

FOIA MARKER

**This is not a textual record. This is used as an
administrative marker by the William J. Clinton
Presidential Library Staff.**

Collection/Record Group: Clinton Presidential Records
Subgroup/Office of Origin: Council on Environmental Quality
Series/Staff Member: Kathleen (Katie) McGinty
Subseries:

OA/ID Number: 2610
FolderID:

Folder Title:
Mitchell Resolution

Stack:	Row:	Section:	Shelf:	Position:
S	61	5	5	2

102nd CONGRESS
1st Session

S. RES. _____

IN THE SENATE OF THE UNITED STATES

February , 1991

Mr. Mitchell (for himself, Mr. Baucus, Mr. Chafee, Mr. Burdick, Mr. Durenberger, Mr. Daschle, Mr. Wirth, Mr. Lieberman, Mr. Biden, Mr. Bryan, Mr. Fowler, Mr. Bradley, Mr. Moynihan, Mr. Adams, Mr. Nunn, Mr. Lautenberg, Mr. Sarbanes, Mr. Akaka, Mr. Bentsen, Mr. Kasten, Mr. Bumpers, Mr. Inouye, Mr. Kennedy, Mr. Cranston, Mr. Reid, Ms. Mikulski, Mr. DeConcini, Mr. Hollings, Mr. Sanford, Mr. Dodd, Mr. Kerry, Mr. Gorton, Mr. Gore, Mr. Leahy, Mr. Jeffords, Mr. Wellstone, Mr. Pell, Mr. Simon, Mr. Harkin, and Mr. Graham, submitted the following resolution; which was read twice and referred to

RESOLUTION

Expressing the sense of the Senate that the United States should take a leadership position in calling for worldwide carbon dioxide emissions reductions at the first meeting of the Intergovernmental Negotiating Committee on a Framework Convention on Climate Change to be held in Washington, D.C on February 4th - 14th, 1991.

Whereas, human activities substantially increase the atmospheric concentrations of the greenhouse gases: carbon dioxide, methane, chlorofluorocarbons and nitrous oxide;

Whereas, an increase in the concentration of greenhouse gases intensifies the natural greenhouse effect, resulting on average in an additional warming at the Earth's surface and an excess of radiative energy available to alter the climate system;

Whereas, carbon dioxide has been responsible for over half the enhanced greenhouse effect in the past, and is likely to remain so in the future;

*all energy legislation both
All P. 1
from record.
Shirley
Mitchell's
resolution*

Whereas, the scientific assessment of the Intergovernmental Panel on Climate Change (IPCC) concluded in August 1990 that under a business-as-usual scenario for emissions of carbon dioxide and other greenhouse gases, a global warming of five to ten degrees Fahrenheit above pre-industrialized levels is likely by the end of the next century, bringing the Earth to its warmest level in at least 150,000 years;

Whereas, many scientific studies show that rapid global warming would create grave risks of precipitous climate shifts, with effects including extreme heat waves and droughts in some agricultural and urban areas, amplified warming at high latitudes, sea level rise and resultant flooding of low-lying coastal areas, a probable increase in the frequency and severity of hurricanes and other extreme weather events, and the potential destruction of forests over broad expanses;

Whereas, environmental stresses of this magnitude have the potential to cause unprecedented agricultural, economic, and social and political disruptions;

Whereas, the Ministerial Declaration of the Second World Climate Conference in November 1990, adopted by more than one hundred governments, including the United States, calls for the negotiation of a framework convention to limit climate change in order to protect society and the environment "without further delay based on the best available knowledge" with the ultimate global objective "to stabilize greenhouse gas concentrations at a level that would prevent dangerous anthropogenic interference with climate.";

Whereas, the Declaration further states that "the potentially serious consequences of climate change give sufficient reasons to begin by adopting response strategies even in the face of significant uncertainties.";

Whereas, the United Nations General Assembly has established an Intergovernmental Negotiating Committee for a Framework Convention on Climate Change responsible for negotiating an international climate protection agreement in time for signature at the United Nations Conference on Environment and Development in June 1992;

Whereas, the first negotiation session will be hosted by the United States from February 4th to 14th, 1991;

Whereas, Germany, Denmark, Austria, Australia, and New Zealand have already proposed to reduce emissions of carbon dioxide and other greenhouse gases; and that seventeen other countries (Belgium, Canada, Finland, France, Great Britain, Greece, Iceland, Ireland, Italy, Japan, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, and Switzerland) have proposed, individually or collectively, to stabilize or reduce their carbon dioxide emissions by the year 2000;

Whereas, the United States emits more carbon dioxide than any other nation and has the second highest per capita emissions of carbon dioxide;

Whereas, a large fraction of the emissions of carbon dioxide from the United States could be controlled at a savings, no cost, or low cost and that such measures would contribute to the competitiveness of American business and the overall economy;

Whereas, development and transfer of technology may assist industrialized and developing nations in their efforts to reduce emissions of greenhouse gases;

Whereas, the National Energy Strategy, which has been in preparation for the last eighteen months, presents an opportunity to develop targets for reductions in United States emissions of carbon dioxide and mechanisms for implementing such targets;

Therefore be it resolved, it is the sense of the Senate that it should be the policy of the United States (1) to specify reductions in the national emissions of carbon dioxide and other greenhouse gases by a date certain, and (2) to assume a leadership position in negotiating an international climate protection treaty that contains specific commitments to reduce emissions of carbon dioxide and the following elements:

- An agreement by industrialized nations to reduce their current emissions of carbon dioxide;
- An agreement by developing nations to limit their growth in carbon dioxide emissions from fossil fuel combustion so that total emissions from the industrialized and developing world are significantly reduced;

- An agreement by all countries to limit the release of carbon dioxide due to deforestation, by sustainable use of existing forests and reforestation;
- An agreement by all countries to take available steps to cut emissions of other greenhouse gases, including methane;
- The establishment of an international fund, to help developing countries achieve these objectives;
- The establishment of a mechanism of continuing international cooperation for development of efficient policies for future emissions reductions necessary to meet the objective of stabilizing greenhouse gas emissions at safe levels.
- The establishment of appropriate institutional mechanisms to facilitate cooperation in: research, observation and analysis; data and information exchange and reporting; development and transfer of technology; and technical training and public education.

Be it further resolved, that the United States should support, at the February negotiating session, the establishment of a process that will allow negotiations of substantive provisions to accomplish each of these elements, for inclusion in the convention that is to be concluded in June 1992.

Senate

TUESDAY, FEBRUARY 5, 1991

(Legislative day of Thursday, January 3, 1991)

The Senate met at 2:15 p.m., on the expiration of the recess, and was called to order by the President pro tempore [Mr. BYRD].

The PRESIDENT pro tempore. The prayer will be led by the Chaplain, the Reverend Dr. Richard C. Halverson. Dr. Halverson, please.

PRAYER

The Chaplain, the Reverend Richard C. Halverson, D.D., offered the following prayer: Let us pray:

The prayer of layman Walter Guntharp, offered at the Chesterbrook Presbyterian Church last Sunday, was a great blessing. I use it with his permission:

"Father: In a tormented world, we go our usual ways, safe from the perils of war, secure from hunger, and protected from the elements in warm and comfortable homes. We are observers of the world's troubles, yet we are largely insulated against them.

"Help us, Father, to understand the magnitude of our blessings, to realize that, however unworthy we might be, You have made us to prosper in the midst of a world of pain, fear, and privation . . .

"We pray that You will open our eyes to our own blessings. Forgive our indifference and grant us a deeper commitment of service to You and to our fellow man. Amen."

RECOGNITION OF THE MAJORITY LEADER

The PRESIDENT pro tempore. Under the standing order, the majority leader is recognized.

SCHEDULE

Mr. MITCHELL. Mr. President, today, following the time reserved for the two leaders there will be a period for morning business with Senators permitted to speak therein for up to 10 minutes each.

It is my hope that this week the Senate can take up three matters: the export administration reauthorization bill, the defense production reauthorization bill, and the nomination of Lynn Martin to be Secretary of Labor if reported favorably by the Labor Committee.

With respect to the latter, I am advised that that committee will be meeting tomorrow and if as expected

the nomination is reported favorably, it is my hope and intention to attempt to accommodate the President and his nominee by dealing promptly with that recommendation.

I hope also we can gain clearance to proceed to the export administration reauthorization bill and the defense production reauthorization bill. Both of those items have been cleared on the Democratic side, and consultation is now occurring on the Republican side. We hope we will obtain approval to proceed to those items promptly.

U.N. MEETING ON CLIMATE CHANGE

Mr. MITCHELL. Mr. President, this week the United States is hosting the first negotiating session of the Intergovernmental Negotiating Committee for a framework convention on climate change of the U.N. General Assembly. The hope is that agreement on a global warming convention can be reached in time for the meeting in Brazil next year.

But for these negotiations to be successful, the United States must take a leadership position. We can and must demonstrate to the world that we are leaders in environmental protection.

In global warming, we stand out in two ways. First, we are among the most wasteful nations on this planet. We contribute 20 percent of the world's global warming commitment. We use 15 times the energy per person that a person in a typical developing country uses and twice that of some industrialized nations, such as Japan, France, and Italy.

Second, we are alone among industrialized nations in opposing even the concept of setting an emissions reduction target and deadline. Austria, Australia, Canada, Denmark, France, Germany, Italy, Japan, The Netherlands, New Zealand, Norway, and Sweden have all proposed reductions in greenhouse gas emissions.

Ignoring this problem simply makes it worse. Delay leaves us with more limited choices in a more urgent situation. What will the next generation think of our inability to adequately address this problem?

Global warming is an immediate threat. The decade of the 1980's includes some of the warmest years on record. This week temperature records are being broken across the country as

we experience April in February. The potential of temperature shifts that previously occurred over thousands of years instead taking place in a matter of decades, confronts us with an unprecedented event.

Neither our Earth nor our human civilization has any experience with such a change. Scientists are doing their best to warn us of potential outcomes. But their warnings are of probabilities, not certainties.

They are well-founded probabilities, and they are becoming more well-founded over time.

Efforts are under way to improve the data base for those predictions. But because short-term climate shifts are an entirely new phenomenon, our reading and interpretation of the data will always include some margin of error.

Climate change will affect the life of every human being.

Some nations have already recognized that action cannot wait.

The international community has undertaken an urgent program of worldwide monitoring: The World Meteorological Organization, the International Council of Scientific Unions, and the U.N. Environmental Programme are working with national governments to collect and analyze global climate data.

The sense of urgency is growing.

But there are some, in this Nation and others, who argue that the scientific view must be final and unanimous before any concrete steps are taken to combat the causes of the problem.

But we do not wait for scientific certainty in other cases where a technical problem confronts us.

We apply experimental medical protocols in the effort to fight cancer, even when we do not know what the ultimate cancer-causing agent is.

We try to prevent the discharge of toxic wastes into the waterways, even though we may not know precisely which toxins pose the greatest threat to which organisms.

The call for scientific certainty is a double standard. It is not a standard we meet in any other legislative field. In this instance, it is a device for delay for those who are unwilling to act.

This is especially ironic, and potentially dangerous, that this argument is being raised in connection with what is the most serious, far-reaching; and

● This "bullet" symbol identifies statements or insertions which are not spoken by a Member of the Senate on the floor.

irreversible environmental danger the world faces.

The best scientific information today tells us that the concentration of greenhouse gases already in the atmosphere has committed the world to an increase in the warming of the atmosphere.

The Intergovernmental Panel on Climate Change (IPCC)—an intergovernmental group of scientists and government officials, including those from the United States, concluded last year that under a business-as-usual scenario for emissions of carbon dioxide and other greenhouse gases, a global warming of 5 to 10 degrees Fahrenheit above preindustrialized levels is likely by the end of the next century. This is more climate change in a shorter period of time than we have experienced in at least 150,000 years.

The Secretary General of the World Meteorological Organization has said:

The global warming to which we are already committed is irreversible . . . By the time we detect it, it will be too late . . .

The majority of the scientific community today believes the concentrations of atmospheric carbon dioxide alone—and it is just the main one of the greenhouse gases—will nearly double from 1985 to 2010.

Greenhouse gases are being released into the atmosphere much faster than they are being removed by the Earth's natural systems.

Even if we could hold emissions of greenhouse gases constant their concentration in the atmosphere would continue to intensify for the next century.

There is no quick response on this issue. Greenhouse gases have long atmospheric lifetimes so it takes many years for emissions reductions to have an impact on the atmosphere. Carbon dioxide, which accounts for over one-half of the global warming effect, has an atmospheric lifetime of 50 to 200 years. Nitrous oxides last 150 years. Chlorofluorocarbons last 60 to 400 years.

It took this Congress 10 years to enact amendments to the Clean Air Act. It will take the Environmental Protection Agency and the States 10 to 20 years to fully implement clean air legislation enacted last year. If we postpone action on global warming, we may find we eliminated the choice which, in retrospect, would have been the prudent, cost-effective course of action.

The action of greenhouse gases is well known and not in dispute. They prevent some of the heat of the Sun's energy from reradiating back into space and warm the air near the Earth's surface. Warmer air at the Earth's surface affects the climate. And on the climate depends our ability to produce the major food crops on which human life depends.

The increase in greenhouse gases in the atmosphere has been measured. It is not in doubt. Their heat-conserving effects are scientifically known, and

not in dispute. The question is not if the Earth will become warmer; it is when and by how much?

Given the facts that we know as well as the large uncertainties about regional effects, it is the responsibility of all nations to develop strategies for reducing the emission of these gases into the atmosphere.

Undoubtedly, the largest share of that control must come from those nations now responsible for the largest share of the emissions—the Western Nations and the Soviet Union, which together produce more than half the excess emissions in question.

