

ADDRESSING GLOBAL CLIMATE CHANGE

Presented by

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May 19, 1997

Dean Spence, Ladies and Gentlemen, good morning.

It is always marvelous to come back to Stanford and it is a pleasure and a privilege to be here to speak to you today on a subject which I believe is of the utmost importance.

I can't think of anywhere better than Stanford to discuss in a calm and rational way a subject which raises great emotion and which requires both analysis and action.

I think it's right to start by setting my comments in context.

Following the collapse of Communism in Europe and the fall of the Soviet Empire at the end of the 1980s, two alternative views of the consequences for the rest of the world were put forward. Francis Fukuyama wrote a book with the ironic title "The End of History." Jacques Delors, then President of the European Commission, talked about the "Acceleration of History."

In the event, history has neither accelerated nor stopped. But it has changed.

The world in which we now live is one no longer defined by ideology. Of course, the old spectrums are still with us of left to right of radical to conservative. But ideology is no longer the ultimate arbiter of analysis and action. Governments, corporations and individual citizens have all had to redefine their roles in a society no longer divided by an Iron Curtain separating Capitalism from Communism.

A new age demands a fresh perspective of the nature of society and responsibility.

The passing of some of the old divisions reminds us we are all citizens of one world, and we must take shared responsibility for its future, and for its sustainable development.

We must do that in all our various roles — as students and teachers; as business people with capital to invest; as legislators with the power to make law; as individual citizens with the right to vote; and as consumers with the power of choice.

These roles overlap, of course. The people who work in BP are certainly business people, but they're also people with beliefs and convictions — individuals concerned with the quality of life for themselves and for their children.

When they come through the door into work every morning they don't leave behind their convictions and their sense of responsibility. The same applies to our consumers. Their choices determine our success as a company. And they too have beliefs and convictions.

Now that brings us to my subject today the global environment. That is a subject which concerns us all in all our various roles and capacities.

I believe we've now come to an important moment in our consideration of the environment. It is a moment when, because of the shared interest I talked about, we need to go beyond analysis to seek solutions and to take action. It is a moment for change and for a rethinking of corporate responsibility.

A year ago, the Second Report of the Inter-Governmental Panel on Climate Change (IPCC) was published. That report and the discussion which has continued since its publication, shows that there is mounting concern about two stark facts — the concentration of carbon dioxide in the atmosphere is rising, and the temperature of the earth's surface is increasing.

Karl Popper once described all science as being provisional. What he meant by that was that all science is open to refutation, to amendment and to development.

That view is certainly confirmed by the debate around climate change.

There's a lot of noise in the data. It is hard to isolate cause and effect. But there is now an effective consensus among the world's leading scientists and serious and well informed people outside the scientific community that there is a discernible human influence on the climate, and a link between the concentration of carbon dioxide and the increase in temperature.

The prediction of the IPCC is that over the next century temperatures might rise by a further 1 to 3.5 degrees centigrade, and that sea levels might rise by between 15 and 95 centimeters. Some of that impact is probably unavoidable because it results from current emissions.

Those are wide margins of error, and there remain large elements of uncertainty about cause and effect and even more importantly about the consequences.

But it would be unwise and potentially dangerous to ignore the mounting concern.

The time to consider the policy dimensions of climate change is not when the link between greenhouse gases and climate change is conclusively proven but when the possibility cannot be discounted and is taken seriously by the society of which we are part.

We in BP have reached that point.

It is an important moment for us. A moment when analysis demonstrates the need for action and solutions.

To be absolutely clear we must now focus on what can and what should be done, not because we can be certain climate change is happening, but because the possibility can't be ignored.

If we are all to take responsibility for the future of our planet, then it falls to us to begin to take precautionary action now.

But what sort of action? How should we respond to this mixture of concern and uncertainty? I think the right metaphor for the process is a journey.

Governments have started on that journey. The Rio Conference marked an important point on that journey. So was the Berlin review meeting. The Kyoto Conference scheduled for the end of this year marks another staging post.

It will be a long journey because the responsibilities faced by governments are complex, and the interests of their economies and peoples are diverse and sometimes contradictory. But the journey has begun, and has to continue.

The private sector has also embarked upon the journey, but now that involvement needs to be accelerated. This too will be long and complex, with different people taking different approaches. But it is a journey that must proceed.

As I see it, there are two kinds of actions that can be taken in response to the challenge of climate change.

The first kind of action would be dramatic, sudden and surely wrong. Actions which sought, at a stroke, drastically to restrict carbon emissions or even to ban the use of fossil fuels would be unsustainable because they would crash into the realities of economic growth. They would also be seen as discriminatory above all in the developing world.

The second kind of action is that of a journey taken in partnership by all those involved. A step by step process involving both action to develop solutions and continuing research that will build knowledge through experience.

BP is committed to this second approach, which matches the agreement reached at Rio based on a balance between the needs of development and environmental protection. The Rio agreements recognize the need for economic development in the developing world. We believe we can contribute to achievement of the right balance by ensuring that we apply the technical innovations we're making on a common basis — everywhere in the world.

What we propose to do is substantial, real and measurable. I believe it will make a difference.

Before defining that action I think it is worth establishing a factual basis from which we can work.

Of the world's total carbon dioxide emissions only a small fraction comes from the activities of human beings, but it is that small fraction which might threaten the equilibrium between the much greater flows.

You could think of it as the impact of placing even a small weight on a weighscale which is precisely balanced. In preserving the balance we have to be clear where the problem actually lies.

Of the total carbon dioxide emissions caused by burning fossil fuels only 20 percent comes from transportation. Eighty percent comes from static uses of energy — the energy used in our homes, in industry and in power generation. Of the total, 43 percent comes from petroleum.

We've looked carefully using the best available data at the precise impact of our own activities.

Our operations — in exploration and in refining — produce around 8 megatons of carbon. On top of that, a further 1 megaton is produced by our Chemical operations. If you add to that, the carbon produced by the consumption of the products we produce, the total goes up to around 95 megatons.

That is just 1 percent of the total carbon dioxide emissions which come from all human activity.

Let me put that another way to be clear.

Human activity accounts for a small part of the total volume of emissions of carbon — but it is that part which could cause disequilibrium.

Only a fraction of the total emissions come from the transportation sector, so the problem is not just caused by vehicles. Any response which is going to have a real impact has to look at all the sources.

As a company, our contribution is small and our actions alone could not resolve the problem. But that does not mean we should do nothing.

We have to look at both the way we use energy — to ensure we are working with maximum efficiency — and at how our products are used.

That means ensuring our own house is in order. It also means contributing to the wider analysis of the problem through research, technology and through engagement in the search for the best public policy mechanisms — the actions which can produce the right solutions for the long-term common interest.

We have a responsibility to act, and I hope that through our actions we can contribute to the much wider process which is desirable and necessary.

BP accepts that responsibility and we're therefore taking some specific steps.

- To control our own emissions.
- To fund continuing scientific research.
- To take initiatives for joint implementation.
- To develop alternative fuels for the long term.
- And to contribute to the public policy debate in search of the wider global answers to the problem.

First we will monitor and control our own carbon dioxide emissions.

This follows the commitment we've made in relation to other environmental issues. Our overall goal is to do no harm or damage to the natural environment. That's an ambitious goal which we approach systematically.

Nobody can do everything at once. Companies work by prioritizing what they do. They take the easiest steps first — picking the low hanging fruit — and then they move on to tackle the more difficult and complex problems. That is the natural business process.

Our method has been to focus on one item at a time, to identify what can be delivered, and to establish monitoring processes and targets as part of our internal management system and to put in place an external confirmation of delivery.

In most cases the approach has meant that we've been able to go well beyond the regulatory requirements.

That's what we've done with emissions to water and to air. In the North Sea, for instance, we've gone well beyond the legal requirements in reducing oil discharges to the sea. And now at our crude oil export terminal in Scotland, at Hound Point, which handles 10 percent of Europe's oil supplies, we're investing \$100 million to eliminate emissions of volatile organic compounds.

These VOCs would themselves produce carbon dioxide by oxidation in the atmosphere. No legislation has compelled us to take that step, we're doing it because we believe it is the right thing to do.

Now, as well as continuing our efforts in relation to the other greenhouse gases, it is time to establish a similar process for carbon dioxide.

Our carbon dioxide emissions result from burning hydrocarbon fuels to produce heat and power, from flaring feed and product gases, and directly from the process of separation or transformation.

So far our approach to carbon dioxide has been indirect and has mainly come through improvements in the energy efficiency of our production processes. Over the last decade, efficiency in our major manufacturing activities has improved by 20 percent.

Now we want to go further.

We have to continue to improve the efficiency with which we use energy. And in addition, we need a better understanding of how our own emissions of carbon can be monitored and controlled, using a variety of measures including sequestration. It is a very simple business lesson, what gets measured gets managed.

It is a learning process, just as it has been with the other emissions we've targeted, but the learning is cumulative and I think it will have a substantial impact.

We have already taken some steps in the right direction.

In Norway, for example, we've reduced flaring to less than 20 percent of 1991 levels, primarily as a result of very simple, low cost measures. The operation there is now close to the technical minimum flare rate which is dictated by safety considerations.

Our experience in Norway is being transferred elsewhere, starting with fields in the UK sector of the North Sea, and that should produce further progressive reductions in emissions. Our goal is to eliminate flaring except in emergencies.

That is one specific goal within the set of targets which we will establish.

Some are straightforward matters of efficient operation, such as the reduction of flaring and venting. Others require the use of advanced technology in the form of improved manufacturing and separation processes that produce less waste and demand less energy.

Other steps will require investment to make existing facilities more energy efficient. For instance, we're researching ways in which we can remove the carbon dioxide from large compressors and reinject it to improve oil recovery. That would bring a double benefit — a cut in emissions and an improvement in production efficiency.

The task is particularly challenging in the refining sector where the production of cleaner products require more extensive processing and a higher energy demand for each unit of output. That means that to make gasoline cleaner, with lower sulfur levels, takes more energy at the manufacturing stage. That's the trade off.

In each case our aim will be to establish a data base, including benchmark data; to create a monitoring process, and then to develop targets for improvement through operational line management.

Monitoring and controlling emissions is one step. The second is to increase the level of support we give to the continuing scientific work which is necessary.

As I said a few moments ago, there are still areas of significant uncertainty around the subject of climate change. Those who tell you they know all the answers are fools or knaves.

More research is needed on the detail of cause and effect; on the consequences of what appears to be happening, and on the effectiveness of the various actions which can be taken.

We will increase our support for that work.

That support will be focused on finding solutions and will be directed to work of high quality which we believe can address the key outstanding questions.

Specifically, we've joined a partnership to design the right technology strategy to deal with climate change. That partnership includes the Electric Power Research Institute and the US Department of Energy. We're also supporting work being done at MIT in Cambridge and through the Royal Society in London.

We're also joining the Greenhouse Gas Program of the International Energy Agency which is analyzing technologies for reducing and offsetting greenhouse gas emissions from fossil fuels.

The third area is the transfer of technology and the process of joint implementation which is the technical term for projects which bring different parties together to limit and reduce net emission levels of greenhouse gases. Joint implementation is only in its infancy, but we believe it has great potential to contribute to the resolution of the climate change problem. It can increase the impact of reduction technology by lowering the overall cost of abatement actions.

We need to experiment and to learn and we'd welcome further partners in the process. The aim of the learning process must be to make joint implementation a viable and legally creditable concept that can be included in international commitments.

We've begun by entering into some specific programs of reforestation and forest conservation programs in Turkey and now in Bolivia, and we're in discussion on a number of other technology based joint implementation projects.

The Bolivian example I think shows what can be done. Its a program to conserve 1.5 million hectares of forests in the province of Santa Cruz . It is sponsored by The Nature Conservancy and American Electric Power and is sanctioned by the US Government.

We're delighted to be involved, and to have the chance to transfer the learning from this project to others in which we are involved. Forest conservation projects are not easy or simple, and that learning process is very important.

