Ryan. As I said, we will keep the record open for 10 days. If the minority has any additional questions, since Dennis wasn't able to get back, you can forward those on to the witnesses.

Thank you for participating. I appreciate it greatly. The hearing is adjourned.

[Whereupon, at 5:44 p.m., the subcommittee was adjourned.]