But that share of the responsibility does not eliminate the responsibility of other contributors to the problem. And that means we face a worldwide responsibility from which no inhabited nation is exempted.

The threat of global warming thus confronts the entire world with an unprecedented challenge and an unprecedented opportunity.

Never before have all of the nations on the Earth been faced with a danger from which none of their neighbors is protected. Unlike manmade calamities, such as wars, or regional disasters, no part of the Earth will remain unscathed; no human population will be untouched by climate change.

But change presents opportunity as well as danger.

Never before have all the nations of the Earth been faced with the imperative of treating our Earth as the one world it is.

Never before has the survival and health of the richest depended upon the help and cooperation of the poorest. Never before has there been as great an incentive for nations to share in the work and in the rewards of developing technologies and processes to meet a common problem.

When national boundaries cut across natural ecological systems, as they do on four of the five inhabited continents, the health and well-being of the natural environment is a matter of concern to all the nations affected. River systems, tidal patterns, wind flows, rain fall, plant, and animal communities—all respect no manmade boundary.

The challenge we face is to develop effective ways of preserving natural systems and at the same time improve the living conditions of the people who rely on those natural systems.

For that challenge, we will need both imaginative ideas, and aggressive efforts to develop and share the least polluting technologies, so that developing nations need not pass through the smokestack period of industrialization on their path to economic development.

Equally important, we will need the commitment and support of people for the actions that must be taken by our society and others to meet these challenges.

Even as we are forced to focus our attention on the deadly clash of mili-

tary forces, the long term survival of our planet demands that we keep a focus on natural forces as well.

In the long term, those forces will determine how we live as certainly as the outcome of war.

At the first session of the Intergovernmental Negotiating Committee for a Framework Convention on Climate Change beginning this week, the United States can be both host and leader if we announce a policy of specific reductions in greenhouse gases and deadlines for such reductions. As was the case with clean air legislation, the President can then share with us his legislative initiative for meeting these requirements domestically.

Delay reduces our options and increases the final cost of action. The President should have announced a bold initiative to address this global environmental problem. Unfortunately, his administration's so-called action plan, announced yesterday, is in reality an "inaction plan." The administration's statement of policy is positive in that it recognizes global warming demands a solution. However, the administration fails to offer a solution. In this policy area, the administration has chosen to follow, not lead. It is up to the Congress to provide the leadership the United States should have and the world needs.

RESERVATION OF LEADER TIME

Mr. MITCHELL. Mr. President, I ask unanimous consent that the time of the distinguished Republican leader be reserved and that there be added to his time such additional time as I may have used over and above the time I was allotted prior to my remarks made here:

I now yield the floor.
The PRESIDENT pro tempore. Without objection, it is so ordered.

MORNING BUSINESS

The PRESIDENT pro tempore. Under the order there will now be a period for transaction of morning business with Senators permitted to speak therein for not to exceed 10 minutes each.

Several Senators addressed the Chair.

The PRESIDENT pro tempore. Mr. METZENBAUM first sought recognition.

Mr. METZENBAUM. I thank the Chair.

WARN ANNIVERSARY TWO

Mr. METZENBAUM. Mr. President, this week marks the second anniversary of the effective date of the Worker Adjustment and Retraining Notification Act—the so-called WARN Act. Two years have elapsed since we furiously debated the wisdom of requiring employers to provide 60 days advance notice of a plant closing or a mass layoff.

In fact, the agreement as is already has, in my opinion, more than enough loopholes which permit spending beyond our self-imposed caps. If we are to change our enforcement provisions, we ought to tighten them, not throw away those that we currently have.

I ask those who supported this agreement last fall to support it again by defeating this resolution, which would make it unworkable. I hope that those who opposed it because it spent too much will join in keeping in place the spending restraints that the agreement contained.

I believe that everyone here and everyone out there has a stake in voting down this resolution, simply because we all have such a big stake in deficit reduction. I do earnestly hope that this resolution will be defeated.

The PRESIDENT pro tempore. The Senator from Louisiana is recognized.

Mr. JOHNSTON. I thank the Chair. (The remarks of Mr. JOHNSTON and Mr. WALLOP pertaining to the introduction of S. 341 are located in today's RECORD under "Statements on Introduced Bills and Joint Resolutions.")

PRIVILEGE OF THE FLOOR

Mr. WIRTH. I thank the Chair. Mr. President, I ask unanimous consent that Kevin Matthews of Senator LIEBERMAN's staff be granted privilege of the floor during the discussion of the National Energy Policy Act of 1991.

The PRESIDENT pro tempore. Without objection, it is so ordered.

Mr. WIRTH. Mr. President, I want to commend Senator JOHNSTON for the introduction of a complex and important, vital piece of legislation. While I do not agree with everything in the bill—and none of us are going to, I am sure—I think he has done yeoman work in putting this together and putting in front of the Nation the extraordinary important of having a national energy policy. I have a feeling this is where I came in, Mr. President.

My first committee assignment as a freshman Member of the House of Representatives was on the Commerce Committee. We struggled for the next 6 years to begin to focus on and develop an energy policy and by 1980 had a pretty good template out there. Unfortunately, all of that changed, as we all remember, in 1981. We went through a decade in which the administration's policy was dedicated to low prices and low prices alone. That policy by the administration, Mr. President, was successful beyond their wildest dreams. Energy prices went down and President Reagan told us that the energy crisis was over.

Unfortunately, that strategy, Mr. President, neglected the fact that the Straits of Hormuz are as narrow in 1990 as they were in 1980, as they were in 1970. It is breaking into that oil dependency that Senator JOHNSTON's legislation is addressed. The legislation I am introducing is part of the Johnston bill. I believe it is focused

and upon which we have a great deal of work to do.

If there is, Mr. President, a silk purse to come out of this extraordinarily unhappy situation in the Persian Gulf, it will be energy policy, focused on national security, our own economic security, our environmental security, and our own moral responsibility, if nothing else, the morality of having more than 500,000 troops in the Gulf and not acting to do something about it. We must do that.

The four issues of conservation: alternative energy programs, nuclear, and drilling in the North Slope of Alaska or off the California coast or Florida keys are going to be heavily debated, and it is not my intent to get into that at this point. Rather, the need for long-term energy policy, driven, I believe, in the coming decades by environmental considerations, more than anything else, is the thrust behind S. 324, legislation which I have introduced and for which the primary cosponsors are my distinguished colleagues, Senator GORE, from Tennessee, and Senator HEINZ, from Pennsylvania. The three of us worked on this legislation last year, and have cooperated in many endeavors such as this, and I am delighted to have them as the lead cosponsors and to announce to the Senate, Mr. President, that there are 48 cosponsors already of S. 324.

Mr. President, I was struck, during last week's State of the Union Address, by the President's eloquent discussion about the burden of leadership. Unquestionably, we in the United States have taken on that burden in the conduct of world affairs during this century. Unfortunately, Mr. President, in the area of the environment, this administration is in danger of abdicating the American legacy of leadership. We are bucking that burden and isolating ourselves outside the community of nations lined up to take on the greatest environmental challenge we face—global warming. It is to that that S. 324 and the attention of so many Senators is addressed.

Yesterday, the United States began hosting the first round of what will be a long series of negotiations designed to develop a binding international agreement to address the global warming threat. These negotiations build on the work of the Intergovernmental Panel on Climate Change, which worked for 18 months to develop state of the art assessments of the science, impacts and policy options associated with global warming.

In response to the IPCC work, a number of countries have been compelled by the scientific evidence to develop specific emissions reduction targets—Germany, Australia, Canada, France, Great Britain, Italy, Japan, Sweden and the Netherlands to name only a few. But the United States firmly opposes specific emissions reductions targets and timetables, and has yet to articulate any policy posi-

tion on emissions of carbon dioxide and other greenhouse gases.

Yesterday, as was reported in this morning's papers, the United States unveiled an "action agenda" as the negotiating meetings got underway. The administration's "action agenda," as pointed out by the majority leader, covers the actions of the past—reductions in CFCs and energy efficiency benefits associated with passage of the Clean Air Act amendments, something we did last year, the reduction of the CFCs coming out of the Montreal Protocol, some years ago. It is encouraging to know that our work in the past will limit our contribution to the greenhouse problem in the future. But make no mistake about it, putting a new label on old initiatives is no substitute for strong leadership and a comprehensive, clearly articulated statement of policy from our government.

In essence, the United States entered the first negotiating session with no policy, just new packaging. Unfortunately, the sense of urgency surround these negotiations has increased in recent months as more and more nations have clearly announced positions on emissions reductions and as the U.N. General Assembly considered and issued a resolution calling for immediate negotiation of an agreement.

Therefore, Mr. President, the contrast between the lack of development of a comprehensive U.S. policy on the one hand and the movement of the international community and the development of science on the other hand, has been startling. Last month, it was widely reported that 1990 was the warmest year on record. Taken by itself, one warm year would not trouble us. But last year was not an anomaly. Instead, it is only the latest in a string of hot years. Seven of the warmest years ever recorded have occurred during the past decade. Instinctively, we understand that a trend is developing. It is clear that the Earth is warming.

The scientific community is rapidly refining its ability to understand and predict the so-called greenhouse effect has improved. The most recent report from the Intergovernmental Panel on Climate Change [IPCC]—the internationally recognized body tasked with studying this issue—reported unambiguously that:

There is a natural greenhouse effect . . . (and that) emissions resulting from human activities are substantially increasing the atmospheric concentrations of the greenhouse gases will enhance the greenhouse effect, resulting in an additional warming of the Earth's surface . . . the long-lived gases would require immediate reductions in emissions from human activities of over 60 percent to stabilize concentrations at today's levels.

To some, these may sound like mild encouragements from the scientific community. On the contrary, however, these are urgent warnings that the global climate is going to change, with

potentially devastating results, unless we change course.

It is a situation not unlike that in which we find ourselves in terms of energy policy. The warning signs of growing dependence have been around for years, and yet it is only recently that we have been shaken from the complacency invoked by cheap energy prices.

It was only 15 years ago, in response to our heavy dependence, that we enacted a broad national energy policy to secure an independent energy future. During the 1980's, those objectives were systematically compromised by an administration that failed to acknowledge the problem—a steady, but inexorable increase in dependence on foreign oil.

Similarly, we are now conscious that steadily and inexorably we are changing the composition of the Earth's atmosphere. And the Earth will warm as a result of this trend. We hear so much from the administration, particularly the President's Chief of Staff, about the uncertainties associated with this issue. The only question is how much the Earth will warm and how fast. The IPCC scientists I referred to earlier believe that we are currently headed toward a rate of warming greater than has been seen in 10,000 years, when ice a mile thick covered New York City.

And what is the response of our Government to these frightening projections? The administration's response has been characterized by delay, denial, and outright deception. As a candidate, George Bush pledged to use the "White House effect" to combat the greenhouse effect. And the initial rhetoric was promising. In his first major speech as Secretary of State Baker said: "Time will not make the problem go away," and urged specific and commendable steps that might be taken to fight global warming.

In May 1989, however, the administration censored the testimony of one of this Nation's most respected Government scientists—Jim Hansen of NASA-Goddard. Hansen, in testimony before the Senate, wanted to give his honest assessment that global warming is a serious threat to the long-term interests of this Nation and the world. But, the administration gutted his testimony to reflect the perception of a few political appointees that the problem is not serious at all.

At the 1989 economic summit in Paris, the President signed a final communique which said that "decisive action is urgently needed to understand and protect the Earth's ecological balance. . . . We strongly advocate common efforts to limit emissions of carbon dioxide and other greenhouse gases."

Later that year, the administration tried to block its own EPA Administrator, Mr. Reilly, from attending a major conference in Europe. Mr. Reilly was eventually allowed to go, but his

hands were tied at these negotiations. At that conference dozens of nations said that we should freeze emissions of carbon dioxide, but not the United States, which led the effort to scuttle the final conference statement.

In February of last year, President Bush, addressed the Intergovernmental Panel on Climate Change—whose work the administration has repeatedly endorsed—and gave a very cautious and poorly received speech. He called for more science. Hardly the White House effect. Indeed, Marlin Fitzwater, the President's spokesman, said that "the people who think this is a problem that needs to be solved today don't understand it. They're wrong." Asked about the President's pledge to use the White House effect, Fitzwater said: "I don't know if he said those words during the campaign, but if so, he's changed his mind." (New York Times, Feb. 6, 1990.)

Again in March at a much delayed White House conference, the President cautioned the scientists to do more research. His speech was so poorly received, he had to go back to the conference the next day to clarify himself, stating the United States "commitment to action, to sound analysis and sound policies." Disgracefully, it was disclosed the next day that the administration had distributed a briefing to its representatives instructing them on "Debates to Avoid." It is, the warning said, "not beneficial to discuss whether there is or is not warming, or how much or how little warming. In the eyes of the public we will lose this debate. A better approach is to raise the many uncertainties that need to be understood on this issue." "Don't let reporters posit in this conference as an attempt to delay serious decisions on this issue." A reprehensible display of hubris. (Washington Post, Mar. 19, 1990.)

In the intervening time, the Europeans, the Japanese, governments around the world have taken steps to stabilize emissions at 1990 levels by the year 2000 or to actually reduce emissions early in the next century. Most recently, the European Community announced a plan to stabilize emissions.

Last summer, it was revealed that the United States was scuttling the major international effort to develop global warming prevention strategies. The IPCC, which the administration endorsed, has three working groups—one on science, one on effects, one on policy responses, which the United States chairs. Consider the disconnect between the science and policy panels. The science panels says "with certainty" that there is a natural greenhouse effect and that greenhouse gas emissions are increasing and that therefore the Earth will warm. The science panel estimates that the Earth will warm by 3 to 9 degrees in the next century and faster than at any time in more than 10,000 years. The U.S. chaired policy panel reports that

"The information available to make sound policy analyses is inadequate." What more can we ask for: the IPCC science panel says this is a problem, half our Nobel laureates and half of the members of the National Academy of Sciences say this is a problem, but not the administration.