Technology transfer is part of the joint implementation process but it should go wider and we're prepared to engage in an open dialogue with all the parties who are seeking answers to the climate change problem.

So those are three steps we can take — monitoring and controlling our own emissions, supporting the existing scientific work and encouraging new work, and developing experiments in joint implementation and technology transfer.

Why are we doing all those things? Simply because the oil industry is going to remain the world's predominant supplier of energy for the foreseeable future. Given that role, we have to play a positive and responsible part in identifying solutions to a problem which is potentially very serious.

The fourth step — the development of alternative energy — is related but distinct.

Looking ahead it seems clear that the combination of markets and technology will shift the energy mix.

The world's population is growing by 100 million every year — by 10,000 just since I started speaking.

Prosperity is spreading. By the end of the century 60 percent of the world's economic activity will be taking place in the South, in areas which ten years ago we thought of as Third World countries.

Both these factors will shape a growing level of demand for energy.

At the same time technology moves on.

The sort of changes we've seen in computing, with continuing expansion of semiconductor capacity, is exceptional but not unique. I think it is a reasonable assumption that the technology of alternative energy supplies will also continue to move forward.

One or more of those alternatives will take a greater share of the energy market as we go into the next century.

But let me be clear. That is not instead of oil and gas. It is additional.

We've been looking at alternative energies for a long time, and our conclusion is that one source which is likely to make a significant contribution is solar power.

At the moment solar is not commercially viable for either peak or base load power generation. The best technology produces electricity at something like double the cost of conventional sources for peak demand.

But technology is advancing, and with appropriate public support and investment I'm convinced that we can make solar competitive in supplying peak electricity demand within the next ten years.

For this industry that is the appropriate timescale on which to work.

We explore for oil and gas in a number of areas where production today wouldn't be commercially viable at the moment. Twenty-five years ago we did that in Alaska.

We take that approach because we believe that markets and technology do move, and that the frontier of commercial viability is always changing.

We've been in solar power for a number of years and we have a 10 percent share of the world market. The business operates across the world with operations in 16 countries.

Our aim now is to extend that reach, not least in the developing world where energy demand is growing rapidly. We also want to transfer our distinctive technologies into production, to increase manufacturing capacity and to position the business to reach \$1b in sales over the next decade.

I am happy to report that there will be significant investment in the USA and we'll be commissioning a new solar manufacturing facility here in California before the end of this year.

The result of all this is that gradually, but progressively, solar will make a contribution to the resolution of the problem of carbon dioxide emissions and climate change.

So a series of steps on the journey. These are the initial steps. We're examining what else we should do, and I hope to be able to announce some further steps later in the year.

Of course, as I said at the beginning, nothing we can do alone will resolve the concern about climate change. We can contribute, and over time we can move toward the elimination of all emissions from our own operations and from the consumption of our products.

The subject of climate change, however, is a matter of wider public policy.

We believe that policy debate is important. We support that debate, and we're engaged in it through the World Business Council on Sustainable Development, through the President's own Council here in the United States, and in the UK, where the Government is committed to making significant progress on the subject.

Knowledge in this area is not proprietary, and we will share our expertise openly and freely.

Our instinct is that once clear objectives have been agreed, market-based solutions are more likely to produce innovative and creative responses than an approach based on regulation alone.

Those market based solutions need to be as wide ranging in scope as possible because this is a global problem which has to be resolved without discrimination and without denying the peoples of the developing world the right to improve their living standards. To try to do that would be arrogant and untenable — what we need are solutions which are inclusive, and which work through cooperation across national and industry boundaries.

There have been a number of experiments, all of them partial, but many of them interesting because they show the way in which effective markets can change behavior.

We're working, for instance, with the Environmental Defense Fund to develop a voluntary emissions trading system for greenhouse gases, modeled on the system already in place in respect of sulfur.

Of course, a system which just operates here in the United States is only a part of the solution. Ideally such structures should be much wider. But change begins with the first step and the development of successful systems here will set a standard which will spread.

Ladies and Gentlemen, I began with the issue of corporate responsibility. The need for rethinking in a new context.

No company can be really successful unless it is sustainable. Unless it has capacity to keep using its skills and to keep growing its business.

Of course, that requires a competitive financial performance. But it does require something more, perhaps particularly in the oil industry.

The whole industry is growing because world demand is growing. The world now uses almost 73 million barrels of oil a day, 16 percent more than it did ten years ago. In another ten years, because of the growth of population and prosperity, that figure is likely to be over 85 mbd, and that is a cautious estimate. Some people say it will be more.

For efficient, competitive companies that growth will be very profitable.

But sustainability is about more than profits. High profitability is necessary but not sufficient.

Real sustainability is about simultaneously being profitable and responding to the reality and the concerns of the world in which you operate. We're not separate from the world. It's our world as well.

I disagree with some members of the environmental movement who say we have to abandon the use of oil and gas. They think it is the oil and gas industry which has reached the end of history.

I disagree because I think that view underestimates the potential for creative and positive action. But that disagreement doesn't mean that we can ignore the mounting evidence about climate change and the growing concern.

As businessmen, when our customers are concerned, we'd better take notice.

To be sustainable, companies need a sustainable world. That means a world where the environmental equilibrium is maintained but also a world whose population can all enjoy the heat, light and mobility which we take for granted and which the oil industry helps to provide.

I don't believe those are incompatible goals.

Everything I've said today — all the actions we're taking and will take — are directed to ensuring that they are not incompatible.

There are no easy answers. No silver bullets. Just steps on a journey which we should take together because we all have a vital interest in finding the answers. The cultures of politics and of science and of enterprise must work together if we are to match and master the challenges we all face.

I started by talking about the end of history. Of course it hasn't ended. It's moved on.

Francis Fukuyama who coined that phrase describes the future in terms of the need for a social order — a network of interdependence which goes beyond the contractual. An order driven by the sense of common human interest. Where that exists, societies thrive.

Nowhere is the need for that sort of social order at the global level more important than in this area.

The achievement of that has to be our common goal.

Thank you very much.

speeches

'97 SEP 12 PM 4:59



NATIONAL INSTITUTE OF ALLERGY AND INFECTIOUS DISEASES
Office of Policy Analysis

FACSIMILE

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MESSAGE:

Jonathan

Attached are Dr. Fauci's talking points. As I mentioned, he'll be using slides principally about this should give you a sense of how he's fitting in the conference and the President's efforts. Please fax us a copy of the official notification, and we'll be able to slip it more specifics into it. E.

**United States-Mexico-Canada
Research Development Workshop**

Precursors and Consequences

of

**Emerging and Re-emerging Diseases
In North America**

**Draft Remarks of Anthony S. Fauci, M.D.
Director**

**National Institute of Allergy and Infectious Diseases
National Institutes of Health**

**Lawton Chiles International House
Wednesday, September 17, 1997**

**Draft Remarks to
United States-Mexico-Canada
Research Development Workshop**

- Themes:**
- 1. Commitment of U.S./NIH to true trilateral collaboration in spirit of NAFTA**
 - 2. NIH commitment to emerging/re-emerging infectious diseases research**

➤ **It is an honor to have a part in hosting this year's meeting, and to re-affirm our commitment to collaboration with our sister nations in this hemisphere in addressing the challenges of emerging and re-emerging diseases.**

➤ **To our distinguished colleagues from Mexico: congratulations on the 187th anniversary of Mexico's Independence, which I understand was celebrated yesterday.**

"Bienvenido a nuestros amigos Mexicanos y Felicidades en el día de Independencia Mexicana. Que Viva Mexico!"

(Welcome to our Mexican Friends; congratulations on the anniversary of Mexican Independence DayLong live Mexico !)

➤ **Trilateral collaborations between talented scientists from each of our nations are crucial to solving some of the problems I will address briefly and which will be discussed over the next three days.**

➤ **We must remember that our respective communities are separated only by lines on a map. This is the spirit of NAFTA.**

➤ **As you know, Infectious disease remain the leading cause of death in the world (slide).**

➤ **A popular perception is that disease emergence is a brand new phenomenon. One needs only to talk to our older citizens to be reminded that this is not the case. My 86-year-old father, for instance, has experienced in his lifetime two global epidemics of extraordinary impact (slide).**

➤ **In the past 3 decades, the number of emerging and re-emerging diseases has continued to mount. Here are a few examples you are all familiar with (slide).**

➤ This slide shows only some of the outbreaks of emergent diseases that occurred last year alone (slide).

➤ We have been fortunate, in a time of constrained resources, that President Clinton, the Congress, and NIH have judged emerging diseases to be among our highest priorities; funding has increased accordingly (slide of emerging diseases funding -- NIH and/or NIAID; emerging diseases spending as proportion of all non-AIDS emerging diseases spending at NIAID).

➤ NIH emerging diseases funding has increased 39 percent 1995-1998

➤ NIH FY 1998 estimate: \$87.5 M

➤ NIAID emerging diseases funding has increased 83 percent 1993-1998

➤ NIAID FY 1998 estimate: \$72.0 M

➤ NIAID emerging diseases funding as proportion of all NIAID (non-AIDS) infectious disease funding increased from 12.9 percent in 1993 to 20.3 percent in 1998.

➤ The NIH research approach to emerging diseases is multi-faceted (slide: either cartoon or bullets).

➤ An example of this: microbe-sequencing efforts (slide).

➤ Our collaborative efforts in emerging disease will have benefits in other areas (slide).

➤ Dr. Harold Varmus has been fully supportive of initiatives in emerging diseases research, and has taken a key role in a number of international meetings.

➤ As I mentioned, the President also has taken an interest in emerging diseases, including the health effects of global climate change. As many of you may know, the President is convening a White House Conference on Global Climate Change on October 6. In addition, these issues will be among the issues discussed at a summit on greenhouse gasses emissions in Kyoto, Japan in December.

➤ Again, welcome to Bethesda to what promises to be an extraordinary meeting.

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Speeches

THE WHITE HOUSE
WASHINGTON

August 11, 1997

TO: Bob Boorstin
Shelley Fidler
Peter Orszag
David Sandalow
Gene Sperling
Dan Tarullo

FROM: Todd Stern

I need your comments on the
attached ASAP. Thank you.

DRAFT #2

"A Discernible Human Influence"

Remarks of

Secretary of the Interior
Bruce Babbitt

before the
Plenary Session of the
Ecological Society of America

Albuquerque, New Mexico
August 12, 1997

OPTIONAL FORM 99 (7-90)

FAX TRANSMITTAL

of pages = 14

To <u>Todd Stern</u>	From <u>Alex Mathiesen</u>
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Fax # <u>456-2215</u>	Fax #
NSN 7540-01-317-7368	5008-101 GENERAL SERVICES ADMINISTRATION

Todd,

Here is a new draft which, I think you will see, reflects many of the White House's concerns. If you could take another look and let me know what you think, we would appreciate it. (Obviously, the sooner the better as the speech is being delivered tomorrow morning.)

I appreciate the opportunity to speak to this joint meeting of the Ecological Society of America and the Nature Conservancy. Your shared concern for the conservation of biological diversity is a powerful force in the ongoing struggle to preserve our natural heritage. The theme of this conference, "Whither Planet Earth?," underscores the urgency of bringing scientists and conservation leaders together to address issues of global concern.

Of the many concerns that we share, I have selected just one - climate change - to discuss with you today. For the time is at hand for you, scientists and conservationists, to help communicate what we already know about climate change to the American people and to [translate for] them the meaning of these

Thanks.
Alex

findings. With the public's support, we must then formulate an effective program to control the carbon pollution that is degrading the atmosphere and threatening our future on this planet. For we are at the threshold of a momentous decision; we can step forward now and actively confront this threat, or we can fall back and passively await the inevitable onslaught of [human caused] climate change, with its potentially catastrophic consequences. In either case, it will be left to future generations to judge the quality of our stewardship.

As the Secretary of the Interior, I recognize the potentially devastating effects that climate change will have on our parks, refuges, and other public lands. For instance, animals and plants may not be able to migrate or adapt fast enough to keep pace with their receding habitats. And we cannot move our park boundaries to follow receding ecosystems. Of course, the threat of climate change also has vast implications for our entire society. And I would therefore like to discuss climate change in its full context.