Last November, U.S. intransigence reached its nadir. The United States, and the United States alone, blocked consideration of a common agreement to stabilize emissions at 1990 levels. Even the Japanese have come around to accept stabilization. Indeed, the Japanese, like all of the European governments, have found that there are enormous economic efficiencies to be achieved in reducing greenhouse gas emissions and that there are huge markets for "greenhouse friendly" energy technologies. And A.I.D. report last year found that the developing world will need an additional 300 to 900 billion dollar's worth of energy technology in the next 20 years. The U.S. position is summed up accurately in this quote from Bill Reilly to the U.S. representative—himself a third level representative as compared with Margaret Thatcher and the French Prime Minister: "Roll up your sleeves and give blood. We're just going to be beaten black and blue."

Yesterday, the administration repackaged a number of old initiatives into a so-called action agenda. It is time to change course. It is time to take on the "burden of leadership." So I have introduced, together with 48 of my colleagues, and with Senator GORE and Senator HEINZ as lead cosponsors, legislation that will slow down the U.S. contribution to the mindless buildup of greenhouse gases in the atmosphere. This broad-based, bipartisan legislation, is virtually identical to the global warming bill passed by the Senate last year.

This legislation focuses on the nexus between energy policy and environmental policy and on the need to reduce emissions of carbon dioxide, the primary greenhouse gas. It is increasingly clear that our greatest environmental challenges are also our greatest energy challenges. My bill begins with the premise that the Department of Energy should develop a national least-cost energy plan, which equally balances our supply-side resources with the enormous potential that exists in this country to reduce the demand for energy. And that is what least-cost planning is all about, putting energy efficiency on a level playing field with supply-side alternatives. We task the Department of Energy with coming up with low-cost strategies that will reduce our carbon dioxide emissions 20 percent by the year 2005.

This bill also strengthens the Nation's commitment to energy efficiency by building a variety of new programs to realize the full potential of energy conservation in the industrial

and buildings sector. This legislation builds on last year's proposals to strengthen the Nation's commitment to natural gas, the cleanest burning of the fossil fuels. Our bill also proposes to step up the effort to develop electric vehicles, which have promise for reducing emissions of greenhouse gases and local air pollutants. Moreover, my bill would strengthen U.S. efforts to provide clean energy technologies to the nations of the developing world.

Finally, Mr. President, I want to comment briefly on a resolution that is being circulated by the distinguished majority leader. This resolution urges the administration to develop a specific set of targets and timetables for reducing greenhouse gases by the United States. Nations around the globe are developing these kind of programs and we are outside the mainstream in these efforts. As we enter the first phase of negotiations on an international agreement to protect the global environment, it is essential that the United States take the lead. As always, the majority leader is at the forefront of this effort, and I urge all of my colleagues to support his resolution.

I ask unanimous consent, Mr. President, that the full text of the bill, a summary of the bill and other material be printed in the RECORD.

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

S. 324

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled.

SECTION 1. SHORT TITLE.—This Act, together with the following table of contents, may be cited as the "National Energy Policy Act of 1991".

SEC. 2. TABLE OF CONTENTS.—

- Sec. 1. Short Title.
- Sec. 2. Table of Contents.
- Sec. 3. Findings.
- Sec. 4. Purposes.
- Sec. 5. Goals.
- Sec. 6. Definitions.

TITLE I—ENERGY POLICY INITIATIVES

Subtitle A.—National Energy Strategy

- Sec. 101. Least-cost Energy Strategy.
- Sec. 102. Conforming Amendments.
- Subtitle B.—Director of Climate Protection
- Sec. 111. Appointment.
- Subtitle C.—National Academies of Science and Engineering

- Sec. 121. Review.
- Sec. 122. Report to the Congress.

TITLE II—ENERGY EFFICIENCY INITIATIVES

Subtitle A.—Energy Efficiency

- Sec. 201. Report.
- Sec. 202. Energy-Intensive Industries.
- Sec. 203. Federal Energy Management.
- Sec. 204. Fuel Cells.
- Sec. 205. Repeal of Prohibitions on Supply and Installation of Residential Energy Conservation Measures by Utilities.
- 206. Energy Efficiency Labeling for Windows and Window Systems.
- Sec. 207. Energy Efficiency Information.

- Sec. 208. Compact Fluorescent Lamps in Federal Facilities.
- Sec. 209. Demonstration of New Technology.
- Sec. 210. Residential Energy Efficiency Ratings.

Subtitle B.—Amendments to the Public Utility Regulatory Policies Act of 1978

- Sec. 211. Encouragement of Investments in Conservation and Energy Efficiency Resources and Study of Certain State Rate-making Policies.

Subtitle C.—Fuel Cells

- Sec. 221. Amendment.

TITLE III—ENERGY RESEARCH AND DEVELOPMENT INITIATIVES

Subtitle A.—General

- Sec. 301. Energy Research and Development Priorities.
- Sec. 302. Management Plan.
- Sec. 303. Joint Ventures.

Subtitle B.—Engine and Vehicle Fuel Research

- Sec. 311. Vehicle Engine Fuel Research.
- Sec. 312. High Efficiency Heat Engines.
- Sec. 313. Natural Gas Cofiring Research, Development and Demonstration.

Subtitle C.—Technology Development Program

- Sec. 321. Program.
- Sec. 322. Authorizations.

Subtitle D.—Fusion

- Sec. 331. Programs.

Subtitle E.—Coal

- Sec. 341. Coal Program Goals.
- Sec. 342. Non Fuel Use of Coal.
- Sec. 343. Authorizations.

Subtitle F.—Natural Gas and Other Alternative Fuels

- Sec. 351. Mass Transit Program.
- Sec. 352. Natural Gas and Other Alternative Fuel Use in Fleet Vehicles.
- Sec. 353. Training Program.
- Sec. 354. Vehicle Research, Development and Demonstration Program.
- Sec. 355. Natural Gas Recovery Research, Development and Demonstration Program.
- Sec. 356. Natural Gas and Electric Heating and Cooling Technologies.
- Sec. 357. Vehicle and Battery Research, Development, and Demonstration Program.
- Sec. 358. Definitions.

Subtitle G.—Hydropower

- Sec. 361. Program.
- Sec. 362. Report.

Subtitle H.—Electric Vehicle Technology Development and Demonstration

- Sec. 371. Short Title.
- Sec. 372. Findings.
- Sec. 373. Definitions.
- Sec. 374. Identification of Nonattainment Areas.
- Sec. 375. Applications From Manufacturers.
- Sec. 376. Selection of Manufacturers.
- Sec. 377. Discounts to Purchasers.
- Sec. 378. Reports to Congress.
- Sec. 379. Authorizations.

Subtitle I.—Advanced Nuclear Reactor Study

- Sec. 381. Report.

TITLE IV—MISCELLANEOUS

Subtitle A.—Methane Assessment

- Sec. 401. Objective.
- Sec. 402. Domestic Methane Source Inventory and Control Options.
- Sec. 403. International Studies.

Subtitle B.—Committee on Renewable Energy Commerce and Trade

- Sec. 411. Duties of CORECT.

- Sec. 412. Information and Technical Program.

- Sec. 413. Comprehensive Energy Technology Evaluation.

- Sec. 414. Joint Ventures in Developing, Demonstrating, and Marketing Energy Efficient and Renewable Energy Technologies in Key Lesser-Developed Countries.

- Sec. 415. Authorizations.

Subtitle C.—Fuel Cycle Costs Analysis

- Sec. 421. Program.

- Sec. 422. Report.

Subtitle D.—United Nations Conference

- Sec. 431. 1992 United Nations Conference on Environment and Development.

TITLE V—NATURAL RESOURCE POLICY

- Sec. 501. Ecological and Environmental Resource Study.
- Sec. 502. National Forestation Initiative.

- Sec. 503. Urban Forestry and Energy Savings.

SEC. 3. FINDINGS.—The Congress finds that—

(1) scientific evidence indicates that the atmosphere of the earth is being affected by the generation from natural and man-made sources of carbon dioxide and other greenhouse gases;

(2) trends in the concentration of such greenhouse gases in the atmosphere may result in global changes in climate, with potentially significant economic, social and environmental implications for human-kind;

(3) a scientific understanding of the causes and economic effects of global climate change is necessary to formulate effective policies;

(4) the formulation of domestic and international energy and natural resource policies may be necessary in order to reduce the generation of carbon dioxide and other greenhouse gases and mitigate or adapt to potential adverse consequences of human-induced global climate change;

(5) the formulation of such policies by the Government will include an effort involving the private sector and the laboratories of the Department of Energy; and

(6) the United States should pursue a framework convention on global climate change by the year 1992 through the Intergovernmental Panel on Climate Change (IPCC) of the United Nations Environmental Program and the World Meteorological Organization.

SEC. 4. PURPOSES.—The overall purposes of this Act is to establish a national energy policy that will fully consider the contribution of energy use to potential changes in global climate and will include cost-effective strategies to lessen the generation of energy-related greenhouse gases consistent with the achievement of other domestic energy, economic, social, and environmental goals. The specific purposes of the Act are to—

(1) improve scientific understanding of the natural and man-made sources of greenhouse gases and their relative contributions to global climate change;

(2) evaluate the environmental, social, and economic consequences of global climate change;

(3) evaluate the environmental, social, and economic consequences of domestic and international policies for mitigating or adapting to global climate change;

The Goddard analysis also found that the rate of global warming for the past quarter-century was greater than at any other time since 1880. Scientists believe that natural climate variation may have produced higher global temperatures at other junctures since the last ice age, but they have no reliable way of making comparisons between then and now.

LOADING THE DICE

Dr. Hansen said that if the global climate rises only about another two-tenths of a degree and remains there, the odds of warmer than normal winters and summers will increase substantially, and that this will be readily noticeable. "Seasonal temperature is still a crapshoot," he said, "but the global warming is loading the dice."

He calculates that with the two-tenths of a degree further warming, the chances for a warmer than normal season will increase from 1 in 3 to 2 in 3 and that the chances for a normal or colder than normal season decrease from 2 in 3 to 1 in 3.

"We're already close to there," he said.

While many scientists say it is not possible to conclude that the warming is being caused by increased greenhouse gases emitted as a result of human activity, Dr. Hansen said that the temperature increase "is roughly on the track" of what is predicted by computer models of the climate that try to predict the course of a greenhouse warming.

An international group of scientists convened under United Nations auspices found last year that if greenhouse gases continued to be emitted at the current rate, the earth's temperature would increase by about 2 degrees by the year 2025 and by more than 5 degrees by the end of the next century.

Given that range, scientists cannot say whether the warming would be mild or catastrophic, or which regions of the earth might be most affected.

A group of 16 Senators led by Al Gore, Democrat of Tennessee, yesterday signed a letter to President Bush citing the findings and saying that the data "illustrates clearly that global climate changes is real, that global warming is not a problem that will disappear if we ignore it and that there is an increasingly urgent need for policies that address these issues."

[From the Washington Post, Jan. 10, 1991]

GLOBAL WARMING CONTINUES, BUT CAUSE IS UNCERTAIN—BUILDUP OF POLLUTANTS IN EARTH'S ATMOSPHERE STUDIED; DEFINITIVE EVIDENCE IS LACKING

(By William Booth)

The average temperatures on Earth in 1990 were the highest since record keeping began, continuing a warming trend first detected in the 1980s.

The world's two leading authorities on global surface temperatures reported these findings jointly yesterday, but said it is not clear that the cause of the warming is the buildup of pollutants in the atmosphere.

The analyses were done by the British Meteorological Office and the National Aeronautics and Space Administration's Goddard Institute for Space Studies in New York, using a network of thermometers on land and sea.

Most climate experts say they lack definitive evidence that the observed global warming is caused by pollutants such as carbon dioxide, a gas that has been steadily increasing in the atmosphere because of the burning of forests and fossil fuels, and which acts like a blanket to trap heat close to the Earth's surface.

The observed warming may instead be some completely natural, though poorly un-

derstood, phenomenon. But there is a growing feeling among many researchers that the warming trend may be fueled by human pollutants.

"I have been skeptical about saying it's an enhanced greenhouse effect," said Jim Angell, a climate expert at the National Oceanic and Atmospheric Administration's Air Resources Laboratory in Silver Spring. "But it's getting harder to defend that skepticism."

While uncertain about the cause of the warming, both the British and American researchers yesterday agreed that 1990 beat out 1988, which was previously the hottest year on record. Indeed, six of the seven warmest years in more than a century occurred in the 1980s. In descending order the seven warmest years on record are 1990, 1988, 1983, 1987, 1944, 1989 and 1981.

Angell and his colleagues, however, believe that it may take another decade to know for certain whether pollutants are causing the warming.

Based on computer simulations on how the planet operates, an international group of researchers sponsored by the United Nations predicted that the average global temperatures would increase between 2 and 6 degrees Fahrenheit by the end of the 21st century, if gases such as carbon dioxide continue to accumulate at projected rates.

The United States will host an international meeting in February to discuss possible responses to global warming. In past discussions, the Bush administration has resisted attempts to reduce carbon dioxide emission, arguing that more research is needed to prove that warming will occur.

James Hansen, head of NASA's Goddard Institute, stressed that a single record-breaking year was meaningless. Rather, he said, scientists were most interested in—and concerned about—what they view as a warming trend.

The warm weather was most evident over the United States and southern Canada, Europe, western Siberia and the Far East.