In December, the world's nations will gather in Kyoto, Japan to decide whether to make new [and expanded] commitments to reduce carbon emissions to the atmosphere. Negotiations will not be easy because climate change brings new and complex scientific and political questions, and in the face of this challenge, some would counsel continued inaction. However, as you well know, we do not have the luxury of waiting. For there are very long time constants involved in the climate system.

FROM: DEPT OF INTERIOR 202 208 4581 155703 11 10712 1000 1700/17

Fortunately, we start down the road to Kyoto with considerable precedent to guide our decisions. Just a few decades back, the nations of the world confronted a comparable problem – the impending destruction of the stratospheric ozone layer by industrial chemicals called chlorofluorocarbons.

Today the nations of this planet are moving together to successfully control and eliminate these substances, and the recovery of the ozone layer that sustains life by protecting us from harmful radiation now seems assured. The political, scientific and diplomatic process that produced this result is known as the Montreal Protocol, and it provides important lessons as we now confront the issues of climate change.

The first lesson that we can learn from the Montreal Protocol process is the crucial need for leadership from the scientific community.

When Molina and Rowland discovered and illucidated the basic chemical reactions responsible for ozone destruction, there were plenty of skeptics within the scientific community. Soon, however, the evidence accumulated to reach what we could call “scientific consensus.” But scientific consensus is not a form of revelation; it is produced by scientific leaders stepping forward to articulate what is known, and what is not known, and to state in plain language, comprehensible to us non-scientists, the inferences that can be reasonably be drawn from the available evidence. And that of course is the point that we have now reached with the 1995 Report of the Intergovernmental Panel on Climate Change, or IPCC, the findings of which I will now summarize.

The IPCC report is a product of the careful deliberations of a group of more than 2000 scientists who, under the auspices of the Framework Convention on Climate Change, were charged with the task of assessing the current state of knowledge regarding both the existence of the global warming phenomenon and the likely impacts of climate change on physical and ecological systems, human health, and socioeconomic sectors. The IPCC body includes the participation of the world's leading climatologists, chemists, soil scientists, foresters, ecologists, energy technologists, economists, statisticians, geochemists and glaciologists, among others.

This panel of eminent scientists concluded that, and I quote, "the balance of evidence suggests that there is a discernible human influence on global climate." The strength of this statement, and the more detailed findings of these scientists, are particularly remarkable given the conservative, 'lowest-common-denominator' conclusions that are typical of international panels assembled to deliberate policy-relevant scientific questions.

The basic principles of the greenhouse effect are well understood. Are there uncertainties? Absolutely. Is there still more to be learned about the atmospheric chemistry associated with climate change processes? Sure there is. But we should be very clear with the public about what we do know. Human activities are changing the composition of the earth's atmosphere in unprecedented ways. The greenhouse gases released as a result of our actions are contributing to global climate change. The earth is warming it is that simple.

FROM : DEPT OF INTERIOR 202 208 4501 155700 11 10-12 1000 1000 1000 1000

We know that human activities – principally the burning of fossil fuels – have caused atmospheric concentrations of carbon dioxide to increase by 30% during the last century. In that same time period, global mean surface air temperature has increased by between 0.5 and 1.1 degrees Fahrenheit. Moreover, the ten warmest years, since the advent of instrumental recording devices in 1860, have all occurred within the last two decades. The IPCC projects that the average global air temperature will rise by another two to six degrees Fahrenheit by the year 2100. Such a rate of warming would probably be greater than any seen in the last 10,000 years.

Global sea level has risen by four to ten inches over the past 100 years and could rise another six inches to three feet by the year 2100. Under such a scenario, one could expect substantial loss of coastal land and even small islands. The IPCC estimates that a 19-inch sea level rise would put approximately 92 million people at risk of flooding due to storm surges.

From these facts, the IPCC report draws some reasonable inferences, one of which is that “climate change is likely to have wide-ranging and mostly adverse impact on human health with significant loss of life.” A general warming, drawing more moisture into the atmosphere, will create a more vigorous hydrological cycle with more severe droughts and flooding and extremes of hot and cold weather. A northward spread of malaria, dengue fever, and other vector-spread diseases is also anticipated as a result of atmospheric warming. Those at risk of infection from malaria could increase to 60% of the world’s population

over the next century, with an additional one million malaria-related deaths per year.

We also cannot discount the possibility that global warming could trigger sudden and catastrophic climate change such as those that occurred at the beginning of the Holocene Era, approximately 10,000 years ago. In those climate episodes, average global temperatures fluctuated significantly within a single human lifetime, with catastrophic consequences. We, of course, do not yet know the cause of these abrupt shifts but prudence suggests that we not risk our future by heedlessly pushing the system away from stability and toward possible threshold changes. It is no coincidence that human civilization has flowered in the last 10,000 years of climate stability; we must not compromise the next millennia by careless inattention to the cumulative effects of our activities in this century.

This IPCC consensus is still being attacked by a few scientists on the fringe, just as there remain a handful of scientists who still refuse to accept the scientific consensus that brought about the Montreal Protocol.

Having achieved scientific consensus, the next urgent task is to form a public consensus that can be translated into political and diplomatic results. The Scientists' Statement on Global Climatic Disruption – signed by more than 2600 American scientists endorsing the conclusions reached by the IPCC and calling on political leaders to take steps to reduce anthropogenic carbon emissions – is an

important beginning. But it is only a beginning, for ultimately every scientist should consider his or her civic obligation to inform the broader American community of these issues.

A second crucial lesson learned from the Montreal Protocol process is the need for support and leadership from American industry. The Montreal Protocol process did not reach a successful conclusion until the DuPont Company, then the principle manufacturer of CFCs, publicly acknowledged the problem and expressed confidence that a transition to substitute industrial chemicals could be made without disrupting our economy.

If the fossil fuel industry has been slow to react to the threat of climate change, there are now responsible leaders and companies stepping forward. Recently, British Petroleum broke ranks with the rest of the oil industry when John Browne, the company's Group Chief Executive, delivered a speech in which he acknowledged that, I quote, "there is now an effective consensus, among the world's leading scientists and serious and well informed people outside the scientific community, that there is a discernible human influence on climate, [and] it would be unwise to ignore the mounting concern." The Edison Electric Institute, representing electric utilities that burn fossil fuels, has taken a step forward by [finish with NYT article about what they said EEI did] The insurance industry, fearful of increased claims from storm losses, has come forward to join an informed discussion of policy alternatives.

Still, there are many who, by their inaction or opposition, seem to be emulating the unfortunate tactics formulated in recent years by the tobacco

industry. In the three decades since the Surgeon General first publicized the scientific consensus showing the connection between smoking and lung cancer, the tobacco industry has chosen to consistently mislead the American people by denial and misrepresentation. Millions of Americans dead of lung cancer are silent testimony to those tactics.

Now, however, there are encouraging signs that public opinion is awakening to the threat posed by climate change. Public opinion polls show that seventy percent of all Americans consider global warming to be a serious threat. Exactly fifty percent believe that the U.S. should sign an international treaty setting binding limits on carbon emissions.

The skeptics are nonetheless quick to argue that the CFC pollution that brought about the Montreal Protocol was, at least in retrospect, much simpler than the climate challenge, principally because CFCs were a specialized chemical produced only by DuPont and a handful of other companies. Yet, then as now, the opponents, after first denying the existence of a problem, then proceeded to claim that eliminating CFCs would be too costly to contemplate.

Then as now the opponents have mounted a new campaign to convince the American people that, however unfortunate it may be, we will simply have to accept the risks of global carbon contamination because it would be too costly to act. The American people should not accept this defeatist view of our future. Neither should American industry, for the facts tell a very different story. In every case where American industry has set out, under the spur of market forces

or regulatory standards, to develop new technologies to mitigate environmental impacts, it met with resounding success.

The argument that cleaning up pollution – in this case taking steps to reduce carbon emissions – will hurt the economy has been invoked time and time again during the last half century in opposition to virtually every environmental law passed by Congress. And in each case these naysayers have been wrong.

I first encountered these 'we can't do it' arguments when I was Governor of Arizona. Then, as now, my state was the nation's number one copper producer. During my nine years as Governor, the copper industry resisted compliance with the Clean Air Act and the underlying argument was always the same: compliance would put America at a competitive disadvantage in world markets and tip our trade balance in favor of foreign producers.

Well, the companies were finally brought into compliance with clean air standards and what do you suppose happened? The latest statistics indicate that, in 1995, Arizona produced 1.3 million short tons of copper, a 44% increase over what the state produced in 1970, the year the Clean Air Act was passed, and an 18% increase over 1980 production. Nearly 13% of Arizona's copper production in 1995 was sold to overseas customers, bringing in more than \$550 million to offset the nation's foreign trade deficit. U.S. copper production currently makes up 20% of world production – second only to Chile – and is growing faster than the rest of world production combined. And American technology companies are

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now exporting smelter control technology to other parts of the world where citizens are demanding that their industries follow the American example.

Here is another case. In the mid-1970s, the coal industry attacked *Senator Morris Udall* for sponsoring the Surface Mining Control and Reclamation Act. The coal industry claimed that the legislation, which required them to restore lands ravaged by strip mining, would drive up the price of coal, which would drive up the price of energy, which would drive up manufacturing costs, which would cause American companies to lose out in international markets. And what actually happened? America has increased coal production from 685 million short tons in 1976 to about one billion short tons in 1995, which constitutes 20% of world production. As of 1995, U.S. coal exports reached 89 million short tons, 50% higher than 1976 exports.

And, I might note, the coal industry made much the same arguments back in 1960 in opposition to the Mine Safety and Health Act, claiming that miners suffering from black lung disease was a regrettable but necessary cost that had to be incurred if the U.S. was to remain competitive. It wasn't true then and it isn't true now. The reality is that, American innovation in pollution control and prevention technology has improved the competitive position of American industry and generated more employment and more exports.

The same was true for the CFC-reliant industries in the wake of the Montreal Protocol. Then as now, objections among U.S. companies were raised as to the costs of technological change. A handful of large air conditioning manufacturers argued that it would take eleven years to get new technology to

market. But in less than six years they were marketing systems that were 40% more efficient than 1970 models and 20% more efficient than some 1990s models. The auto industry also complained that retrofitting car air conditioning units would be complex and cost over \$1,000 per car. Using much simpler options, technicians can now do it for between fifty and one hundred and fifty dollars.

The final fall back position of opponents is that, since that it will be difficult to negotiate a treaty fairly apportioning international efforts to limit carbon emissions, it would be better not to make the effort, or to wait, or to demand in advance, that all countries of the world, large and small, developed and less developed, must undertake identical commitments to limit emissions.

Here again the Montreal Protocol offers useful guidance. That treaty recognized there were significant differences between industrial countries and developing countries, and the negotiators managed to make adjustments reflecting those differences and to fairly apportion the compliance obligations. The Montreal Protocol contained two such conditions that were eventually agreed to by the parties: (1) a schedule allowing developing countries an additional ten years for compliance and phase-out, and (2) a fund established by the developed countries to provide technical assistance and technology transfer to developing countries to aid their transition.

Those who oppose negotiations will be quick to point out the many differences between the Montreal process and current climate negotiations. The circumstances are indeed different. Climate change is a more complex challenge and the Montreal treaty process is certainly not an exact guide for the present. But

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the Montreal process is a powerful example of how we can proceed from warning signs to scientific consensus to public consensus to productive negotiations that recognize national differences and work them into the fabric of an acceptable solution.

The reality is that the Montreal treaty process came in ahead of schedule and way below budget and managed to include the developing countries while allowing them more time to reach their compliance and phase-out targets – all of which should encourage us to get on with producing a climate change treaty.

There is no question that carbon contamination has created the most complex atmospheric problem that we have encountered on this planet. The production of energy from fossil fuels is deeply embedded in our way of life; the sources of contamination range from a peasant cooking over a coal fire to inefficient transportation to fossil fuel-based power plants generating thousands of megawatts of electricity.