Readings taken with weather balloons launched by Angell and colleagues at NOAA confirmed that 1990 was the warmest year not only at the Earth's surface but in the planet's atmosphere, from about 5,000 to 30,000 feet. Similarly, Angell said, the warming trend of the 1980s was also observed in the atmosphere.

Satellite data collected by Roy Spencer at NASA's Marshall Space Flight Center in Huntsville, Ala., also confirmed that the atmosphere was warm in the 1980s. However, Spencer's satellites showed that 1990 was not the hottest year, but the fourth warmest. Spencer is not sure why his temperature record is different.

Spencer said scientists don't really understand natural fluctuations in climate. Records have been kept only since the late 1800s. Indeed, there was a distinct warm peak in the 1930s and 1940s, which gave way to 20 years of relatively cool temperatures, followed by the warming of the 1970s and 1980s.

"If it was a purely scientific thing, I'd say I'm not convinced. I'm skeptical," Spencer said. "But I'm just glad I'm not a policymaker. There is so little proof, but the possible consequences are so severe."

Last year also had by far the lowest annual snow cover ever recorded for the Northern Hemisphere, according to analyst David Robinson of Rutgers University.

Robinson said he is not sure whether the decreased snow cover was a result of higher temperatures, or the cover actually contributed to the warming. The less snow cover, the more the Earth's surface heats up. The more snow cover, the more sunlight is reflected back into space.

Mr. WIRTH. Mr. President, in closing, I again thank my colleagues who have worked long and hard on this issue. I point especially to the distinguished Senator from Tennessee, Senator GORE, and Senator HEINZ, the distinguished Senator from Pennsylvania, who have worked on this issue.

This is a broad, bipartisan move on this enormously important global issue. Forty-eight Senators have sponsored this legislation. I look forward to its early passage.

Mr. President, I yield the floor.

Mr. HEINZ. Mr. President, I am pleased to join my distinguished colleague from Colorado in introducing legislation which carries today a new imperative. The Persian Gulf crisis has served to dramatize many facets of national life, not the least of which is the way Americans use, perhaps abuse, energy resources. And the environmental effects of our relentlessly increasing use of petroleum products continues to generate alarm and controversy.

The geologic record is quite clear in some respects. We know the planet has periodically cooled then warmed. What continues to alarm scientists is the present rate at which Earth is warming and to what ends our current warming cycle will bring us. There is no dispute about the massively increased loading of greenhouse gasses into our atmosphere. There is disagreement among those same scientists about what the actual effect of this man-made change will be. The scenarios range, literally, all over the imaginable list of possible outcomes. The worst of those scenarios is nothing short of catastrophic. Given the length of time necessary for Earth's systems to respond to meteorological change, it seems only reasonable and prudent, Mr. President, that we assume that the majority opinion of our scientific community is correct and that we should move now to alter the inevitability of that outcome. Our National Energy Policy Act represents a crucial first step to alter our energy use activities and turn the worst-case debate, hopefully, into an academic exercise.

But here is another, I believe equally imperative and compelling, reason to act on this legislation. Increasing concentrations of atmospheric carbon dioxide not only pose the potential for catastrophic global warming rates, but signals a continued reliance on petroleum energy which may well have reached dangerous proportion. Carbon dioxide is believed to account for about half of the warming effect of all the greenhouse gases. In the past 30 years alone, concentrations of CO₂ in the atmosphere have increased by 25 percent and, without changes, the world will experience an 80 percent increase in the next two decades. And that increase will come, almost exclusively, from increased use of oil—oil which we now import at nearly 50 per-

of energy in this country, spending some \$4 billion to power Federal facilities in the United States each year, and it ought to take the initiative. It should be pursuing, right now, a forward-looking energy policy geared toward the early commercialization of clean and efficient alternative sources of energy, using our energy-guzzling Federal facilities as a proving ground. Instead, there has been a declining trickle of Federal support for basic research in renewable and alternative clean energy, and a lack of resolve to follow through with the funds needed to provide the final boost toward commercialization.

Promising technologies now exist which would reduce America's dependence on imported oil, while offering tremendous environmental benefits. Major research advances have occurred in fuel cells, photovoltaic cells, solar thermal systems, and geothermal, wind, and biomass systems. Most of these technologies are pollution-free and compare favorably with traditional energy sources when the very real environmental costs of the latter sources are factored in. For example, fuel cells produce virtually pollution-free energy, without combustion, achieving overall efficiencies which can exceed 80 percent, when cogenerated heat is recaptured. In contrast, traditional power generating sources have efficiencies in the neighborhood of 30 percent. Yet, fuel cell manufacturers and other innovative energy industries are struggling in this country because they lack the Federal support that prudent energy policy would dictate.

Even as they struggle in this country, however, alternative energy industries form the basis of aggressive energy strategies in Japan and West Germany, countries whose economies are world models for efficiency and productivity. It is no accident that both of these countries have ambitious energy conservation programs and are right now making massive investments in alternative energy technology. Japan plans to satisfy up to 15 percent of its electric power requirements from fuel cell technology by the year 2000. To that end, it is actively pursuing alliances with U.S. companies to capitalize on technological developments which our country pioneered. Japan and West Germany are both enthusiastically embracing solar energy, and each has made major investments in American solar concerns.

It is a time to seek our new ways to meet our energy requirements which are more efficient and less harmful to the environment. This legislation takes very important steps forward to address this situation. I will focus, Mr. President, on the provisions which I authored.

First, section 203 of the legislation amends the National Energy Conservation Act to require Federal agencies to adopt cost-effective energy conservation programs at federally owned or

leased facilities. It provides a specific procedure for Federal facility managers to use to enter into shared savings, energy conservation contracts.

In the short-term, simple conservation measures hold great promise for improving our energy and environmental picture, with comparatively little effort. And this is the area which is particularly appropriate for Federal leadership. In the wake of Iraq's invasion of Kuwait, President Bush identified energy conservation, for the first time in my memory, as an important step to address potential oil supply shortfalls. It should not take an act of blatant aggression in the international arena to elicit support from the administration for energy conservation. Common sense ought to suffice. The truth is that energy conservation requirements for Federal facilities have been on the books for several years now, and they have been largely ignored.

Our Government has failed to implement conservation measures in its facilities which would ultimately save the taxpayers billions of dollars in energy savings. The Department of Energy has admitted that just reducing Federal lighting energy needs by 25 percent would save taxpayers up to \$930 million per year. This is not a pipe dream, Mr. President—savings of this magnitude are easily achievable today, with new compact fluorescent bulbs which use about one quarter as much energy as typical incandescent bulbs and which can be installed in existing fixtures. In addition, various conservation programs sponsored by electric utilities boast large payoffs and are literally available for the asking, because they would involve no up-front costs but would instead provide utilities a share of the savings. Unfortunately, the administration has been slow to implement these and other beneficial programs.

Not only must energy conservation and efficiency be the centerpiece of the Nation's energy policy but they are an integral part of the solutions to our Nation's clean air problems—acid rain, smog, air toxics.

The solutions to acid rain and smog are intrinsically tied to the demand, supply, and consumption of energy. As a result, the line between energy and environmental policy has become blurred.

The demand for and generation of electricity from traditional fuel sources is at the heart of not only the acid rain problem, but also global warming. As the largest single consumer of electricity, the Federal Government is part of the problem. This legislation takes steps to reduce the contribution of the Government to acid rain as well as to overall carbon dioxide emissions.

Energy conservation is, quite simply, the most effective, cost-efficient, and natural resource protective technology available to prevent acid rain. Conservation reduces electric demand. Re-

duced electric demand leads directly to reduced electric generation. It saves money, reduces our dependence of fossil fuel and foreign sources, and protects the environment. It is that simple.

In the Clean Air Act we have required private industries to reduce emissions. But instead of playing a leadership role, the Government is remaining part of the problem of acid rain and global warming. This legislation directs the Government to do its part by practicing electric energy conservation.

Section 203 may require some up-front investment to implement. But overall, it is a big money-saver. A 25 percent reduction in Federal energy consumption can save the taxpayers \$1 billion a year.

The shared savings provisions in the bill—discussed below—can significantly reduce initial investments.

The legislation only requires Federal agencies to adopt conservation measures that are cost effective. It requires each Federal agency to install energy conservation and efficiency improvements that have a pay back time of 10 years or less.

Section 203 directs Federal agencies to use the cost-effectiveness formula developed by the National Institute of Standards and Technology. This formula allows the Department of Energy to incorporate environmental externalities in its life-cycle cost methodology. The determination of these values is an important step that is already being implemented by the New York State Public Utility Commission and is under consideration in other states. Further, the incorporation of environmental externalities is a high priority of the Conservation Committee of the National Association of Regulatory Utility Commissioners. The best incentive for true efficiency in the energy sector is an honest accounting of all costs associated with energy generation. Determining the value of environmental externalities provides the market with the information it requires to meet our energy needs in the most efficient manner.

The problem is that too many perceive these technologies as still being in the idea stage with little application in the real world. We are continually told that these technologies are unproven, prohibitively expensive, and, if they're ever going to be available, it's in the far, distant future. But the truth is that we are much further along. A recent DOE initiative focused on energy conservation in Federal and commercial buildings, solar energy and similar energy saving innovations. DOE projects that, with an investment of \$336 million over 5 years, the potential total payback for the country is \$32 billion over 20 years. That represents savings of some \$100 for every one dollar of investment.

The DOE initiative also indicates that it will assist other Federal agen-

cies in developing innovative financing options that would minimize the need for upfront Federal investments. Section 203 establishes a general statutory framework for procurement officials in all agencies to use these innovative share energy savings contracts. For the last 15 years, State and local governments have been retrofitting Government buildings with energy conservation improvements without any capital investment. Our friends at the State and local level have been taking advantage of alternative funding arrangements. However, the Federal Government has only limited involvement in these beneficial public-private partnerships.

Shared savings contracts have two important features that are of particular interest to the Federal Government:

First, an energy services company installs and pays for the energy conservation measures. It does not require an expenditure by the Federal Government; and

Second, it immediately reduces the amount the Federal Government has to pay for electricity.

That is as close to a win/win situation as I've ever seen.

With these contracts, private capital will finance conservation improvements in public buildings, under section 203, with no requirement for a Federal budget commitment. Aggressive energy conservation is good energy policy, and it's good environmental policy. The least we can do is ensure that the Federal Government is a model energy consumer. Section 203 of this bill goes a long way toward making the Federal Government a leader in energy conservation.

Section 221 of the bill also takes some significant steps forward to meet our energy requirements in ways which are both more efficient and less harmful to the environment by providing for the use of fuel cells to meet electrical requirements in Federal buildings.

Fuel cells are essentially large-scale batteries which use hydrocarbon fuels, without combustion, to produce electricity, but they are remarkable batteries indeed. They are superlative energy producers, reaching efficiencies of over 80 percent if heat energy is recovered, compared to about 30 percent for traditional powerplants. They are virtually pollution free and, because of their great efficiency, emit far less carbon dioxide per unit of energy produced than do traditional power-generating devices. They are quiet and modular, making them ideal for use onsite and in situations where variable power demands allow fuel cells to be combined or separated as needed. In short, the widespread use of fuel cell technology promises to reduce the Nation's energy consumption, clean up our air, reduce the threat of global warming, and improve the versatility of our energy base.

Mr. President, these are only some of the numerous benefits offered by fuel cell technology. This section provides that the Secretary of Energy, in consultation with various agencies, to conduct a program to promote the early commercial application of fuel cell systems for the production of electricity by the demonstration of such systems in Federal buildings. Section 221 requires the installation of fuel cell systems to meet energy requirements in at least 10 Federal facilities. This should do much to highlight the attributes of this technology.

The section first requires selected agencies, within 6 months of enactment of the legislation, to provide a list of candidate facilities to the Secretary of Energy. Within 6 months of receiving the list of potential projects, the Secretary, in consultation with other interested officials, is required to select project sites for installation of fuel cell systems. The Secretary is authorized to provide financial assistance to agencies sponsoring projects to acquire and install fuel cells manufactured in the United States and any associated equipment. The bill authorizes \$15 million for fiscal years 1992 to 1994. It also requires the Secretary to prepare a comprehensive report detailing the results of the program, so that we are provided information which might point the way to wide-scale commercial application.

Mr. President, I like to think of a day when our Nation comes to grips with our collective energy wastefulness and environmental despoliation. Programs to decrease the consumption of energy are vital, but they are not enough. We need also to increase the efficiency of the energy we do use and to positively influence the environmental consequences of that energy use. Fuel cells are one of the promising technologies that can achieve these goals, if only we reach out for them. With the introduction of this legislation, I hope we can begin to work toward these goals.

Mr. AKAKA addressed the Chair.

The PRESIDING OFFICER (Mr. KERREY). The Senator from Hawaii is recognized.

THE FISCAL YEAR 1992 BUDGET

Mr. AKAKA. Mr. President, the President is preoccupied with the war in the Persian Gulf, as he should be. We expect that the war would receive his full energy and attention at a time when half-a-million American service men and women are stationed overseas.

However, an unfortunate casualty of the war appears to be the Federal budget. The fiscal year 1992 budget is a document without much ambition—or exciting new ideas. It reflects some minor reshufflings, but no bold new initiatives.

If it were not for the unprecedented size of the proposed deficit—\$318 bil-

lion—it might be called the low-profile budget.

The block grant proposal serves as a good example. It is not big news. Block grants have been around since the early 1970's.

What we are witnessing is an effort to take existing programs and repackage them with different wrapping paper. Despite assurances to the contrary, there is no guarantee that the Federal contribution to fund these programs will continue at the rate initially proposed. It may sound like a good idea now, but States could wake up some day and find that they will have to do the same work with less money in their programs.

True, there are some modest gains in the areas of law enforcement and space programs. But these gains are overshadowed by losses in the area of housing, a number of vital education programs, and programs for the elderly. And in the field of energy, the budget falls far short of what the American public needs, and expects, from Washington.

Over the past decade, renewable energy research was cut by 80 percent. With a floundering energy policy that is adrift, it is no wonder that we are fighting to safeguard Mideast oil supplies.

It is not my intent to question the President's Persian Gulf strategy. I am, however, criticizing the absence of a coherent domestic energy policy. America is preoccupied with the war. But the recession is producing casualties at home. As our troops fight in the Persian Gulf, we must think about getting America in shape for their return.

Mr. President, I yield the floor.

I suggest the absence of a quorum.

The PRESIDING OFFICER. The clerk will call the roll.

The legislative clerk proceeded to call the roll.

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

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

GLOBAL WARMING

Mr. SIMPSON. Mr. President, I have been listening to some of the debate with regard to global warming. I am very concerned about the environment. I serve on the Environment and Public Works Committee. I have served there for 12 years. It is an interesting place. It gets pretty emotional sometimes. It gets a little partisan sometimes. That is the way we do our work.

As we address the issue of global warming, I think it is very important that we try to maintain a good bit of common sense. It should not develop simply into a "bash the President" exercise, which I have very distinct feelings it is becoming.

I have heard various participants in the debate today speak with some passion about environmental shell games. They assert that the administration says it will do certain things, but, to paraphrase them, that is not true. I guess something that is not true is just like a lie.

We hear a lot of inflammatory rhetoric:

"Some nations are phasing out CFC's faster than the United States." I will challenge that one in a minute. Here's another:

"We are allowing CO₂ emissions to soar." This is the administration that successfully put together a Clean Air Act. I was deeply involved in that legislation as was our majority leader, and Senator BAUCUS, and Senator CHAFFEE, and a lot of other Senators on both sides of the aisle who did fine work.

"The administration is crafting artful obfuscation, not offering a single constructive idea." And on and on and on.

That kind of statement makes good copy, but it is not true.

So, as I have said, I am on the committee. I notice those speaking with the most volatility are not on the Environment and Public Works Committee. I wish they would have joined us in our cause as we tried to do the heavy work in so many controversial areas. We do some heavy work in that committee. Chairman QUENTIN BURDICK, Senator JOHNSTON, Senator CHAFFEE, the ranking member, you can go through the list of those who participate on the Environment and Public Works Committee and it is a fine cross-section of people in this body.

The reason the global warming issue does not get the attention that those who continue to be obsessed with it would like, is because it is a very difficult issue to deal with, and it gets more difficult the more frustrated one becomes.

It is much like agent orange. One blind alley leads to another. Finally, after frustration you go try to put presumptions together. I see the same frustration with global warming. You just cannot continue to do press conferences. You finally have to do some reasonable legislating. However, the biggest problem with this issue is that there is not enough honest information to rely on.

Scientists do not have a good handle on the role of industrial emissions and what is causing warming. Many scientists disagree about the cause and effect relationships. Models developed so far are incomplete. That is the way it is.

There was some discussion recently that a global warming resolution might be introduced. I do not think one has been presented yet. I believe the Chair could advise me. Has there been a resolution presented before the body?

The PRESIDING OFFICER: No such resolution has been presented.

Mr. SIMPSON. I thought not. Yet that proposed resolution has been circulating for over a week or 10 days. The reason it is still circulating is that there is enough contention and controversy on the other side of the aisle as there is on this side of the aisle on the issue of global warming.

So that is not yet before us in the nature of a resolution. Therefore the frustration level is ratcheted up two notches, or three. But what that controversial resolution says is that there should be reductions in the natural emission of carbon dioxides and other greenhouse gases by a date certain.

I would observe that it is inappropriate for any Senate resolution to set out what U.S. administration policy is in any case. The discussion of the proposed resolution suggests some statements that do not represent a scientific consensus. It is replete with leaps of faith regarding scientific findings about global warming.

We are also ignoring some very positive steps—I think this is very unfortunate—as we discuss this issue. Some very positive steps have been taken by the administration and Congress that will help to address the global warming issue. One of the most important things that this whole activity ignores is the passage of the Clean Air Act last year. That was a noble effort by a lot of thoughtful Democrats and Republicans.

The EPA has estimated the passage of the Clean Air Act can result in the stabilization of greenhouse gases by the year 2000, and that a reduction is possible by 2010.

The proposed resolution seems to call for a unilateral action by the United States without requiring any similar action by other countries. How unfortunate.

Tropical deforestation may actually affect global climate more than industrial activities, and yet this aspect of the issue is not even mentioned in the resolution.

It just does not make sense for the United States to take actions to reduce carbon dioxide when there is no scientific consensus about the cause and effect relationship between industrial and automotive carbon dioxide emissions and global warming.

There are a number of interest groups—and Lord knows, they were present during the Clean Air Act deliberations, huddled in great little enclaves all over the Capitol Building at 2 or 3 in the morning, while we met in the majority leader's office. With his patience, we worked through everyone's complaint about the Clean Air Act, and I mean everyone's complaint.

We would come out of that room at 2 in the morning, and find nine of the heavy-hitter, "big timer" groups out there wailing away on how they were going to exact retribution upon Senator MITCHELL or Senator CHAFFEE or Senator BAUCUS or Senator SIMPSON;

whoever. Theirs was not to really participate with any great, unselfish interest. Theirs was simply to figure out who they could do in during the next election because they had not followed the particular interest group's agenda.

In fact, we knew there were going to be five votes on this floor where six or seven of us in the core group knew that by those votes we would be listed as the "Dirty Dozen" in America. Well, they did award me that trophy. I'm a member of the so-called Dirty Dozen.

I asked the folks who compiled that list: "Could you tell me how that comes about?"

"Well, your five votes here put you on the scorecard."

And I said, "You know, when you go hit the sack tonight, just remember that for 12 years, we have not had a Clean Air Act. Every year that has passed, progress could have been made toward a 10-million-ton reduction. So why do you not think about that, because I hold you directly responsible for that activity. No one else. It was never good enough for you."

Well, enough of that.

But I can tell you that we did some vitally important things that will be seen when the Clean Air Act cranks in.

I would add, too, that there are a number of these interest groups, and we all know them now, who pride themselves on their zealotry. I believe that is their central and significant activity, zealotry. They have another great attribute. If you do not agree with them, they label you as an idiot or a lightweight or a fool, or one who would befoul the universe.

So I have already been through a lot with them. But they use some of the most extraordinary worst-case scenarios to whip up fear, alarm, anguish, horror, terror—you name it—among the general public about global climate change.

I would also add that the media has been less than responsible about its coverage of this issue. We often read regular doomsday reports—they are almost edged in black—about climate change. They make good copy, but they are not based on scientific fact. And this is a very disturbing trend.

I have said it before, and I will say here one more time, the first duty of a responsible press in a free nation is to educate the public, not to see how they can frighten them, terrorize them, or mislead them.

Then finally, there does a time or two creep in a bit of a partisan angle to all of this. Some would like to indicate that the White House has not responded properly to the concerns of its citizens about the possibility of global climate change.

It was the President of the United States that presented Congress with a clean air bill, and much of it was incorporated into the Clean Air Act that was passed last year. This will result in a phaseout of CFC's. It will reduce

CO₂ and SO₂ and other greenhouse gases in a major way.

It is the President who proposed a program to plant a billion trees a year, and that has the potential to reduce net emissions of greenhouse gases by 50 million tons of carbon equivalent by the year 2010.

So let us not fall into this anguish of frustration, the "Chicken Little syndrome." The sky is not falling. And if CO₂ is causing dramatic global warming, we will have a chance to respond by having a worldwide reduction in greenhouse gases, so that the burden is shared. We are already ahead, far ahead of the rest of the world in that regard. And we should demand that others pass their own clean air acts in their own legislatures, in their own nations, and get one as strong as ours before we take any more action.

I am not personally going to ascribe to that, but that is something we could in good faith express if we felt so inclined.

As I wind up my remarks I would say that there are many reputable scientists, such as Lou Ellsler from Lawrence Livermore Laboratory, who says that it is much too soon to conclude that global warming is here. The temperature increase seen so far is still no greater than the natural year-to-year and decade-to-decade temperature variability.

Global warming is already here, because the Earth has been warming since the Ice Age 10,000 years ago. And this warming occurred in the absence of industrial activity. The problem is trying to separate natural warming from warming caused by human activity. And I think that it is critically important to do that.

Anthropogenic climate change on a global scale has simply not been conclusively demonstrated. I am ready to join in a constructive debate. I promise and pledge to do it.

The possibility, indeed, of increased warming caused by human activities is being taken very seriously by the Bush administration, and certainly is being taken very seriously by the Committee on Environment and Public Works.

I think it was Bertrand Russell who once said that "the most savage controversies are those about matters as to which there is no good evidence either way."

And that is going to be true with the greenhouse debate, just as it was true with regard to acid rain controls. Computer models have not been able to predict with any certainty what will happen to the global climate if greenhouse gases continue to increase. And the geological and ice sheet records do not shed much light on this issue, either.

Scientists will all agree that the planet has warmed slightly over the last century, but they do not know if that is a natural fluctuation, or if it has been increased by industrial activity.

The most recent data show that between 1979 and 1989, average global temperatures did not increase. And, yet, during that same time, man-made pollution did increase. Scientists do tend to agree that if we keep increasing pollution at current rates, obviously some increased warming may occur. But working groups of international scientists now say that existing uncertainties make it very difficult to determine which responses to potential climate change make sense.

Yet now we hear persons in this Chamber advocating a commitment to unilateral action on the part of the United States with regard to setting CO₂ reduction targets by a date certain. I just do not think that makes any good sense. What we need is enhanced levels of research that will complement what we have already done with regard to the passage of the Clean Air Act. We are already going to phase out CFC's, significantly reducing other greenhouse gases. I have provided those figures. Let us take a close look at tropical deforestation. I am ready to work in that. Deforestation in the Southern Hemisphere could be more significant in terms of global warming than all the industrial activity in the rest of the world. Let us take some steps to help these countries to curb this activity. But let us not indicate that the President of the United States is not concerned or does not care or has not done anything, because that is simply untrue.

THE THIRD PHASE OF THE NATIONAL DRUG CONTROL STRATEGY

Mr. SIMPSON, Mr. President, late last week, the President announced his plan for the third phase of our country's war on drugs. I support the fine efforts of President Bush and Senator STROM THURMOND regarding what needs to be done with regard to the third phase of our national drug strategy and I rise today to voice my strong support and respect for the President's leadership and continuing commitment to eliminate this menace from our society.

This has been our Nation's first comprehensive drug policy—aimed at both the supply side with tougher law enforcement and on the demand side with better treatment and more sources for treatment. The strategy is sound and the strategy works! Communities all across the country are a part of this war on drugs and, as the President told us last week, the signs of progress are unmistakable.

The first phase of the drug strategy was released only 1½ years ago—in that strategy, the President set a number of 2-year goals. We now know that those goals have been met—and in some cases surpassed.

Our young people are turning away from drugs because they are being educated about the danger of drug use. Drug use among high-school age

young people is at its lowest point in many years. Current overall drug use is down by 11 percent; current adolescent drug use is down by 13 percent; and current adolescent cocaine use is down by 49 percent.

Drug-related emergencies in our hospitals are down by 18 percent and hospitals are reporting fewer cocaine related deaths.

Frequent cocaine use is down by 23 percent. That is especially significant because the original goal—considered optimistic by some when the strategy was first released—the original goal was to simply reduce the rate of increase by 50 percent. We see now an actual decrease in use by 28 percent.

We are seeing an important and encouraging shift in drug use, but our war on drugs is not over.

The third phase of the President's drug control strategy commits even more resources to the drug war. The President has asked Congress to provide even more law enforcement personnel and resources, more prison space, and more assistance treatment and education.

We should all support the President's plan. I would urge my colleagues—Members who are every bit as dedicated to fighting this war as the President—I would urge them to resist the temptation to play politics with the drug menace or to try and upstage the President's initiatives by simply throwing more money at the problem.

I have often said that the strongest substance addiction in politics is the substance of money—all too often Congress addresses a problem by simply throwing more money at it. That is the drug that poisons this body—the body of Congress.

But money alone, as we know too well, is not a solution. Money is only a tool we give the administration to use to reach a desired objective. President Bush has used the tools we have provided him effectively, responsibly, thoughtfully, and with astounding results.

These are very troubling times for our country. We are at war at home and overseas. Our military battles overseas while we in Congress face yet another battle over the budget. The President has sent a budget to Congress asking for \$11.7 billion dollars to continue the war on drugs at home. This is an 11-percent increase from last year and an 82-percent increase since President Bush took office.

Eighty two percent, Mr. President. This is proof that the leadership of our country is strongly committed to winning the war on drugs. I strongly urge my colleagues to resist the urge to play politics with the war on drugs and to join the fight with our President so we can win this war during our children's lifetimes.

The PRESIDING OFFICER. The Senator from Ohio is recognized.
Mr. METZENBAUM. I thank the Chair.

01. 24. 91 05:08PM

P 02

PHOTOCOPY
PRESERVATION

102nd CONGRESS

1st Session

S. RES. _____

Expressing the sense of the Senate that the United States should take the leadership position in calling for worldwide carbon dioxide emissions reductions at the first meeting of the Intergovernmental Negotiating Committee on a Framework Convention on Climate Change to be held in Washington, D.C on February 4th - 14th, 1991.

IN THE SENATE OF THE UNITED STATES

January __, 1991

Mr. Mitchell (for himself, and Mr. _____.) submitted the following resolution, which was _____.