And this very complexity, together with the urgency of finding solutions, is why we need increased involvement from the science community and conservation leaders. I recognize that the scientific community is typically reluctant to enter into policy debates, rightfully stressing that scientists are often most effective when they remain outside the continually shifting cross currents of daily political debate.

However, the scientific community has an unwritten compact with society – a responsibility to educate and inform. Thomas Jefferson believed that an informed citizenry would ultimately make the right collective decisions. You as scientists must provide the public with the information – the intellectual foundation – necessary to make one of the most important public policy decisions of our lifetime, a decision that will affect the lives of generations to come. I encourage you to take that responsibility very seriously.

There are occasions, of which this is surely one, when the stakes are so high, the issues so complex and the need for action so urgent that to remain on the sidelines would be effectively conceding ground to the self-serving opposition. Many of you signed the Scientists' Statement on Global Climate Disruption, which I applaud you for. You are speaking out just as you did in the 1950s to warn us of the dangers of atmospheric nuclear testing, as you did in the 1960s to inform us of the environmental impacts of indiscriminate pesticide use, and as you did again in the 1980s to educate Americans about the possible irreversible effects of CFC emissions into the atmosphere.

As President Clinton said during his recent White House roundtable discussion on climate change, "we have evidence, we see the train coming, but most ordinary Americans in their day-to-day lives can't hear the whistle blowing." It is now our task to help the American people hear that train whistle through all the background noise and to explain the meaning of that whistle by presenting the science of climate change and the reasonable inferences that can be drawn from

the scientific facts. It is not an easy task because the daily changes are invisible, and the cumulative calamity that will surely occur is not quite upon us. However, I am confident that reason and good judgment will prevail as they have in past debates over water pollution, acid rain, nuclear testing and the threat of CFC destruction of the upper atmosphere. The American people *will* make the right decision.

It is your task now to help us hear the whistle, and to join with us in bringing American leadership to the successful resolution of this impending crisis. Together, we can make a discernible human influence in the right direction.

Thank you.



United States Department of the Interior

OFFICE OF THE SECRETARY

Washington, D.C. 20240

speeches

To: Gene Sperling
Fax #: 202-456-2878
Re: Draft Speech from Sec. Bruce Babbitt
Date: August 8, 1997
Pages: 16, including this cover sheet.

FACSIMILE

Secretary Babbitt, who is on travel this week, asked that I send you this draft speech for your review, with the following message:

~~"Is this on message? I would appreciate your comments."~~

The Secretary is scheduled to deliver this on Tuesday, August 12 in New Mexico to the Ecological Society of America. If you have any suggested changes, the speechwriter, Alex Matthiessen, will be waiting for your call. You can reach him at (202) 208-4203, or by fax at (202) 208-4561. In order to send any updates to the Secretary this evening, he requests that you communicate edits to Alex by 4:00pm. Thank you.

Todd -

Two concerns for you to consider:

Two considerations:

- ① General tone ~~is~~ may be too ~~state~~ aggressive.

2) Discussion re developing economies on pages 11 -

From the desk of...

Maura McManimon
Special Assistant to the Secretary
Department of the Interior
1849 C Street, NW
Washington, DC 20240

202-208-7351
Fax: 202-208-6956

- Peter

DRAFT**Climate Change Speech**

**delivered by
Secretary Babbitt**

**for the
Plenary Session of the
Ecological Society of America**

August 12, 1997

*There are
those in industry
who say
negotiating is
wrong.*

I appreciate the opportunity to speak to this joint meeting of the Ecological Society of America and the Nature Conservancy. Your shared concern for the conservation of biological diversity is a powerful force in the ongoing struggle to preserve our natural heritage. The theme of this conference, "Whither Planet Earth?" underscores the urgency of bringing together science and conservation leaders to address issues of global concern.

Of the many concerns that we share, I have selected just one – climate change – to discuss with you today. For the time is at hand for you, the scientific community, to help us communicate what we already know about climate change to the American people and to help them interpret the meaning of these findings. With the public's support, we must then formulate an effective program to control

the carbon pollution that is degrading the atmosphere and threatening our future on this planet. We are at the threshold of a momentous decision; we can step forward now and actively confront this threat, or we can step back and passively await the inevitable onslaught of climate change, with its potentially catastrophic consequences. It will then be left to future generations to judge our folly.

As the Secretary of the Interior, I recognize the potentially devastating effects that climate change will have on our parks, refuges, and other public lands. For instance, animals and plants will not be able to migrate fast enough to keep pace with their receding habitats. And we will not be able to move our park boundaries to follow receding ecosystems. Of course, the threat of climate change has vast implications for our entire society. I would therefore like to discuss climate change in its full context.

In December, the world's nations will gather in Kyoto, Japan to decide whether or not to make specific commitments to reduce carbon emissions to the atmosphere. [The entire world is waiting to see whether the United States will assume its historic leadership role, or whether we will be held back by segments of the energy industry which have mounted a furious campaign to discredit the findings of science and to create political gridlock thereby delaying action for as long as possible.] The American people will of course have the final say and we will not accomplish much in Kyoto without their backing and support. We have

less than six months to mobilize public opinion - and we need your active participation, in the national debate that is now building toward a climax.

Unfortunately, large ~~sectors within the energy industry~~^{some} have embarked upon a campaign of misinformation and distortion calculated to confuse the public and pressure the Congress. Their campaign, the sole purpose of which is to serve their own short-term interests at the expense of the American people, employs a two-part strategy. The first is to deny the problem exists, distort the facts, and employ a handful of scientists willing to create the appearance of division within the scientific community. The tobacco industry used this tactic with great success for more than thirty years, since the surgeon general first warned of the health hazards of smoking. Millions of Americans, dead of lung cancer, are silent testimony to the success of these efforts. This strategy of denial could be called the Phillip Morris defense.

The second ploy, initiated by, among others, the Western Fuels Association, a trade group of coal companies, is to proclaim that any measures to control greenhouse gases will cost jobs and weaken our ability to compete in international markets. These are, of course, familiar arguments, made repeatedly in the past in opposition to the Clean Air Act, the Clean Water Act, the Surface Mining Control and Reclamation Act and even against efforts to reduce the incidence of black lung disease among coal miners.

Before discussing this campaign of distortion and deception, I would like to provide a brief summary – no doubt familiar to all of you – of what is known, and what is not yet known, about climate change.

br
The findings that I am about to summarize are based on the conclusions of the 1995 Report of the Intergovernmental Panel on Climate Change, or IPCC. The report is a product of the careful deliberations of a group of more than 2500 scientists who, under the auspices of the Framework Convention on Climate Change, were charged with the task of assessing the current state of knowledge regarding both the existence of the global warming phenomenon and the likely impacts of climate change on physical and ecological systems, human health, and socioeconomic sectors. The IPCC body includes the world's leading climatologists, chemists, soil scientists, foresters, ecologists, energy technologists, economists, statisticians, geochemists and glaciologists.

This panel of eminent scientists concluded that, and I quote, "the balance of evidence suggests that there is a discernible human influence on global climate." The strength of this statement, and the more detailed findings of these scientists, are particularly remarkable given the conservative, 'lowest-common-denominator' conclusions that are typical of international panels assembled to deliberate policy-relevant scientific questions. Moreover, the conclusions reached by the IPCC are fully endorsed by more than 2600 American scientists, most of whom do not serve on the IPCC panel. The endorsement, also known as the Scientists' Statement on Global Climate Disruption, goes even further in calling

on political leaders to take the necessary steps to reduce anthropogenic carbon emissions.

The basic principles of the greenhouse effect are well understood. Are there uncertainties? Absolutely. Is there still more to be learned about the atmospheric chemistry associated with climate change processes? Sure there is. But we should be very clear with the public about what we do know. Human activities are changing the composition of the earth's atmosphere in unprecedented ways. The greenhouse gases released as a result of our actions are contributing to global climate change. The earth is warming it is that simple.

We know that human activities – principally the burning of fossil fuels – have caused atmospheric concentrations of carbon dioxide to increase by 30% during the last century. In that same time period, global mean surface air temperature has increased by between 0.5 and 1.1 degrees Fahrenheit. Moreover, the ten warmest years, since the advent of instrumental recording devices in 1860, have all occurred within the last two decades. The IPCC projects that the average global air temperature will rise by another two to six degrees Fahrenheit by the year 2100. Such a rate of warming would be greater than any seen in the last 10,000 years!

Global sea levels have risen by four to ten inches over the past 100 years and, at current rates of carbon emissions, are predicted to rise another six inches to three feet by the year 2100. Under such a scenario, one could expect substantial loss of coastal land and even small islands. The IPCC estimates that a 19-inch sea

level rise would put approximately 92 million people at risk of flooding due to storm surges.

From these facts, the IPCC report draws some reasonable inferences, one of which is that "climate change is likely to have wide-ranging and mostly adverse impact on human health with significant loss of life." A general warming, drawing more moisture into the atmosphere, will create a more vigorous hydrological cycle with more severe droughts and flooding and extremes of hot and cold weather. A northward spread of malaria, dengue fever, and other vector-spread diseases is also anticipated as a result of atmospheric warming. Those at risk of infection from malaria could increase to 60% of the world's population over the next century, with an additional one million malaria-related deaths per year.

We also cannot discount the possibility that global warming could trigger sudden and catastrophic climate change such as those that occurred at the beginning of the Holocene Era, approximately 10,000 years ago. In those climate episodes, average global temperatures fluctuated as much as 20 degrees within a single human lifetime, with catastrophic consequences. We, of course, do not yet know the cause of these abrupt shifts but prudence suggests that we not risk our future by heedlessly pushing the system away from stability and toward possible threshold changes. It is no coincidence that human civilization has flowered in the last 10,000 years of climate stability; we must not compromise the next 10,000 by careless inattention to the cumulative effects of our activities in this century.

Given these realities, why do groups like the Western Fuels Association, the American Mining Association and the misnamed Global Climate Coalition persist in denying the facts? They do it for the same reason that the tobacco industry has spent thirty years misleading the public, concealing evidence, and suborning scientists to produce propaganda. They are renouncing corporate responsibility to pursue short-term gain at the expense of the public interest.

The principal tactic of the industry's campaign of distortion is to hire or subsidize the ^{few} ~~one~~ scientist ^{in a thousand} willing to take its position, and then to create the illusion of scientific dissent by parading them around the country to deliver speeches and to testify before Congress as scientific experts.

is to hire or

to prevent
Responsible
action

The "Leipzig Declaration on Climate Change," signed by 84 men and women in the U.S. and Europe, all of whom identified themselves as "scientists," is a good place to see these "scientists" at work. One of these scientists is a TV weatherman who attended college but never graduated. Another signer operates a weather service that tracks weather data but avoids the trickier task of forecasting.

Critics of consensus climate change science often lack scientific credentials. With few exceptions, they do not publish in peer-reviewed journals of physics, chemistry or atmospheric science. They do not publish because they cannot meet the professional standards of peer review that are at the heart of legitimate research science. They are propagandists, not true scientists.

There are, of course, some honorable exceptions to this campaign of distortion. Recently, British Petroleum broke ranks with the rest of the oil

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industry when John Browne, the company's Group Chief Executive, delivered a speech in which he acknowledged that, I quote, "there is now an effective consensus, among the world's leading scientists and serious and well informed people outside the scientific community, that there is a discernible human influence on climate." The insurance industry, fearful of increased claims from storm losses, has come forward to join an informed discussion of policy alternatives. But too many are still employing tobacco tactics.

Now at last, however, this campaign to deny the facts, to distort scientific research and to deceive the public is faltering, just as similar efforts by the tobacco industry have begun to fail. Public opinion polls show that seventy percent of all Americans consider global warming to be a serious threat. Exactly fifty percent believe that the U.S. should sign an international treaty setting binding limits on carbon emissions.