RESOLUTION

To establish that it is the policy of the United States to reduce the national emissions of carbon dioxide by a minimum of twenty percent from the 1990 carbon dioxide baseline level by the year 2000, and to provide a leadership role in calling for similar reductions of carbon dioxide emissions in industrialized nations at the first meeting of the Intergovernmental Negotiating Committee on a Framework Convention on Climate Change to be held in Washington, D.C. on February 4th - 14th, 1991;

Whereas, human activities substantially increase the atmospheric concentrations of the greenhouse gases: carbon dioxide, methane, chlorofluorocarbons and nitrous oxide;

20/25
Chafie
J. Swanson

01. 24. 91 05:08PM

-2-

PHOTOCOPY
PRESERVATION

Whereas, an increase in the concentration of greenhouse gases enhances the natural greenhouse effect, resulting on average in an additional warming of the Earth's surface and an excess of radioactive energy available to alter the climate system;

Whereas, carbon dioxide has been responsible for over half the enhanced greenhouse effect in the past, and is likely to remain so in the future;

Whereas, the scientific assessment of the Intergovernmental Panel on Climate Change (IPCC) concluded in August 1990 that under a business-as-usual scenario for emissions of carbon dioxide and other greenhouse gases, a global warming of five to ten degrees Fahrenheit above pre-industrialized levels is likely by the end of the next century, bringing the Earth to its warmest level in at least 150,000 years;

Whereas, many scientific studies show that rapid global warming would create grave risks of precipitous climate shifts, with effects including extreme heat waves and droughts in agricultural and urban areas, amplified warming at the Poles, sea level rise and resultant flooding of coastal areas, an increase in the frequency and severity of hurricanes and other extreme weather events, and the potential destruction of forests over broad expanses;

Whereas, environmental stresses of this magnitude have the potential to cause unprecedented agricultural, economic, and social disruptions;

Whereas, the Ministerial Declaration of the Second World Climate Conference in November 1990, adopted by more than one hundred governments including the United States, calls for the negotiation of a treaty to limit climate change in order to protect society and the environment "without further delay based on the best available knowledge" with the ultimate global objective "to stabilize greenhouse gas concentrations at a level that would prevent dangerous anthropogenic interference with climate.";

Whereas, the Declaration further states that "the potentially serious consequences of climate change give sufficient reasons to begin by adopting response strategies even in the face of significant uncertainties.";

-3-

PHOTOCOPY
PRESERVATION

Whereas, the United Nations General Assembly has established an Intergovernmental Negotiating Committee for a Framework Convention on Climate Change responsible for negotiating an international climate protection agreement in time for signature at the United Nations Conference on Environment and Development in June 1992;

Whereas, the first negotiation session will be hosted by the United States from February 4th to 14th, 1991;

Whereas, Germany, Denmark, Austria, Australia, and New Zealand have already committed to reduce emissions of carbon dioxide, the most important greenhouse gas, by twenty to thirty percent by 2005, and that seventeen other countries (Belgium, Canada, Finland, France, Great Britain, Greece, Iceland, Ireland, Italy, Japan, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, and Switzerland) have committed, individually or collectively, to stabilize or reduce their carbon dioxide emissions by the year 2000;

re - Canada
Whereas, the United States emits more carbon dioxide than any other nation and has the highest per capita emissions of carbon dioxide of the major industrialized nations;

Whereas, a large fraction of the emissions of carbon dioxide from the United States could be controlled at a savings, no cost, or low cost and that such measures would contribute to the competitiveness of American business and the overall economy;

Whereas, the National Energy Strategy, which has been in preparation for the last eighteen months, presents an opportunity to develop targets for reductions in United States emissions of carbon dioxide and mechanisms for implementing such targets;

Therefore be it resolved, it is the policy of the United States
(1) to reduce the national emissions of carbon dioxide by *at least* twenty percent from the 1990 baseline level by the year 2000, and (2) to assume a leadership position in negotiating an international climate protection treaty that contains specific commitments to reduce emissions of carbon dioxide and the following elements:

- An agreement by industrialized nations to reduce their current emissions of carbon dioxide by twenty percent by 2000;
- at least*

01. 24. 91 05:08PM

FOS

-4-

- An agreement by developing nations to limit their growth in carbon dioxide emissions from fossil fuel combustion so that total emissions from the industrialized and developing world are significantly reduced by 2000;
- An agreement by all countries to stop the release of carbon dioxide due to deforestation by 2000, by preservation of virgin forests, reforestation, and preservation of biodiversity;
- An agreement by all countries to take available steps to cut emissions of other greenhouse gases;
- The establishment of an international fund, financed in proportion to carbon dioxide emissions from industrialized countries, to help developing countries achieve these objectives, where the necessary measures impose incremental costs;
- ? (- The establishment of a mechanism of continuing international cooperation for development of efficient policies for future emissions reductions necessary to meet the objective of stabilizing greenhouse gas emissions at safe levels.

Be it further resolved, that the United States should support, at the February negotiating session, the establishment of a working group or working groups empowered to negotiate substantive provisions to accomplish each of these elements, for inclusion in the convention that is to be concluded in June 1992.

PHOTOCOPY
PRESERVATION

102nd CONGRESS
1st Session

S. RES. _____

IN THE SENATE OF THE UNITED STATES

February , 1991

Mr. Mitchell (for himself, Mr. Baucus, Mr. Chafee, Mr. Burdick, Mr. Durenberger, Mr. Daschle, Mr. Wirth, Mr. Lieberman, Mr. Biden, Mr. Bryan, Mr. Fowler, Mr. Bradley, Mr. Moynihan, Mr. Adams, Mr. Nunn, Mr. Lautenberg, Mr. Sarbanes, Mr. Akaka, Mr. Bentsen, Mr. Kasten, Mr. Bumpers, Mr. Inouye, Mr. Kennedy, Mr. Cranston, Mr. Reid, Ms. Mikulski, Mr. DeConcini, Mr. Hollings, Mr. Sanford, Mr. Dodd, Mr. Kerry, Mr. Gorton, Mr. Gore, Mr. Leahy, Mr. Jeffords, Mr. Wellstone, Mr. Pell, Mr. Simon, Mr. Harkin, ~~and Mr. Graham~~, submitted the following resolution; which was read twice and referred to

ONE
LIT

RESOLUTION

Expressing the sense of the Senate that the United States should take a leadership position in calling for worldwide carbon dioxide emissions reductions at the first meeting of the Intergovernmental Negotiating Committee on a Framework Convention on Climate Change to be held in Washington, D.C on February 4th - 14th, 1991.

Whereas, human activities substantially increase the atmospheric concentrations of the greenhouse gases: carbon dioxide, methane, chlorofluorocarbons and nitrous oxide;

Whereas, an increase in the concentration of greenhouse gases intensifies the natural greenhouse effect, resulting on average in an additional warming at the Earth's surface and an excess of radiative energy available to alter the climate system;

Whereas, carbon dioxide has been responsible for over half the enhanced greenhouse effect in the past, and is likely to remain so in the future;

Whereas, the scientific assessment of the Intergovernmental Panel on Climate Change (IPCC) concluded in August 1990 that under a business-as-usual scenario for emissions of carbon dioxide and other greenhouse gases, a global warming of five to ten degrees Fahrenheit above pre-industrialized levels is likely by the end of the next century, bringing the Earth to its warmest level in at least 150,000 years;

Whereas, many scientific studies show that rapid global warming would create grave risks of precipitous climate shifts, with effects including extreme heat waves and droughts in some agricultural and urban areas, amplified warming at high latitudes, sea level rise and resultant flooding of low-lying coastal areas, a probable increase in the frequency and severity of hurricanes and other extreme weather events, and the potential destruction of forests over broad expanses;

Whereas, environmental stresses of this magnitude have the potential to cause unprecedented agricultural, economic, and social and political disruptions;

Whereas, the Ministerial Declaration of the Second World Climate Conference in November 1990, adopted by more than one hundred governments, including the United States, calls for the negotiation of a framework convention to limit climate change in order to protect society and the environment "without further delay based on the best available knowledge" with the ultimate global objective "to stabilize greenhouse gas concentrations at a level that would prevent dangerous anthropogenic interference with climate.";

Whereas, the Declaration further states that "the potentially serious consequences of climate change give sufficient reasons to begin by adopting response strategies even in the face of significant uncertainties.";

Whereas, the United Nations General Assembly has established an Intergovernmental Negotiating Committee for a Framework Convention on Climate Change responsible for negotiating an international climate protection agreement in time for signature at the United Nations Conference on Environment and Development in June 1992;

Whereas, the first negotiation session will be hosted by the United States from February 4th to 14th, 1991;

Whereas, Germany, Denmark, Austria, Australia, and New Zealand have already proposed to reduce emissions of carbon dioxide and other greenhouse gases; and that seventeen other countries (Belgium, Canada, Finland, France, Great Britain, Greece, Iceland, Ireland, Italy, Japan, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, and Switzerland) have proposed, individually or collectively, to stabilize or reduce their carbon dioxide emissions by the year 2000;

Whereas, the United States emits more carbon dioxide than any other nation and has the second highest per capita emissions of carbon dioxide;

Whereas, a large fraction of the emissions of carbon dioxide from the United States could be controlled at a savings, no cost, or low cost and that such measures would contribute to the competitiveness of American business and the overall economy;

Whereas, development and transfer of technology may assist industrialized and developing nations in their efforts to reduce emissions of greenhouse gases;

Whereas, the National Energy Strategy, which has been in preparation for the last eighteen months, presents an opportunity to develop targets for reductions in United States emissions of carbon dioxide and mechanisms for implementing such targets;

Therefore be it resolved, it is the sense of the Senate that it should be the policy of the United States (1) to specify reductions in the national emissions of carbon dioxide and other greenhouse gases by a date certain, and (2) to assume a leadership position in negotiating an international climate protection treaty that contains specific commitments to reduce emissions of carbon dioxide and the following elements:

- An agreement by industrialized nations to reduce their current emissions of carbon dioxide;
- An agreement by developing nations to limit their growth in carbon dioxide emissions from fossil fuel combustion so that total emissions from the industrialized and developing world are significantly reduced;

- An agreement by all countries to limit the release of carbon dioxide due to deforestation, by sustainable use of existing forests and reforestation;
- An agreement by all countries to take available steps to cut emissions of other greenhouse gases, including methane;
- The establishment of an international fund, to help developing countries achieve these objectives;
- The establishment of a mechanism of continuing international cooperation for development of efficient policies for future emissions reductions necessary to meet the objective of stabilizing greenhouse gas emissions at safe levels.
- The establishment of appropriate institutional mechanisms to facilitate cooperation in: research, observation and analysis; data and information exchange and reporting; development and transfer of technology; and technical training and public education.

Be it further resolved, that the United States should support, at the February negotiating session, the establishment of a process that will allow negotiations of substantive provisions to accomplish each of these elements, for inclusion in the convention that is to be concluded in June 1992.

will be a period for the transaction of morning business for not to extend beyond the hour of 11:30 a.m., with Senators permitted to speak therein for up to 10 minutes each.

The majority leader.

GLOBAL WARMING—SENATE RESOLUTION 53

Mr. MITCHELL. Mr. President, I am today, on behalf of myself and 40 other Senators, submitting a resolution on global warming. The resolution expresses the sense of the Senate that it should be the policy of the United States to adopt specific greenhouse gas reductions by a date certain, and the resolution calls on industrialized nations to reduce their emissions of carbon dioxide, the most potent greenhouse gas.

The United States is currently hosting a meeting of a U.N. committee to develop a framework convention on global warming. The President announced an action plan earlier this week. In reality, it is an inaction plan. The so-called plan is a business-as-usual proposal, under which the administration takes credit for reductions in chlorofluorocarbons already committed to under the Montreal Protocol to protect the ozone layer and the administration then assumes unproven reductions in emissions from domestic legislation.

Mr. President, and I say to my colleagues, we cannot afford to just stay the course on greenhouse gas emissions.

The congressional Office of Technology Assessment [OTA] is today releasing a report on global warming entitled "Changing by Degrees: Steps To Reduce Greenhouse Gases." The report states that "under current trends and regulations carbon emissions by 2015 will be close to 50 percent greater than today's level." That increase will occur even though OTA assumed that some efficiency improvements will occur even in the absence of new legislation.

Recognizing that global warming is an international problem, we must keep in mind the fact that the United States, according to OTA, emits about 20 percent of the world's greenhouse gas emissions.

Actions taken here will have a global environmental impact. We have every reason to act now to make our use of energy more efficient, through options such as improving gas mileage of our cars and trucks.

Other nations recognize their obligations to curb their emissions. Industrialized nations in Europe and elsewhere have endorsed a 20-percent reduction in carbon dioxide emissions.

The United States stands alone among industrialized nations in opposing meaningful emissions reductions.

We cannot afford pea-under-the-shell proposals that sound like they address the problem but in reality, like the old shell game, do very little.

The facts are clear: human activities are causing the Earth to warm more rapidly and more quickly than we have ever experienced. The best scientific information today tells us that the concentration of greenhouse gases already in the atmosphere has committed the Earth to an increase in the warming of the atmosphere. The Secretary General of the World Meteorological Organization has said:

The global warming to which we are already committed is irreversible. . . . By the time we detect it, it will be too late. . . .

But there are some, in this Nation and in others and unfortunately led by the President, who argue that there must be a final and unanimous scientific view before any serious action can be taken. The demand for scientific certainty is a double standard not used in any other area of legislative activity. It is in fact, a device for delay used by those unwilling to act.

It is ironic and dangerous that this argument is being raised in connection with what is the most serious, far-reaching and irreversible environmental danger the world faces.

It is ironic that the United States is a follower on global warming controls at a time when in the middle of February and in which we have experienced a recordbreaking heatwave in the past week, some years in the past decade were among the hottest on record.

The administration has given to participants at the U.N. meeting being held here this week a glossy brochure. It is not much more than an illustrated justification for doing nothing.

History has shown that we pay a high price for ignoring environmental problems. The cheaper, easier solution is dismissed because it is too soon to act. Delay leaves fewer and more costly choices. Meanwhile, the adverse impacts on the environment continue to grow.

The Office of Technology Assessment report being released today indicates that we can reduce carbon dioxide emissions 35 percent by the year 2015 while possibly saving money. The OTA estimates that a 35-percent reduction in emissions could save us \$20 billion per year or could cost us up to \$150 billion per year. The cost estimates have a wide range—in this instance of \$170 billion—but it is clear that the opportunity exists for us to reduce our emissions and save money.

I urge the administration to see the global warming problem as an opportunity to improve the efficiency of American industry and enhance American competitiveness; a chance to find new ways to produce goods while protecting the environment and perhaps saving money. Economic growth and environmental protection complement, not contradict, each other.

The time has come for the United States to move forward on controlling emissions of carbon dioxide. The price of delay is too high. In this area, the Bush administration has chosen to follow, not lead. It is up to the Con-

gress to provide the leadership the United States should have and the world needs.

Mr. KERRY. Mr. President, I rise today in support of this resolution in which the Senate once again asks the United States to be a leader in the world effort to reduce the threat of global climate change. I hope that this year the United States will finally take some real steps toward reducing our greenhouse gas emissions and will finally take our place with other nations of the world who have long agreed on the need for this action.

Many of us have been working over the past several years to enact energy efficiency and conservation measures to combat global warming. Our opposition argued vigorously that the science was too uncertain and the costs too great. So instead of action, we called for research. We asked U.S. scientists to work here at home and in the international community to resolve some of these questions.

And the answer came back that, although some questions remain unresolved, the overwhelming evidence says that we are distorting our atmosphere with increasing concentrations of carbon dioxide and other greenhouse gases and that this will cause the temperature of our planet to rise. While we must continue to examine and improve our information, the facts we do have clearly show that inaction is the last thing we can afford.

Estimates of the extent of warming by the middle of the next century vary from 3 to 16 degrees Fahrenheit, and such warming could disrupt our Earth's agricultural patterns, threaten our water supplies and devastate our coastal areas. We don't have to look far to find the source of the greenhouse gases that would cause these changes. Human activity pumps 24 billion tons of CO₂ into the atmosphere every year, with the United States alone accounting for about 5.7 billion tons or 24 percent through the burning of fossil fuels. Humans also produce all of the 1 million tons of chlorofluorocarbons [CFC's] that enter the atmosphere each year.

In the past few years, we have seen the United Nations organize scientists from around the world to evaluate the science and recommend actions. We have seen half of our own National Academy of Sciences joined by 49 Nobel laureates to urge President Bush to take the threat of global climate change seriously and begin to take action. This year, the Office of Technology Assessment reports:

It is clear that the decision to limit emissions cannot await the time when the full impact is evident. The lag time between emission of gases and their full impact is on the order of decades to centuries; so too is the time needed to reverse any effects.

If we fail to act, our National CO₂ emissions would rise by an estimated 50 percent over the next 25 years.

In addition, Mr. President, our commitment to reduce our emissions of fossil fuels will have other positive effects. It will enhance our efforts to achieve energy security, to keep our air and water clean, and to make advances in technology and stay economically competitive.

The Department of Energy reports that energy efficiency and conservation measures could cut CO₂ emissions by up to 27 percent by the year 2000. Mr. President, with thousands of American troops in the Persian Gulf risking their lives in part to secure our economy's access to energy, and with people in Massachusetts and across the Nation feeling the pinch from higher fuel costs, it does not take much foresight to see the immense additional benefits associated with energy conservation. Moreover, these actions can be accomplished in a cost-effective manner.

This week we saw the administration assert, for the first time, that global climate change is a potentially devastating problem that justifies our action. And I commend them for finally taking that step. Unfortunately, their proposed reductions in greenhouse gases do not go beyond the progress that we have already made as a result of the Clean Air Act and our commitment to eliminate ozone-depleting CFC's. This is totally unacceptable.

So I look forward to working this year to develop a comprehensive national energy strategy that includes a strong energy conservation component. And today, I am proud to cosponsor this resolution with so many of my distinguished colleagues. We strongly believe that the U.S. policy on climate change must include specified targets and dates for reductions in greenhouse gases. And, very importantly, the United States must play a leadership role over the next year in negotiating an international climate protection treaty.

Mr. CHAFEE. Mr. President, as recently as 5 years ago, in 1986, few people knew about the greenhouse effect and the threat of global climate change. Today, it is front page material. Cover stories in weekly magazines, headlines in daily newspapers, documentaries on PBS and network television, even the evening news is now telling us about the threat of an intensified greenhouse effect caused by the pollution that comes primarily from the burning of fossil fuels such as coal and oil.

Is all of this just another example of Chicken Little screaming that the sky is falling? The answer, Mr. President, is a resounding "No." The threat is real and very serious.

We are experiencing an accelerating accumulation of greenhouse gases in the atmosphere, primarily carbon dioxide, chlorofluorocarbons (CFC's), and methane. Scientific experts from all over the world are telling us that these gases act as a thermal blanket

and, if we continue to pour them into the atmosphere at current rates, they will trap heat in the Earth's atmosphere and cause unprecedented climate changes.

The predicted environmental impacts of an intensified greenhouse effect include:

A significant increase in global average temperatures over the next several decades that is equal to or greater than the increase experienced over the last 10,000 years;

Continuing temperature increases at an equally alarming rate in succeeding years;

The extinction of numerous species of plants and animals and significant interference with natural evolutionary responses;

Reduced soil moisture content and altered storm patterns that may seriously disrupt the U.S. agricultural industry; and

A dangerous rise in sea level over the next few decades and continuing sea level rise in succeeding years.

It is easy to overstate the uncertainty that surrounds this issue. It is true that scientists disagree about matters such as whether an intensified greenhouse effect has already begun. Similarly, there is no scientific consensus about the precise timing of the predicted changes. When will we see a 2-degree change? When will we see a 9-degree change? Will it be 50 years, or 75, or 100?

Nevertheless, there is a remarkable degree of scientific consensus concerning the threat of massive, uncontrolled global climate change. Specifically, most experts agree that if we do not change our pattern of polluting the atmosphere, many of us, our children, and our grandchildren will experience devastating climate changes of a magnitude and at a rate that will preclude natural evolutionary responses.

There appears to be consensus on another critical point. That is: By the time there is scientific proof for every detail of the problem, it will be too late to avoid the most devastating impacts of an intensified greenhouse effect and global climate change.

Those of us in Government must make decisions based on the best information we have at the time and be ready to modify those decisions—after the fact—if new information becomes available.

Out willingness to make initial, difficult decisions to change the status quo in order to avoid or reduce the threat of future environmental damage, is a function of personal and societal values. Many of us are willing to bite the bullet and take bold action to avoid or reduce the threat of global climate change.

We can ill afford to wait for 10 years of research before we take action to limit the rate and extent of future climate change by reducing atmospheric concentrations of greenhouse gases. It is not enough simply to freeze emissions at current levels. At the same

time, we must begin to implement adaptation strategies for coping with the changes to which we are already committed.

Mr. President, earlier this week, I joined Senator WIRTH and a number of our colleagues as an original cosponsor of S. 324. This bill is a good starting point in the effort to establish a national energy strategy that reflects the concerns many of us share about an intensified greenhouse effect. It is designed to reduce U.S. emissions of carbon dioxide, the primary greenhouse gas that is a byproduct of fossil fuel combustion, and to increase our use of clean, renewable fuels such as solar energy and wind power.

Today, I am proud to join Senator MITCHELL, the majority leader and a respected colleague on the Committee on Environment and Public Works, as an original cosponsor of a Senate resolution on global climate change. The resolution states our support for the negotiation of an international treaty that includes specific commitments to reduce emissions of carbon dioxide.

The United States is the largest emitter of carbon dioxide in the world. Each year, we produce 5 tons of carbon dioxide for every man, woman, and child in this country. On a per capita basis, Canada is an equal offender although its total emissions do not come close to United States levels. The next largest producer is the Soviet Union, with annual per capita emissions of 3½ tons. Compare these numbers to the world average which is less than 1 ton per capita.

In addition, the United States is one of the most energy inefficient countries in the world. We continue to lead all industrial nations except Canada in the amount of energy used per unit of goods and services produced. This is not just an environmental embarrassment. It is economic suicide. This gross, inefficient use of energy makes it difficult for us to compete in the world market.

The world is looking to us for leadership but they are not waiting for us. More than 1 dozen nations, including many of our industrialized trading partners, have officially pledged to stabilize or reduce CO₂ emissions by 2005. There is no excuse for us to be sitting on the sidelines while the rest of the world presses ahead. The United States should be a world leader in the international effort to reduce atmospheric concentrations of CO₂.

It is important for the President to send a clear signal to everyone that he believes we know enough to act now and that we cannot afford the risk that comes with a wait and see policy. The scientists are telling us that if we wait for scientific proof, it will be too late to respond.

There is no shortage of studies and reports on the nature of the problem and the policy options for responding to it. Listen to this list:

In February 1989, EPA produced an excellent study outlining policy options;

The U.N. Environment Programme [UNEP] issued a similar report in September 1989;

The Department of Energy produced a policy options report in October 1989;

In December 1989, EPA published an extensive report on the effects of an intensified greenhouse effect; and

In August 1990, the International Panel on Climate Change [IPCC], an international group of experts that included many of the world's most respected scientists and government officials, issued a series of reports on the science of the greenhouse effect, likely impacts, and policy options for responding to the threat.

A new report entitled "Changing by Degrees: Steps to Reduce Greenhouse Gases" is being released today by the congressional Office of Technology Assessment [OTA]. I am proud of the fact that this report stems from a request I made in September 1986—a request that was subsequently supported by four Senate committees and two House committees.

This excellent new report reinforces the message that many of us have been trying to deliver about the threat of an intensified greenhouse effect and global climate change. Simply put, the report shows that there are a great many things we can do that will have a double benefit—we can conserve energy and we can reduce U.S. emissions of carbon dioxide quickly and at relatively low cost. In many cases, energy conservation measures will actually save money.

The new OTA report shows that we can begin to reduce CO₂ emissions without crippling our economy. There is no excuse for us to drag our feet any longer. The international negotiations on a climate treaty that started this week represent a perfect opportunity for the United States to present this new data and to join the rest of the world in an agreement to reduce emissions of carbon dioxide.

The solution is going to involve attacking the problem on several fronts:

As recognized by the recently enacted Clean Air Act Amendments of 1990, we need to eliminate CFC's as quickly as possible—chlorofluorocarbons are a double villain, in addition to destroying the ozone layer, they are powerful greenhouse gases;

As noted in this bill, we need to reduce our use of fossil fuels, especially coal and oil, which produce large amounts of carbon dioxide—greater energy efficiency is one way to do this, for example, we should be producing cars that get at least 40 or 50 miles to the gallon; and

We need to devote more research to new sources of clean, safe energy like photovoltaics, and windpower.

Mr. President, as one who has been working on this matter since early 1986, I am pleased to see the threat of

global climate change receiving the attention it deserves.

Is it too early to act? On the contrary, it is late. Let us not waste time debating whether or not it is too late. There is lag time built into the climate system. Even if we stopped all emissions of greenhouse gases tomorrow, we will experience global changes over the next 20, 30, or 40 years that will make Earth warmer than it has been in the past 100,000 years.

Sea levels will rise. Storm patterns will change. Change is inevitable. The magnitude and rate of this change, however, as well as our ability to adapt to it, will depend on how quickly we respond to this threat and how quickly we reduce atmospheric concentrations of carbon dioxide.

Mr. GORE addressed the Chair.

The ACTING PRESIDENT pro tempore. The Chair recognizes Senator Gore.

Mr. GORE. Mr. President, I am pleased to cosponsor the resolution just submitted by the majority leader. I wish to compliment him on the leadership demonstrated in this resolution and on the statement he has just made.

In meetings and conversations that I have had during the last few days with delegates to the conference now taking place in Chantilly, it has become evident to me that people all over the world want the United States to exercise leadership on this issue. Only the United States is capable of providing the kind of leadership necessary to forging a resolution of this problem. As the majority leader has said, this problem is so serious we cannot afford the kind of inaction proposed by the administration. I believe that global warming is the single-most serious problem human civilization has ever confronted.

Many people do not accept that fact. Many argue that the evidence is still uncertain. Many would have us gamble that the consequences predicted by so many scientists who have studied this issue are simply wrong, and yet the consequences, if those predictions are right, are so dire and so severe that future generations will look back and shake their heads and wonder what were they doing back in 1991 when delegates from around the world gathered in the United States waiting for leadership and heard instead President Bush propose doing nothing. And make no mistake about it, Mr. President; the plan submitted by the Bush administration would commit this country to doing exactly nothing about this problem. It is an exercise in pretense. The stabilization of greenhouse gas emissions in the year 2000, which is promised in the administration's plan, is a sham and an artifice.

The reductions of chlorofluorocarbons, which have to be eliminated anyway under previously agreed to international treaties, will take place here in the United States later than in

other countries because of foot dragging by the administration. Because of their foot dragging, those reductions will take place at the end of the century. CFC's are also greenhouse gases. Therefore, eliminating CFC's will have the effect of reducing the overall emissions of greenhouse gases in that 1 year; the year 2000. Emissions before that year will be higher. Emissions after that year will be higher because the administration's plan does nothing to control the excessive rise in carbon dioxide emissions. In fact, between now and 9 years from now, in the year 2000, the administration's plan allows an estimated 15-percent increase in CO₂ emissions in the United States. If the administration's plan is adopted, that rate of increase will continue or accelerate right through the turn of the century and thereafter.