Recognizing that their denial strategy is failing, these trade association groups are now changing tactics. They have mounted a new campaign to convince the American people that, however unfortunate it may be, we will simply have to accept the risks of global carbon contamination because it would be too costly to act. The American people should not accept this defeatist view of our future. Neither should American industry, for the facts tell a very different story. In every case where American industry has set out, under the spur of market forces or regulatory standards, to develop new technologies to mitigate environmental impacts, it met with resounding success.

The argument that cleaning up pollution – in this case taking steps to reduce carbon emissions – will hurt the economy has been invoked time and time again during the last half century in opposition to virtually every environmental law passed by Congress. And in each case these naysayers have been wrong.

I first encountered these 'we can't do it' arguments when I was Governor of Arizona. Then, as now, my state was the nation's number one copper producer. During my nine years as Governor, the copper industry fought an unremitting battle to avoid compliance with the Clean Air Act – organizing rallies, running misleading advertisements, attempting to frighten labor unions, and often simply ignoring the law. The underlying argument was always the same: complying with the Clean Air Act would put America at a competitive disadvantage in world markets and tip our trade balance in favor of foreign producers.

Well, the companies were finally brought into compliance with clean air standards and what do you suppose happened? The latest statistics indicate that, in 1995, Arizona produced 1.3 million short tons of copper, a 44% increase over what the state produced in 1970, the year the Clean Air Act was passed, and an 18% increase over 1980 production. Nearly 13% of Arizona's copper production in 1995 was sold to overseas customers, bringing in more than \$550 million to offset the nation's foreign trade deficit. U.S. copper production currently makes up 20% of world production – second only to Chile – and is growing faster than the rest of world production combined. And American technology companies are

now exporting smelter control technology to other parts of the world where citizens are demanding that their industries follow the American example.

Here is another case. In the mid-1970s, the coal industry declared war against Morris Udall when he sponsored the Surface Mining Control and Reclamation Act. The coal industry, then as now, claimed that the legislation requiring them to restore lands ravaged by strip mining would drive up the price of coal, which would drive up the price of energy, which would drive up manufacturing costs, which would cause American companies to lose out in international markets. And what actually happened? America has increased coal production from 685 million short tons in 1976 to about one billion short tons in 1995, which constitutes 20% of world production. As of 1995, U.S. coal exports reached 89 million short tons, 50% higher than 1976 exports.

OK

76 held down

And, I might note, the coal industry made exactly the same arguments back in 1960 when it opposed passage of the Mine Safety and Health Act, claiming that the one miner in ten who died from black lung disease was a regrettable but necessary cost that had to be incurred if the U.S. was to remain competitive. It wasn't true then and it isn't true now. The reality is that, American innovation in pollution control and prevention technology has improved the competitive position of American industry and generated more employment and more exports.

Industry sectors, led by the Western Fuels Association, surely know that their arguments will fail as they always have in the past. So they are now putting forth a fall-back position, which you may have already seen in newspapers and

national journals from the New Republic to the Weekly Standard. Their goal-line defense is that the U.S. not commit itself to control measures unless all other nations simultaneously agree to equal carbon reduction requirements.

I am not suggesting that our country act unilaterally. However, history teaches us that when America leads, other nations inevitably follow, and that we lead most persuasively by being out front, demonstrating by our actions, the strength of our commitment.

Let me give you some examples. The world's first atmospheric pollution crisis began with the atmospheric testing of nuclear weapons in the 1950s. The increasing levels of strontium 90, cesium and iodine in the atmosphere sparked worldwide concern. The United States faced a choice much like the one we face today from atmospheric carbon contamination. Downplay the threat and wait on the sidelines until all nuclear powers were ready to sign a test ban treaty. Or lead, thereby ensuring that others would eventually follow. At the urging of President Eisenhower and then President Kennedy, the United States chose to lead, first by announcing a conditional moratorium on testing in 1958, and then in 1962 by entering into a treaty banning atmospheric testing even though two of the other four nuclear powers – China and France – refused to sign. By taking the lead and shaping world opinion, the United States predictably brought other nations into compliance. That initial effort led to a series of agreements to reduce the nuclear

threat, culminating in the comprehensive test ban treaty signed last year by President Clinton.

Another example. In the 1970s, two Nobel Laureate scientists discovered how our use of chlorofluorocarbons was depleting the protective layer of stratospheric ozone. The initial response from the industries involved was denial, followed by a campaign to discredit the science. One of my predecessors as Secretary of the Interior even suggested that, if there was a problem, we could safely ignore it by telling Americans to wear broad-brimmed hats and sunglasses whenever they ventured outside.

It was, however, American leadership that resolved the CFC threat in a series of international conventions that led to the signing of the Montreal Protocol. The Reagan Administration's decision to back a phase-out, despite heated internal debate, gave the negotiations much needed momentum by throwing the weight of the world's largest CFC consumer behind the Protocol. Then as now, the parties had to deal with the claims of developing countries to special consideration and they did so by devising a special compliance schedule. The schedule allowed developing countries to delay their compliance with CFC control measures and phase-out for ten years beyond the start date for industrialized countries. In addition, the Protocol established the Global Environment Facility to provide technical assistance and technology transfer to developing countries to aid their transition.

Then as now, objections among U.S. companies were raised as to the costs of technological change. A handful of large air conditioning manufacturers

argued that it would take eleven years to get new technology to market. But in less than six years they were marketing systems that were 40% more efficient than 1970 models and 20% more efficient than some 1990s models. The auto industry also complained that retrofitting car air conditioning units would be complex and cost over \$1,000 per car. Using much simpler options, technicians can now do it for between fifty and one hundred and fifty dollars.

I would also note that on the eve of the crucial round of negotiations leading to the Montreal Protocol, it was the DuPont Company, the leading manufacturer of CFCs, that stepped forward, acknowledged the problem, and then played a leadership role in the successful transition to a world free from the threat of atmospheric destruction. Is it too much to expect that today the leaders of the fossil energy industry will follow the example of DuPont by stepping forward in response to President Clinton's call for action? I personally don't think so. There are encouraging signs that corporate leaders will step forward to help our country manage this transition as they have done in the past. There is every reason to believe that we can act before it is too late, and that our economy will be stronger and more competitive as a result.

There is no question that carbon contamination has created the most complex atmospheric problem that we have yet encountered on this planet. The production of energy from fossil fuels is deeply embedded in our way of life; the sources of contamination range from a peasant cooking over a coal fire to

inefficient transportation to fossil fuel-based power plants generating thousands of megawatts of electricity.

And this very complexity, together with the urgency of finding solutions, is why we need increased involvement from the science community and conservation leaders. I recognize that the scientific community is typically reluctant to enter into policy debates, rightfully stressing that scientists are often most effective when they remain outside the continually shifting cross currents of daily political debate.

However, the scientific community has an unwritten compact with society – a responsibility to educate and inform. Thomas Jefferson believed that an informed citizenry would ultimately make the right collective decisions. You as scientists must provide the public with the information – the intellectual foundation – necessary to make one of the most important public policy decisions of our lifetime, a decision that will affect the lives of generations to come. I encourage you to take that responsibility very seriously.

There are occasions, of which this is surely one, when the stakes are so high, the issues so complex and the need for action so urgent that to remain on the sidelines would be effectively conceding ground to the self-serving opposition. Many of you signed the Scientists' Statement on Global Climate Disruption, which I applaud you for. You are speaking out just as you did in the 1950s to warn us of the dangers of atmospheric nuclear testing, as you did in the 1960s to inform us of the environmental impacts of indiscriminate pesticide use, and as you

did again in the 1980s to educate Americans about the possible irreversible effects of CFC emissions into the atmosphere.

As President Clinton said during his recent White House roundtable discussion on climate change, "we have evidence, we see the train coming, but most ordinary Americans in their day-to-day lives can't hear the whistle blowing." It is now our task to help the American people hear that train whistle through all the background noise and to explain the meaning of that whistle by presenting the science of climate change and the reasonable inferences that can be drawn from the scientific facts. It is not an easy task because the daily changes are invisible, and the cumulative calamity that will surely occur is not quite upon us. However, I am confident that reason and good judgement will prevail as they have in past debates over water pollution, acid rain, nuclear testing and the threat of CFC destruction of the upper atmosphere. The American people *will* make the right decision.

It is your task now to help us hear the whistle, and to join with us in bringing American leadership to the successful resolution of this impending crisis.

Thank you.

speedy

U. S. State Department

Office of the Under Secretary for Economic, Business, and Agricultural Affairs
Room 7256**FAX**

Date:

9/11/97

Number of pages including cover sheet:

17

To:

Todd Stein

Phone:

Fax phone:

456-2215

CC:

From:

Peter Bass

Phone:

202/647-7575/7688

Fax phone:

202/647-9763

REMARKS:



Urgent



For your review



Reply ASAP



Please comment

Atwood contact numbers ^① 212-841-1127
→ POC: Carla Kopell

or DC: 202-647-9620



U.S. AGENCY FOR
INTERNATIONAL
DEVELOPMENT

September 10, 1997

The Administrator

NOTE TO STU EIZENSTAT

Stu,

As I mentioned in Monday's State Staff meeting, attached is a draft of the speech on climate change that I am scheduled to deliver on Thursday afternoon to the World Policy Institute in New York. I would appreciate any comments or suggestions that you may have.

Thanks.

J. Brian Atwood

Attachment: a/s

cc:Tim Wirth

DRAFT

Remarks of
J. Brian Atwood
World Policy Institute

September 12, 1997
New York, New York

I want to thank the World Policy Institute for inviting me here today. I am particularly pleased to have the opportunity to visit with my old friend Steve Schlesinger.

Only infrequently does a public policy issue come along that cannot be ignored. I would submit that one of the most important domestic and international challenges we now face is the compelling need to address global climate change. I would go even further and suggest that this phenomenon -- this warming of the earth's surface, the rising of the seas and the disruption of the globe's ecosystems -- is a national security issue of first order.

How then will we address this threat? Our first challenge is to speak truthfully and persuasively to the American people. In this century, America stepped up to the challenge of fascism and communism because we collectively believed these ideological systems were repressive and contrary to our interests. We did not always agree on the method when we confronted these international challenges, but there was little dispute over the objective.

Climate change, however, is a very different type of public policy issue. It is a phenomenon rather than an enemy. For many years we conducted a debate over the science. While that debate has not entirely ended, it has become less a debate over whether the earth's surface is warming and more a debate over how fast. Two years ago, the inter-governmental panel on Climate Change, a group of 2,000 eminent scientists, including many Nobel laureates, concluded that "the balance of evidence suggests that there is a discernable human influence on global climate."

For those of us who have been frustrated for years over the inconclusiveness of this debate, this statement was welcomed. But in a peculiar way, the consensus among scientists underscored another difficult aspect of this issue. In effect, the scientists did not identify some evil foreign enemy, they were telling us that we were to blame. They were telling us that economic progress built on modern machines powered by fossil fuels was the chief cause of climate change. They not only took some time to reach strong consensus over the evidence, when they got there, they told us, to borrow the line from the "Pogo" cartoon strip, "we have met the enemy and he is us."

This presents policy makers with a very difficult challenge. It is a challenge to our political system, our economy, and to our society as a whole. How do we mobilize support for the defense of our society when the tools available to us involve modifying our own behavior?

The biggest fear of many who oppose the President's commitment to negotiate international carbon emissions targets and specific timetables is that our very healthy economy would suffer. Numerous economic simulations have been run demonstrating that future economic growth would be hampered if the United States agrees to limit the use of carbon-producing fuels. However, the economic models that predict a negative impact fail to consider the tremendous cost we are already incurring because of climate change -- costs due to weather-related disasters, damage to agricultural capacity, fisheries and human health. These models also fail to assume that enhanced international collaboration to solve this global problem could actually spur economic growth as new technology is developed and shared.

In sharp contrast to those who argue that we cannot afford to
 address climate change, ~~a recent study by the World Resources~~
 Institute (WRI) found that a reduction of carbon dioxide
 emissions could well lead to a net increase in the U.S. gross
 domestic product if we make a few broad assumptions: (1) that
 our economy will respond with innovation and efficiency; (2) that
 we will implement our commitments using market mechanisms,
 and (3) that we include as part of the equation the damage to the
 economy that would be caused by global climate change.