Mr. President, to put out an announcement, as the administration did, claiming that they will stabilize greenhouse gas emissions in the year 2000 is to try to convince the American people and the rest of the world that they are doing something they are really not proposing to do. It is a game. But if the consequences are so serious, how can they approach it in this manner?

I would like to express my personal confidence, Mr. President, in many of those who are part of the negotiating team representing our country in Chantilly. There are some good people involved. It is the policy that they have to argue which is so bad, and the policy has been set not by our negotiators but by President Bush, following the advice not of his head of EPA—who has been excluded from this process; not from his Secretary of State—who has recused himself from this process; not the advice of his science adviser, who feels differently on this matter. No. The President is following the advice of his Chief of Staff, Dr. John Sununu, who evidently has a very deep personal involvement in this issue. It is quite appropriate for the Chief of Staff of the President of the United States to involve himself in issues he feels are important, but in this case, Mr. President, for Dr. Sununu to manage to exclude those who have expertise in this particular area and urge upon the President a course of action which would have this Nation do nothing on the single most serious problem that faces human civilization is really a disservice to the people of this country, to their children, and to their grandchildren.

What other nation can lead the world in facing a problem like this? The world will not follow Japan. Europe will be absorbed in its process of integration for at least the next 10 years. Who else is there? The United States must lead on this question.

I would like to express the hope that some progress will be made in these negotiations, but having met with the delegates and having talked with

them, I can only say that their reports are a source of little comfort. There has been some progress, and perhaps enough to lay the groundwork for a later change of heart by the administration. If that change of heart takes place, it will be because of expressions like the resolution submitted today by the majority leader and 39 of our other colleagues who are urging the President to get going; to offer the leadership that is desperately needed on this issue.

As the majority leader has also noted, the Office of Technology Assessment in about 15 minutes will be formally releasing its report on what can be done to reduce our emissions of greenhouse gases. And importantly, just to summarize the most salient point of this report, we can reduce carbon dioxide emissions and simultaneously save money. The OTA report reveals the bankruptcy of administration's assertion that we will incur tremendous expenses if we even attempt to address this problem. Of course, Mr. President, the Administration measures the expense incurred by not solving the problem. The impact of global warming is not just a few more degrees on average, not just a few hot days in the summer. It is, rather, the threat of a complete change in the pattern of temperature distribution, rainfall distribution, and, consequently, of severe disruptions of all of those human activities which are inextricably tied to the pattern of climate which has existed within boundaries of change for the entirety of the history of human civilization.

Mr. President, the essence of leadership is to look ahead, identify problems, and propose solutions for those problems while the solutions are feasible; while they can be effective. The essence of political cowardice is to see the problem and fail to act because of fear that the political consequences of doing something about the problem will be painful in the short term. That is what we are seeing right now from the Bush administration where the global environmental crisis is concerned.

I am proud to be a member of the Democratic majority in this U.S. Senate, and to join the majority leader in a resolution declaring that we need leadership now, and urging the White House to make the best use of the climate change negotiations that are now underway.

Thank you, Mr. President.

Several Senators addressed the Chair.

Mr. BAUCUS. Mr. President, I rise to join the majority leader and others in submitting a resolution on global warming. The resolution calls upon the United States to assume leadership in negotiating an international climate protection treaty that contains specific commitments to reduce emissions of carbon dioxide and other greenhouse gases by a certain date.

This week the United States is hosting the first session of the International Negotiating Committee for a Framework Convention on Climate Change of the U.N. General Assembly.

That is a lot of words, but it is important to note that it is the first international agreement under the auspices of the U.N. General Assembly in trying to come to grips with this problem.

The goal of the assembled nations is to complete a climate change convention in time for signature at the U.N. Conference on Environment Development in June 1992, just over a year from now.

It is ironic that as the convention is convening here in Washington, DC, temperatures in Washington, DC, broke a 108-year-old record just a couple of days ago. At Washington's National Airport, temperatures hit 70 degrees Fahrenheit, breaking the record set not too many years ago, in 1983.

For these negotiations to be successful, the United States must exercise leadership. The United States is still the leading economic power, the leading military power and, unfortunately, the leading producer of carbon dioxide, the major greenhouse gas. The United States, with about 5 percent of the world's population, generates more than 20 percent of all manmade emissions of carbon dioxide.

George Bush promised us, when he was a candidate for the Presidency, the "White House effect" to deal with global warming. On Monday, President Bush announced his policy on climate change in a document entitled, "America's Climate Change Strategy: An Action Agenda." Those were the words.

Unfortunately, it appears that the promised White House effect is in reality a whitewash effect.

The report states that the strategy will result in U.S. greenhouse gas emissions in the year 2000 being equal to or below the 1987 level. The U.S. strategy, however, sets no basic objective to limit global climate change. Instead it largely repeats on U.S. commitments to cut ozone-depleting chlorofluorocarbons, an action agreed to last year under the Montreal protocol. So there is little new in this document. In fact, stripped of the CFC's reductions, the strategy actually allows a continued increase in total U.S. emissions of all greenhouse gases to the end of the century.

The administration's policy of not setting an emissions reduction target and deadline stands in stark contrast to the action of other industrialized nations. Austria, Australia, Canada, Denmark, France, Germany, Italy, Japan, The Netherlands, New Zealand, Norway, and Sweden have all proposed specific reductions in greenhouse gas emissions, particularly carbon dioxide.

Mr. President, we know the problem is not easy. But if we had the time merely to study and wait, then the

greenhouse crisis would not be the crucial challenge that it is. It would not demand the world-class leadership that only the United States can provide. We must be prepared, today, to make exactly the kind of choice that is the essence of leadership. Though we do not know everything, we know enough to act today.

The testimony of scientific experts clearly indicates that it is time for us to act on this problem. Last year, 49 Nobel laureates and 700 members of the prestigious National Academy of Sciences called global warming "the most serious environmental threat of the 21st century."

In May 1990 the U.N. Intergovernmental Panel on Climate Change issued a report, adopted by delegates from 39 countries, which concluded that under a business-as-usual scenario for emissions of carbon dioxide and other greenhouse gases, a global warming of 5 to 10 degrees Fahrenheit above pre-industrialized levels is likely to occur by the end of the next century. This would bring the Earth to its warmest level in at least 150,000 years.

Even the administration's own Environmental Protection Agency ranked global warming as a top priority. In its recently released report "Reducing Risk: Setting Priorities and Strategies for Environmental Protection", EPA's Scientific Advisory Board examined and ranked 31 environmental risks. Global warming ranked as one of the four highest risks to our natural ecology and human welfare.

It is the nature of the climate system that what we do today—the amount of greenhouse gases we put into the atmosphere—will determine the extent and severity of climate change in the next century.

The impacts are far-reaching. An average temperature rise of 5 degrees Fahrenheit could produce effects such as extreme heat waves and drought in some agricultural and urban areas. It could produce rising oceans with flooding of low-lying coastal areas. An increase in the frequency and severity of hurricanes and other storms. And the potential destruction of forests over broad expanses.

If we wait to reduce greenhouse gas emissions, until we see the changes in climate, it will be too late. To protect the world we and our children will live in in the 21st century, we must make policy changes now.

Mr. President, in 1897 noted American writer and journalist Charles Dudley Warner, observed in an editorial in the Hartford, Courant, that "Everybody talks about the weather, but nobody does anything about it."

Today the international community is poised to do more than just talk about the weather. Global warming is a global problem and the United States must step forward as a leader in the world community to find a international solution. To do this requires two steps. First, we must lead by ex-

ample and shape our own domestic policies to help solve, and not exacerbate the problem. Second, our President must assume a lead role on the world stage by advancing an international policy on climate change which calls for specified reductions in all greenhouse gases by a date certain. Anything less and the United States remains part of the problem.

Mr. PRYOR. Mr. President, I have made it a general practice to not participate in sense-of-the-Senate resolutions. These resolutions have become so prevalent and in many cases immaterial that the only thing accomplished is added expense to the taxpayer for printing them in the CONGRESSIONAL RECORD.

However, I believe Senator MITCHELL's resolution calling on the United States to take a leadership position in calling for worldwide carbon dioxide emissions reductions during the meetings of the Intergovernmental Negotiating Committee on a Framework Convention on Climate Change currently being held in Washington, DC, warrants support.

Our country has long been admired by the many nations around the world as a leader for positive change. This leadership should now be continued in support of controlling the worldwide scourge of global warming. It is fitting that we become the role model for other countries on global warming, as we are the No. 1 emitter of carbon dioxide, which is the primary culprit in causing the greenhouse effect.

We are presently countering a threat in a faraway land where I am sure we will prevail. A far different threat, but a threat nonetheless, looms on the horizon, and scientific studies strongly indicate that unless steps are taken to counter global warming, an environmental calamity of immense proportion may occur.

As a Senator who represents a State whose No. 1 industry, agriculture, is very dependent on sufficient rain, Sun, and other environmental factors, I am very interested in assuring that the proper growing conditions are maintained to the extent possible. If greenhouse gases are allowed to increase unchecked, our farmland and those around the world could ultimately become dust bowls.

Mr. President, I hope our Nation lives up to its past world leadership role and becomes an active force for reducing greenhouse gases.

Mr. SANFORD. Mr. President, I rise in support of the resolution on global warming introduced by the distinguished majority leader.

This resolution will not allow the United States to continue to maintain its seat on the sidelines of the world debate on global warming. Instead, the resolution rightly calls on the United States to take a position of both responsibility and leadership among the world's nations in addressing this critical issue. This Nation must pledge its support to a global effort to seek spe-

cific reductions in the emissions of greenhouse gases, particularly carbon dioxide. As the Nation which produces almost 25 percent of all manmade carbon dioxide emissions through our use of fossil fuels, certainly America should take an active role in helping to determine the parameters of any international climate protection treaty.

The Intergovernmental Negotiating Committee on a Framework Convention on Climate Change is meeting this week and next in Washington, DC. This is a result of the establishment of the Intergovernmental Panel on Climate Change (IPCC) by the United Nations World Meteorological Organization and the U.N. Environment Program. The IPCC report forms the basis for international negotiations on the Framework Convention, an effort in which more than 130 nations are participating.

Mr. President, we cannot afford to hope for the best on this issue. The stakes are too high. There is growing evidence to indicate that the accumulation of greenhouse gases in the atmosphere at current rates may well impact our agricultural, forestry, and water resources. The scientific assessment of the IPCC concludes that, under a business-as-usual scenario for emissions of greenhouse gases, the Earth would reach its warmest level in at least 150,000 years by the end of next century.

The prospect of rising sea levels, increased coastal erosion, and influences on marine ecosystems are of no small concern to me as a resident of a coastal State. Climate swings and damage to forest resources and farmlands are no more appealing. I do not have an alarmist approach to this issue, but neither am I willing to sit back and wait for the disturbing predictions of many of the world's most respected scientists to become reality. Let's take the proper steps now to curb the flow of greenhouse gases into our atmosphere and commit to increased international cooperation on this initiative.

While it will take more than just the minds of a few tarheels to solve the problem of global warming, I would like to mention an initiative in North Carolina that demonstrates both a commitment to stemming the tide of a warming planet and to the true spirit of cooperation. Duke University, North Carolina State University, and the University of North Carolina at Chapel Hill have formed a new Center for World Environment and Sustainable Development specifically to address the key problems of climate change and its causes, such as deforestation and emissions of greenhouse gases. This center brings together internationally renowned faculty and their programs in a significant effort which compliments the actions of the IPCC.

Mr. President, as we take a serious look at the sources of greenhouse gases, there is no question that,

through the methods which we must employ to reduce these emissions, we will also be increasing energy efficiency, reducing our dependency on foreign oil, strengthening our economy, and lending to the long-term health of our global environment.

Last, let's take the opportunities provided this Nation through the Intergovernmental Panel on Climate Change and get serious about this issue that can truly be said to affect everyone's back yard. It is high time that the most powerful nation on Earth stood up and was counted. We are a leading cause of greenhouse buildup; let us provide some answers.

I am encouraged by the efforts of my able colleague from Maine to focus this body's attention on such a critical issue.

The ACTING PRESIDENT pro tempore. The Senator from Hawaii [Mr. AKAKA] is recognized.

U.S. GOVERNMENT TRUST RELATIONSHIP WITH NATIVE PEOPLE OF HAWAII

Mr. AKAKA. Mr. President, less than 9 months ago I stood in this Chamber to be sworn in as a U.S. Senator—the first native Hawaiian to serve as a Member of this distinguished body of lawmakers. And as such, I was honored to offer legislation calling on the United States to formally apologize to the Hawaiian people for the overthrow of their sovereign Kingdom of Hawaii in 1893. My resolution would have also declared that a trust relationship exists between the U.S. Government and the native people of Hawaii.

Because the Senate was unable to complete action on my resolution, I am pleased to reintroduce the measure on behalf of the senior Senator from Hawaii and chairman of the Indian Affairs Committee, DANIEL K. INOUE, and myself.

Mr. President, our Nation speaks openly of the sovereignty and freedoms of those in other countries and the efforts that must be undertaken to restore or protect the rights of these people. It is time that Congress and the administration reflect upon America's own history and her actions which have affected the self-determination and freedoms of her native people. America must extend the same moral responsibility that she feels for the rights of the people in other countries to her own people as well.

In 1893, on orders of the U.S. Minister to the Kingdom of Hawaii, John L. Stevens, American troops landed in Honolulu and blockaded Queen Liliuokalani's palace. This action by an annexation party calling itself the "Committee of Safety," which was joined by over 100 U.S. marines and sailors, led to the overthrow of the Kingdom of Hawaii.

Even before the takeover of the Hawaiian government was complete, Min-