WRI also concluded that over ninety percent of U.S.
 industries expend less than two percent of their budgets for
 energy. The profit motive has already led to major savings
 through more energy efficient systems and with the introduction
 of the new "clean technology" we can expect to save even more
 while lowering emissions. With incentives, perhaps we will see
 alternative energy sources such as wind, solar and
 hydroelectricity come on stream more quickly.

The Administration is working diligently to examine the economic
 impact of emissions reductions. On balance, I firmly believe that the costs to
 the overall economy shall be manageable, particularly if we can
 achieve all our rego goals, incl. intl. em. trading, & JI)

Motivated by concerns about U.S. trade competitiveness and worries that prior negotiations, which did not obligate developing countries to achieve specific reductions in emissions, would disadvantage the United States, the Senate recently passed a resolution sponsored by Robert Byrd of West Virginia. The Byrd resolution states that the U.S. Senate would not support a treaty that excludes 130 developing nations from binding commitments, or that would cause serious economic harm to the United States.

This resolution passed by a 95-0 vote. There is no doubt about the advice it conveys and the Clinton Administration has heard it loud and clear. We also were impressed by Senator Byrd's very personal remarks in his floor address. The Senator acknowledged the potential damage of climate change when he said: "... I begin with the premise that there's something going on that's very serious that's already having an impact on my life, your life and the lives of all Americans and peoples around the world. And I also begin with the premise that if we recognize that fact and agree that there's something going on, we need to work together in dealing with this problem....We need to work together else my children and my grandchildren and their grandchildren will have an intensified problem and one which will be even more costly in its resolution."

Senator Byrd performed a real service in advancing the public debate on this issue in that his resolution was premised on an acceptance of the problem all Americans face. [Still, the Senate's admonition presents us with a real dilemma; progress to date in reaching international agreement has been based upon the assumption that industrialized nations -- including in particular the United States -- would take action first, to be followed by the developing world.

In fact, the Berlin Mandate, which created the framework for the Kyoto negotiation states that "...Parties [to the Convention on climate change] should protect the climate system for the benefit of present and future generations of humankind, on the basis of equity and in accordance with their common but differentiated responsibilities and respective capabilities.

Accordingly, the developed country Parties should take the lead in combatting climate change and the adverse effects thereof." It

~~is very clear that developing countries will not be willing to take on commitments until and unless we do first.~~

From the meeting in Rio de Janeiro on, the developing countries have taken the view that they will not be willing to take on commitments until and unless we do first. In this, they have been supported by the Europeans. ~~(Their attitude seems to be that we have achieved economic progress and we are the biggest cause of the problem. Therefore, we must take action first.~~

Thus, the dilemma: do we push for a comprehensive agreement on targets and timetables for all countries at Kyoto, knowing that such a posture would likely cause the negotiations to collapse? Or do we go along with the framework leaving the developing countries for later, thus assuring defeat or inaction on the treaty in the Senate?

It is clear that what we need is some give on all sides. The world cannot address this problem without U.S. leadership and that is exactly what the President is providing. Beginning with his speech to the United Nations in June, his East Room seminar with scientists in July, and his planned White House conference on climate change in October, the President joined by Vice President Gore is attempting to lead us away from a dilemma and toward a creative solution.

Part of that solution is a commitment on the part of the United States to provide \$1 billion to help the developing world to address climate change over the next five years. USAID is currently working on an action plan for the use of those funds, a plan that will be the focus of dialogue with developing countries, the private sector, the World Bank and others starting in October.

Though it is largely an untold story, we have made great progress since 1990, working on climate change issues with the developing world. We have done so by focusing on those interventions that make economic and development sense -- "no regrets" actions that increase energy efficiency, facilitate the transfer of clean technologies, foster the use of renewable energy, and promote forest preservation and low impact logging. By pursuing such common sense approaches, countries are not only reducing the rate of growth in their greenhouse gas emissions, they are also enhancing their competitiveness, reducing imports of fossil energy and decreasing local air pollution.

Perhaps the most critical way in which developing countries have been addressing the threat of climate change has been the sweeping policy reforms in the energy sector that have taken place in Asia and Latin America. Energy price subsidies in developing nations have been cut by 40 percent since 1990 as countries have moved towards market mechanisms and a broader role for the private sector. Energy sector privatization is dramatically increasing the efficiency of operations.

The progress we have made, however, does not change significantly the projected emissions from the developing world. By the year 2020, the developing world will account for half the greenhouse gas emissions generated by humans worldwide.

Emerging markets such as China, India and Brazil will be major sources of damaging greenhouse gas emissions if concerted action is not taken soon to encourage energy efficient systems, clean technologies and the protection of forests that absorb and retain the earth's carbon.

How do we convince these developing countries to go beyond "no regrets" efforts and join an international regime that will set targets and monitor emissions? The first step must be for the United States to agree to its own binding targets and timetables. When we begin implementing a program at home, we will have removed the biggest obstacle to a truly international system.

The second step must be to engage in a partnership with developing countries today to cooperate in disseminating clean energy technology. By providing advice and expertise on the economic and environmental benefits of a shift to less carbon intensive development, we can help developing nations prepare to take on commitments. We can also help demonstrate that combatting climate change can help stimulate private investment.

One important tool for fostering clean technology transfer in countries is what is known as "joint implementation." If recognized by the climate change convention, joint implementation would allow U.S. companies to offset their domestic greenhouse gas emissions through investments abroad. U.S. greenhouse gas emitters would have greater flexibility in meeting their targets, and developing nations would benefit from the transfer of "climate friendly" U.S. technology and knowhow. Already pilot joint implementation projects are underway in such diverse countries as Mexico, Costa Rica, Indonesia and Russia.

Implementing President Clinton's commitment of \$1 billion for developing countries gives USAID a unique opportunity to help lead the donor community on the climate change agenda. We look forward to the opportunity to work closely with the World Bank, UNDP and other bilateral donors. And we fully intend to work in close partnership with the U.S. private sector to achieve our shared objectives. By forming effective partnerships with multilateral lending institutions and the private sector, we can have an impact not only on greenhouse gas emissions, we can also move developing nations away from rigid negotiating positions by demonstrating that it is in their interest to agree to targets under a joint implementation framework.

We cannot afford delay or denial. The world is already beginning to feel the impact of climate change. In the first half of the 1990s, insurers paid out \$57 billion for weather-related losses worldwide compared with \$17 billion for the entire decade of the 1980s. Over the last three decades, total annual economic losses worldwide from natural disasters have grown from an average \$3.7 billion to \$11.4 billion. The insurance industry worldwide must already count on an average burden from natural catastrophes of \$5 billion per year.

Scientists predict that global temperatures will rise by 1 to 3.5 degrees centigrade by 2100. The consequences to the United States will be severe. 9,000 square miles of coastal areas could be flooded. More frequent and severe droughts and floods could occur in California, Missouri, Arkansas, Texas, the Great Basin. Heat and cold-related deaths in cities throughout the United States will rise. Disease bearing vectors such as malarial mosquitos could enter the United States.

Sadly, the consequences in developing nations could be far worse. Island chains such as the Maldives and coastal nations such as Bangladesh would be devastated. Climate change would disrupt agriculture and natural habitats, cause severe droughts and floods, precipitate vast forced migration, and speed the spread of infectious diseases. Well over 40 million more people would suffer from hunger and famine.

Climate change is an issue that we cannot simply wish away. Whether or not we choose to take responsible action today, will have a profound impact on the lives of our children. We owe it to the next generation not to leave them a world of submerged coastlines, human tragedy and lost economic opportunities. Our place in history demands that we not hide from the consequences of our own actions. I dare anyone to walk the streets of New York, Calcutta or Mexico City and tell me that human development, and our reliance on fossil fuels, is not changing the world around us. We must be honest about the challenge that lies before us, and we can leave this world a better place than we found it.

Thank you

speeches



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Remarks by U.S. Secretary of Commerce William M. Daley
Greenhouse Gas Emissions Trading Policy Forum

[As Prepared for Delivery]

Good afternoon. I am delighted to join you. It's a special pleasure to be here at the Union League Club. I have hanging over the fireplace in my office in Washington a portrait of Theodore Roosevelt -- the president who signed the bill creating the Commerce Department -- which the Club was kind enough to lend me.

Let me begin today by congratulating the United Nations Conference on Trade and Development and the Earth Council for launching this important environmental initiative. The move towards an international greenhouse gas emissions market, similar to the successful U.S. program for cost-effectively lowering acid rain, is both timely and appropriate. I also want to recognize Chicago executive, Dr. Richard Sandor, and the government of Costa Rica for their trail-blazing efforts in this regard.

The Clinton Administration is deeply committed to, in the President's words, giving our children a world worth living in. Last week in a meeting with U.S. business CEOs, President Clinton challenged the group to prove that an economy can grow, while not only preserving, but actually enhancing the environment. No one has been more out front on this issue than Vice President Gore, who is actively working with both government and industry to help our nation meet its economic and environment goals.

The President and Vice President -- all the members of this Administration -- strongly believe that environmental commitments can complement economic objectives. Through far-reaching dialogues, healthy debate, and public-private partnerships, we can find responsible, cost-effective ways to foster family and community friendly growth.

The Administration's Clean Car Initiative, officially known as the Partnership for a New Generation of Vehicles, is a prime example of this approach. Working together, seven federal agencies, the "Big Three" auto makers, 20 national laboratories, and over 300 auto suppliers and universities are developing vehicles with three times the energy efficiency of today's automobiles - with no sacrifice in cost, comfort or safety. I have met with the executives involved. The progress is real. Even those who were skeptical originally are now excited.

Public-private partnerships can work. And if ever an issue called out for a cooperative approach, it is climate change. This isn't about dotting the i's in a regulatory finding or making minute calculations that will affect a small handful of people. This is not a single industry problem. It is not single city problem. It is not a single country problem. It is a human problem that, unlike other environmental issues, affects every person, every business and every government in this world.

To solve it, to promote the best interests of our businesses and workers and generations to come, we need cooperation, not confrontation. This battle will be won by industry and government reasoning and working together.

So let me be clear at the start what my message is. We believe that the long-term threat of global climate change is real. We believe that we must take action now. We also believe that we can shape an agenda that allows us to preserve our environment and grow the economy. As Teddy Roosevelt said, "The nation behaves well if it treats the natural resources as assets which it must turn over to the next generation increased, and not impaired, in value."

We can do this by working creatively and responsibly at home and with other nations to develop a climate change policy. The key questions that confront us at this moment are how and when to begin. Let me answer that second question first. Again I say, we must begin now. Not because of the danger of an imminent disaster. But studies do show that emissions are growing. If we are to avert a greater problem later, we need to act now.

What do we know about climate change? We know that carbon dioxide warms the planet and that by pumping more of it into the atmosphere, we are changing our climate. We know that we've had more extreme weather conditions in the United States in the last five years than we had in the previous 30. We know that rising emissions of greenhouse gases trap heat within the earth's atmosphere. We know that global average surface temperature has increased, and the last few years have been the warmest of the past century. We know that, despite the naysayers, the science is compelling: there is a discernible human influence on global climate. We know that while we cannot precisely predict what or where the effects of the climate changes taking place will be, the net effect is unlikely to be good -- and the shift in temperature may be abrupt and occur in ways that we may not predict. And, finally, we know deep in our hearts that we do not want to gamble with our children's future.

I have talked to the experts. From Commerce Department scientists who are among the world's leading researchers into the atmospheric phenomenon and effects surrounding climate change and its likely impacts -- and from the Intergovernmental Panel on Climate Change, comprised of the world's preeminent scientists -- the best scientific evidence indicates that global warming is occurring. And that it could have profound consequences for the economy and the quality of life for us -- and for future generations. The time to address this threat is now.

I have reviewed with the Commerce Department economists who managed an interagency climate change analysis their recommendations on responses to the impact of climate change.

Chief among these is a far-sighted technology program that targets emission control and reduction. We need to sit down with concerned industry leaders and find ways to accelerate the development and diffusion of innovations that achieve these goals. We need to start thinking big and "out of the box." The benefits would be multiple. Reduced emissions and a healthier environment foremost. And beyond this, well-designed processes reduce total business costs and drive economic growth.

By some estimates, up to half of U.S. economic growth since World War II has been fueled by advanced technologies. New energy and energy efficiency technologies, as well as wholesale new ways to make and use products and services, will create new markets and new opportunities for U.S. companies and businesses worldwide.

Also noteworthy is the recent study which shows that establishments that use advanced technologies are more productive, pay higher wages, offer more secure jobs and increase employment more rapidly than firms that do not.

The interagency analysis indicates that capital incentives are important to managing climate change. Investment triggers capital stock turnover and technology advances, the key to emission reduction. Technological innovation is the principal means for moving beyond the outdated tradeoff between jobs and the environment. Therefore, investment incentives must be considered as part of climate change strategy. We believe that pro-investment policy is pro-environment, pro-growth policy.

At the same time, we realize that though the economic costs of dealing with greenhouse gases are transitional and relatively small -- the equivalent of a 25 cent increase in the price of gasoline by some estimates -- these should include compensation for those workers adversely impacted.

The United States is committed to constructing a climate change strategy that is both responsible and reasonable -- a strategy that recognizes the near-term concerns of American workers and businesses -- and the long-term benefits to all of America and all of the world that a healthy environment brings. I will be working closely with the American business community to develop a plan that achieves our twin goals of promoting economic growth and preserving the environment.

I have one final and very important point. As this forum pointedly demonstrates, solving the climate change problem cannot be a sole source endeavor. The whole world must be involved. All nations -- developed and developing -- must participate. We cannot and will not agree to a international system that imposes constraints on developed countries, but leaves developing countries without obligations. We won't agree to such a system because it wouldn't work. It wouldn't solve the global challenge of reducing greenhouse gas emissions. And it would unfairly hurt U.S. business. This will be a key element of the U.S. proposal for any worldwide effort.

As British Petroleum CEO John Browne told a university group last month in a speech on climate change, "The cultures of politics, science and enterprise must work together if we are to match and master the challenges we all face. Our future is a common one. So too needs to be our resolve."

I want to again congratulate you for promoting this forum and putting together this important initiative. I look forward to working with all of you toward a healthy global environment.

Thank you.

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HEADLINE: Global-warming focus is needed -- Bill Daley

SOURCE: KEITH HALE

BYLINE: BY BRENDA WARNER ROTZOLL

BODY:

U.S. Commerce Secretary William M. Daley said Friday that American industry could profit greatly by developing and adopting technology to reduce production of gases that cause global warming.

It won't happen if government doesn't help fund basic research on advanced technology, or if business is not involved in all efforts to reduce pollution, said Daley, during a meeting with the Sun-Times editorial board and a speech to the Greenhouse Gas Emissions Trading Policy Forum at the Union League Club.

"By some estimates, up to half of U.S. economic growth since World War II has been fueled by advanced technologies," Daley said. "New energy and energy efficiency technologies, as well as wholesale new ways to make and use products and services, will create new markets and new opportunities for U.S. companies and businesses worldwide."

Daley said government must fund basic research because business won't -- it is too focused on immediate returns.

On his first official trip home to Chicago since joining the Cabinet, Daley said much government-funded research has stopped since the end of the Cold War. "Japan will spend in research and development 20 times what we do. It's crazy," he said.

The whole world must participate in the battle against global warming, Daley said. "We cannot and will not agree to an international system that imposed constraints on developed countries, but leaves developing countries without obligations," he said.

Real change in controlling harmful emissions will take place "only if the business community is involved," he said.

GRAPHIC: Commerce Secretary William M. Daley said Friday that the government should help fund research to end global warming.

Remarks
For
The Vice President
At
Climate Change Event
March 17, 1995

(ACKNOWLEDGEMENTS FROM ADVANCE)

I'm so pleased to be here again. I was ushered in by some of GW's Americorps students. They re doing such great work. They have a tremendous goal: to recruit 1,000 university and community volunteers for 75,000 hours of community service per year.

Fifteen Americorps students are a part of the Green University Initiative. They are working to draft a model environmental audit plan that will establish environmentally sound and cost saving practices.

Further, I'm so pleased to be here on Saint Patrick's Day -- one day each year, no one can possibly say I'm too green.

And what better day is there to address the vital issue of climate change?

But we can't limit the wearing of the green to just today: we must continue in two weeks time, when more than 120 different countries will go to Berlin to begin the first Conference of the Parties for a Framework Convention on Climate Change.

Since it's Saint Patrick's Day, it's appropriate to begin by quoting an old Irish politician, Sir Boyle Roche. I'm told he once asked, late in the last century:

"Why should we put ourselves out of our way to do anything for posterity;
for what has posterity done for us?"

He might have done well in this session of Congress.

Posterity is particularly relevant when talking about global climate change. Our actions

today will have far-reaching implications for the environment we leave to future generations.

Commitment to posterity requires that we accept and understand the profoundly altered nature of human civilizations relationship with the ecological systems of the earth--manifested by the destruction of rainforests and species, the pollution and widespread degradation of other important ecosystems from the Aral Sea to the network of coral reefs in the oceans of the world.

This radical change has taken place over the course of my lifetime due to the confluence of three inter-related factors: the population explosion, rapid acceleration in S&T, and a dramatic philosophical shift in human thinking which leads many to conclude we need not take responsibility for the future implications of today's actions.

The baby boom I grew up in was only a small part of a global population explosion. If you drew a chart depicting the growth of human population from thousands of years ago to World War II, you'd see a very gradual rise. It took the entire history of the human species to reach two billion people in 1940.

But for the past 45 years, the population line on your chart would be almost vertical. Global population is now almost three times what it was before the war.

What if you overlay that chart with lines for emissions of greenhouse gases and other environmentally-harmful emissions?

The lines look all too similar.

These trends, difficult to understand individually are almost incomprehensible when taken together. But the prospect of global significant irreversible climate change compels us to understand and to come to grips with these dramatic new realities.

13 years ago, I chaired the first hearings in Congress on the issue of climate change. If you had told me how much we would learn in little more than a decade, I probably wouldn't have believed you. A great deal of progress has been made in our understanding of how the atmospheric system works -- especially how it relates to the oceans and land. We are still a long way from having all the answers, but we have acquired some vital understanding.

There is--the revisionist few notwithstanding--scientific consensus on the most salient issues:

- We know that greenhouse gases are building up in the atmosphere. Concentrations of carbon dioxide have increased about 25% since the industrial revolution. Methane has more than doubled. Nitrous oxide has gone up by 15 percent.
- Scientists also agree that continuing this buildup of greenhouse gases will cause the climate to change.

The scientific community can't tell us the pace or pattern of these changes, but they are telling us change is coming. The international consensus is that:

- The global surface temperature could increase from an average of two to eight degrees Fahrenheit over the next century. That is a rate unseen on the planet for the last 10,000 years. And the United States and high latitudes are projected to warm even more -- with increases up to 10 degrees Fahrenheit. In just the last century, the Earth's temperature has risen by about a degree Fahrenheit. The nine warmest years this century have all occurred since 1980 even though the eruption of Mt. Pinatubo held down temperatures for 3 years.

Already there is ominous evidence of significant change: decrease in Northern

Hemisphere snow cover and Arctic sea ice; alpine glaciers are continuing to retreat; sea level continues to rise; average precipitation in the lower 48 states has increased during the past century by about five percent, and torrential rains have increased in the summer during agricultural growing seasons.

These are troubling, complex and challenging issues to confront.

Follow, if you will, this increasingly likely scenario. A warmer earth alters precipitation, soil moisture, and sea level. Ideal ranges for crops, forests and wetlands shift. Changes in precipitation patterns cause drought in some areas, more rainfall in others. Increased rainfall, in turn, leads to more floods which together with higher sea levels -- threaten the existence of coastal communities. Small island states and low-lying countries like Egypt and Bangladesh could be inundated.

And if we really want to look at what could be in store for us, perhaps we don't need to imagine anything at all. Even as we express our concern for the floods in Northern California, we must note the increased potential for these types of events as the climate changes. For example, the El Nino, which is associated with changed weather patterns has increased in frequency from once every seven years to occurring in 3 out of every 5 years.

Recently, I met with representatives of the insurance industry. They are already concerned. Frank Nutter, President of the Reinsurance Association of America, warned that "significant and perhaps, permanent changes in our climate in this country, and in the world", could bankrupt the insurance industry. Sobering words.

And why not?

In 1993, the Mississippi flooding caused an estimated \$10 to \$20 billion worth of

damage. Hurricane Hugo cost the federal government about \$1.6 billion. Hurricane Andrew topped \$2 billion in Federal disaster payments and cost property insurers at least \$16 billion. The floods and mudslides in California have caused over \$2 billion in damage already this year. The bill for lost crops in that state has not yet come due. In 1988, almost \$4 billion in Federal payments went to farmers suffering crop losses during another natural disaster--a withering drought.

The world's health may be affected as well. Climate change could shift the range of infectious diseases, threatening Americans with malaria and dengue fever.

The Clinton Administration believes we must guard against potentially devastating effects even as we deepen our scientific understanding of these issues through an aggressive research program. This approach-- analogous to an insurance policy--is not just an abstract notion.

Three years ago, we joined the international community in signing the historic Framework Convention on Climate Change. This was a treaty that called on all nations to work together in an unprecedented effort to protect the global environment. Specifically, the industrialized countries were urged to take the lead by stabilizing greenhouse gas emissions to 1990 levels by the year 2000.

Soon after taking office, President Clinton went beyond the vague, non-binding language of the treaty -- declaring that the United States would meet the goal set out in the treaty. The President's commitment was made to complement his economic objectives. He promised to turn our economy around and he has delivered -- inflation is down, growth is up; unemployment is down, jobs are up. All told, we are demonstrating that economic and environmental progress can

go hand in hand.

No doubt, the powerful economic course set by President Clinton challenges several of the assumptions in our plan. Rather than shirking away from this good news, we embrace it -- today I want to reaffirm the President's pledge -- the United States is committed to reaching 1990 levels of greenhouse gas emissions by 2000.

We've developed an ambitious plan aimed at fulfilling the President's commitment. 40 out of 47 of these initiatives have received funding and are underway. Most of these initiatives share a common feature -- they will mean new, clean American jobs for our future. For example, we have signed voluntary agreements with the bulk of our utility industry to keep greenhouse gas emissions down. Similar partnerships have been forged with U.S. industry on energy efficient computers, buildings and lighting systems. We have pledged \$430 million to the Global Environment Facility for its second phase -- the largest contribution of any nation. We have created a new Environmental Technology Initiative totaling more than \$1 billion to develop and disseminate environmentally superior technology.

And the U.S. has launched the world's first pilot program to assess the feasibility of joint investment projects with other countries aimed at reducing or sequestering emissions of greenhouse gases and promoting sustainable development.

In addition, we have launched a partnership for a new generation of vehicles, also known as the Clean Car Initiative. This is a real partnership. All three of the Big Three automakers are participating -- along with many federal agencies. So are many suppliers of materials and equipment. Together, we are tackling a technological challenge as tough as putting a man on the moon. We are going to develop a car with three times the efficiency of today's automobiles with

no sacrifice in cost, comfort, or safety. All that in ten years. Success will mean less dependence on foreign oil and lower emissions of greenhouse gases. Besides the benefits for the American consumer, the project also holds the promise of an extremely attractive car for world markets of the 21st century -- and a thriving U.S. auto industry to produce them.

In our Building and Construction Initiative, our goal is to improve the competitive performance of this \$800 billion industry by developing better construction technologies. With the full cooperation of the industry, we are determined to ensure that our buildings, like our industry, are the most productive, efficient, safe and durable in the world.

That means cutting delivery time in half -- with a 50 percent reduction in costs. We want to see a 50 percent reduction in construction work injuries and illnesses while there is a 30 percent improvement in productivity and comfort. We want to see half as many occupant-related injuries and illnesses. We want to see 50 percent less waste and pollution; and 50 percent more durability and flexibility.

We recognize that our plan is ambitious, and that it requires support from leaders on Capitol Hill. Some of our previous requests were not fully funded, and Congress is now considering taking previously approved funding back. Just as this treaty requires international consensus, our domestic response requires national consensus. We are committed to working with the Congress in a true partnership on behalf of our nation, the world and all its people.

Fulfilling this responsibility in the future requires acknowledging that our plans, and those of our industrialized partners, are only the first step. In two weeks, nations will meet in Berlin to determine what more the international community can do in response to the dramatic scientific evidence that now exists. Once again, this Administration will be at the forefront of this global

effort.

We have have said for almost a year that we do not believe that the current agreement is adequate. It only contains an "aim" or goal for the year 2000. And this aim only applies to a limited number of countries. All the nations of the world will need guidance on what steps to take beyond the year 2000. So we must negotiate a new aim for the future.

In view of these limitations and mindful of our responsibility to the future, we are working with other nations to develop a mandate that can be agreed in Berlin and set the course for next steps under the treaty. This will require us all to carefully examine what we each can do to contribute to further reductions in greenhouse gas emissions. Here in the United States, we have already begun an analytical effort to assess what can be done. But now is the time to relaunch negotiations, and walk more concretely toward the treaty's objective. Now is the time to establish a new negotiating mandate that will allow us to fulfill our responsibilities to future generations -- a mandate that ensures we move forward from the important first steps outlined for the pre-2000 period.

We strongly believes that all nations must participate in this effort. Certainly, those with the greatest wherewithal can and should take the lead -- and we shall. But we cannot ignore the fact that emissions are rising fastest in developing countries, who together now account for almost 50 percent of all greenhouse gas emissions. We know industrialized nations have special responsibilities and fully support the convention's call for "common, but differentiated responsibilities." But we very much want the developing nations to join us at the negotiating table -- so that together we can define these common, but differentiated responsibilities in the post-2000 era: not so that alone we can do less, but so that together we can do more -- through

trade, technology cooperation and a host of strategies that offer benefits for all nations.

We also must do a better job of ensuring that nations are matching rhetoric with reality, that we are accountable for what we say we will do. To date, only a handful of nations have put forward clear, substantive proposals that move them toward the emission reductions they have enunciated. We must be clear: good intentions and high-flying rhetoric will not come close to helping us meet the very significant challenges inherent in reducing emissions. What is needed and expected under the treaty is concrete action.

In the negotiations that will follow the Berlin meeting, it is imperative that we establish a menu of measures from which to choose strategies for reaching any new aim set for the post-2000 period. Only an analytic phase, as part of the negotiating process, can provide us with realizable measures -- and the realistic understanding of what our expectations and goals should be for the future. But the measures selected must truly achieve emission reductions, and nations must be prepared to show actions and results.

Finally, we believe that the mandate for negotiations should be concluded as rapidly as is possible. We believe that an aggressive, ambitious approach -- looking at short and long-term goals (for the years 2010 and 2020) -- can be concluded by 1997 -- when the third conference of the parties will be held. We think this date is a fair one, one that reflects our view of the importance and urgency of the climate change problem and also gives us the lead time to develop and begin to take advantage of new technologies.

To members of the public and the press, I want to acknowledge that we are going to see an enormous amount of political posturing in the coming weeks -- at both ends of the spectrum. On the one hand, we have nations who are trying to appease strong constituencies in their countries by outbidding the rest of the international community in their pledges to reduce

emissions. But what future generations need is aggressive, measurable and ambitious actions, not political promises.

On the other hand, we have political extremists in our own country -- who would have the United States evade and ignore tough issues like global climate change, ozone depletion or any number of threats to human and environmental health. Far outside the mainstream of scientific consensus, they would deny the problem and seek to prevent the United States from even acknowledging its concern -- even though the actions we envision are good for the environment and good for the economy. This is an intellectually, politically and morally bankrupt position and it must be resisted.

We must not forget, after all, that we are now witnessing the most extreme, concerted assault on the environment in recent history. Make no mistake, the core of the Contract with America is a borehole through the heart of the nation's environmental laws. Buried in arcane rhetoric about regulatory reform is a deliberate attack -- widely acknowledged in the popular press -- that effectively revokes many of this nation's most important environmental laws -- from the Clean Air and Clean Water Acts to the Endangered Species Act. In public opinion polls, the American people are clearly on record in support of our environmental policies.

Those pursuing this extreme agenda are going to have to pay a heavy price when the cost of the Contract becomes clear -- as the health of our children, the safety of our workers, and the integrity of our environment is thrown into question.

Rather than attack environmental initiatives, we hope the Congress will work with us to craft policies that are as environmentally sound as they are economically beneficial.

Let me close by drawing an analogy to international efforts to address ozone depletion. Ten years ago, at about the same scientific stage, the nations of the world came together in

Montreal to take prudent steps toward protecting the Earth's ozone layer. These initial efforts were expanded in the aftermath of a stunning scientific discovery -- a hole in the ozone layer the size of the North American continent was found over Antarctica. This, of course, led to the London amendments in 1990 where the world agreed to phase out the most damaging ozone depleting chemicals and subsequent Copenhagen agreement which accelerated the process by five years. Every American can be proud that the United States helped lead these efforts scientifically and politically.

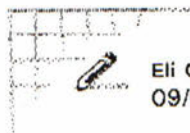
As with the ozone issue, nations have agreed on the nature of the climate change threat. We have taken initial steps to thwart that threat. But this is just a beginning. I think we can answer old Sir Roche's question about posterity with another Irish sentiment, written by the great poet William Butler Yeats:

"I have spread my dreams under your feet;
tread softly because you tread on my dreams."

We are treading on our posterity. Unless we tread softly, our dreams for the future will be nothing more than a dream. Let us make sure that our next step is the right one.

speeches

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Eli G. Attie @ OVP
09/09/97 06:42:26 PM

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As per Katie/David Sandalow...

Draft 9/9/97 7pm

TALKING POINTS BY VICE PRESIDENT AL GORE
BUSINESS ROUNDTABLE
Wednesday, September 10, 1997

I thank the Business Roundtable for having me here tonight -- to talk about what we've been doing to grow the economy and to fight for American business, and to talk about the ways we can work together to build on that progress in the years to come.

For President Clinton and me, a strong, growing economy has always been job number-one. It's worth remembering what we inherited 4 1/2 years ago:

Annual deficits of \$300 billion a year, a quadrupled national debt, and a triple-dip recession;

Rising unemployment, anemic job growth, and a failure to get tough on trade.

We changed all that, by merging three elements that had never been combined before: 1) real fiscal responsibility, 2) targeted investments in our people, and 3) an unprecedented push for free and fair trade.

Our economy is now the strongest in a generation: nearly 13 million new jobs; greatest consumer confidence and investment growth in decades; stock market increased 150%; more small businesses in last 4 years than in any years in history; unemployment at historic lows without inflation.

We've done more than just clean up the mess of the past; we've laid the foundation for the new economy -- an economy that is:

Driven by information, research, and technology;

Increasingly dependent on the productivity and creativity of our people;

Increasingly global and electronic.

Our challenge is to help all our people make the most of this new economy, by continuing the three-pronged economic strategy that has brought us all this prosperity: 1) implementing the budget deal to finally balance the budget; 2) investing in our people to prepare them for the new economy; 3) doing more to expand trade, especially by pushing for Fast Track authority to negotiate new trade deals.

The balanced budget deal is a historic achievement -- and will help keep the economy growing. Reducing the deficit is the most potent way of keeping interest rates in check and freeing capital for new enterprises. That's why I'm proud we put an end to budgets built on second-hand smoke and rear-view mirrors. And we're going to make sure Congress stays on track until the deficit is gone.

Because of the success of our 1993 economic strategy and all the growth that has followed, we can now balance the budget while investing in the things that make us even more productive, and better prepared for the future, including:

The largest education increase in three decades -- and the largest higher education increase since the G.I. Bill, so everyone has a chance to succeed and build the workforce of the future;

Stronger environmental protection -- even as we insist on a common-sense, pro-business approach to environmental regulation. (For example, we've eliminated 15 million hours of paperwork and red tape for businesses seeking to comply with environmental laws, and required that cost-benefit analyses and sound science support all regulatory decisions.)

Moving people from welfare to work -- through substantial tax credits for businesses that hire people off welfare and keep them employed; and \$3 billion that goes to states and local communities, to create jobs and to help people stay in them;

Continuing to reinvent government -- to focus on results, not red tape. We've already cut 300,000 government employees from the federal workforce and are getting rid of 16,000 pages of unnecessary regulations.

And let there be no doubt -- we're not going to turn away from expanding free and fair trade. That means President Clinton needs the same authority that every modern President has had to negotiate fast-track agreements.

With 96% of the world's consumers living outside our borders -- and the global economy expected to grow 3 times as fast as ours -- we can't cut ourselves off from the world.

If we don't move on this front, other nations will. Since 1992, in Latin America and Asia alone, our competitors have negotiated 20 free trade deals that exclude us. Every major economy in this hemisphere has a preferential trade deal with Chile except us.

President Clinton and I fought hard to open foreign markets to U.S. products with some 200 trade agreements. Each time, we faced resistance, and the

fight continues today. I know how important this is to the Business Roundtable, and I hope that you will all keep working to win the fast track vote. It's going to be another big fight -- but I believe it is a critical one.

I want to close by saying a few words about another critical issue that is coming up this year -- global climate change. The Business Roundtable's participation in programs such as Climate Wise, Climate Challenge, the Green Lights and other voluntary programs shows we can make progress together, and reinvent our environmental programs. I'm grateful for these efforts, and I want to talk very specifically about ways we can keep working together in that spirit.

Targets and timetables. The President and I are listening very closely to you. In our recent White House meeting with business leaders, you were ably represented by Bob Burt, who heads your environmental committee. As you know, we have not accepted the European Union's proposal for stringent reductions on an accelerated timetable; we don't think it's realistic. The President took some heat for this at the Denver Summit of the Eight. But we are committed to targets and timetables that are realistic and achievable.

The solution must be legally-binding. I know many of you are opposed to this position. But it is critical to making real progress -- and I want to emphasize that our support for legally-binding international treaties does not mean we can't use voluntary domestic programs to meet those obligations.

Flexibility. The U.S. has been a leading advocate for emissions trading and so-called "joint implementation" (project-based emissions trading, especially in the developing world) -- because we know it is the key to reducing costs and helping industry meet this challenge. That's a real priority for us.

The role of developing countries. No one has fought harder than the U.S. to bring them on board -- with almost no support from our allies. But we've insisted, because the only way to solve a truly global problem is with global solutions, with everyone playing a role.

Technology. The President and I don't believe the pessimists who say we can't reduce greenhouse emissions and grow the economy at the same time. That's why we're focussing on renewable energy and energy research. Right now, there is a \$400 billion worldwide market for environmental technology. It's not only the right thing to do -- it's a huge opportunity, and one that other nations will seize if we don't.

Early action. In our recent meeting with the President and business leaders, many of you expressed a strong interest in taking early action, with possible incentives to recognize and reward it. We want to work with you to develop these ideas in the most serious way possible.

The bottom line is that climate change is a serious problem that demands action. But the solutions don't have to be severe; we can meet this challenge and grow the economy at the same time.

We must remember that the problem is long-term and global. We're not going to solve the problem in Kyoto; it will literally take generations. But Kyoto can be a critical first step. We don't have all the answers today, but we know we must reverse the trend of global warming. That is why we need your involvement in this effort.

In closing, let me just say that by working with business as partners -- by creating the kind of climate that allows you to create jobs and grow the economy, even as we meet our most pressing public challenges -- we've been enormously successful these past 4 ½ years. We want to keep that economic strategy going, so we can keep that progress going. In that spirit of partnership, I'm happy to take your questions.

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