every last, single one. I don't know how long we will have to labor under the illusion that somehow there is no responsibility for this issue or somehow everyone is responsible. The White House is for campaign finance reform. The Democratic caucus is unanimously for campaign finance reform. The vast majority of the Members of the House in our caucus are for it. We will get it—when we can get enough help from our friends in the Republican Party, we will have campaign finance reform. And I hope that it will become clear that that is what has to be done.

Lastly, let me say, be of good cheer when you go into this campaign. If you read American

history books, you will see that, typically, in the second term of an incumbent President, the party of the President normally doesn't do all that well at midterm elections. There is a reason for that. People think the sun is setting and the energy is running out and the steam is getting weak. Well, the sun is not setting, the energy is not running out, and I will be working full tilt until the last minute of the last hour of the last day. And I want you to give me a Democratic Senate to work with.

Thank you, and God bless you.

NOTE: The President spoke at 8:35 p.m. in the Ballroom at the Hyatt Regency Hotel.

Remarks at the National Geographic Society October 22, 1997

Thank you very much, Mr. Murphy, Mr. Vice President, all of you who are here. I thank especially the Members of Congress who are here, the leaders of labor and business who are here, all the members of the administration, and especially the White House staff members that the Vice President mentioned and the Secretary of Energy, the Administrator of EPA, and the others who have helped us to come to this moment.

On the way in here, we were met by the leaders of the National Geographic, and I complimented them on their recent two-part series on the Roman Empire. It's a fascinating story of how the Empire rose, how it sustained itself for hundreds of years, why it fell, and speculations on what, if any, relevance it might have to the United States and, indeed, the West. And one of the gentlemen said, "Well, you know, we got a lot of interesting comments on that, including a letter referencing a statue we had of the bust of Emperor Vespasian. And one of our readers said, 'Why in the world did you put a statue of Gene Hackman in a piece on the Roman Empire?'" [Laughter]

And I say that basically to say, in some senses, the more things change, the more they remain the same. [Laughter] For what sustains any civilization, and now what will sustain all of our civilizations, is the constant effort at renewal, the ability to avoid denial, and to proceed into

the future in a way that is realistic and humane but resolute.

Six years ago tomorrow, not long after I started running for President, I went back to my alma mater at Georgetown and began a series of three speeches outlining my vision for America in the 21st century: How we could keep the American dream alive for all of our people; how we could maintain America's leadership for peace and freedom and prosperity; and how we could come together, across the lines that divide us, as one America.

And together, we've made a lot of progress in the last nearly 5 years now that the Vice President and I have been privileged to work at this task. At the threshold of a new century, our economy is thriving, our social fabric is mending, we've helped to lead the world toward greater peace and cooperation.

I think this has happened, in no small measure, in part, because we had a different philosophy about the role of Government. Today, it is smaller and more focused and more oriented toward giving people the tools and the conditions they need to solve their own problems and toward working in partnership with our citizens. More important, I believe it's happened because we made tough choices but not false choices.

On the economy, we made the choice to balance the budget and to invest in our people

and our future. On crime, we made the choice to be tough and smart about prevention and changing the conditions in which crime occurs. On welfare, we made the choice to require work but also to support the children of people who have been on welfare. On families, we made the choice to help parents find more and better jobs and to have the necessary time and resources for their children. And on the environment, we made the choice to clean our air, water, and land, to improve our food supply and to grow the economy.

This kind of commonsense approach, rooted in our most basic values and our enduring optimism about the capacity of free people to meet the challenges of every age, must be brought to bear on the work that remains to pave the way for our people and for the world toward a new century and a new millennium.

Today, we have a clear responsibility and a golden opportunity to conquer one of the most important challenges of the 21st century, the challenge of climate change, with an environmentally sound and economically strong strategy to achieve meaningful reductions in greenhouse gases in the United States and throughout the industrialized and the developing world. It is a strategy that, if properly implemented, will create a wealth of new opportunities for entrepreneurs at home, uphold our leadership abroad, and harness the power of free markets to free our planet from an unacceptable risk. This strategy is consistent with our commitment to reject false choices. America can stand up for our national interest and stand up for the common interests of the international community. America can build on prosperity today and ensure a healthy planet for our children tomorrow.

In so many ways the problem of climate change reflects the new realities of the new century. Many previous threats could be met within our own borders, but global warming requires an international solution. Many previous threats came from single enemies, but global warming derives from millions of sources. Many previous threats posed clear and present danger; global warming is far more subtle, warning us not with roaring tanks or burning rivers but with invisible gases, slow changes in our surroundings, increasingly severe climatic disruptions that, thank God, have not yet hit home for most Americans. But make no mistake, the problem is real. And if we do not change our course now, the consequences sooner or later

will be destructive for America and for the world.

The vast majority of the world's climate scientists have concluded that if the countries of the world do not work together to cut the emission of greenhouse gases, then temperatures will rise and will disrupt the climate. In fact, most scientists say the process has already begun. Disruptive weather events are increasing. Disease-bearing insects are moving to areas that used to be too cold for them. Average temperatures are rising. Glacial formations are receding.

Scientists don't yet know what the precise consequences will be. But we do know enough now to know that the industrial age has dramatically increased greenhouse gases in the atmosphere, where they take a century or more to dissipate, and that the process must be slowed, then stopped, then reduced if we want to continue our economic progress and preserve the quality of life in the United States and throughout our planet. We know what we have to do.

Greenhouse gas emissions are caused mostly by the inefficient burning of coal or oil for energy. Roughly a third of these emissions come from industry, a third from transportation, a third from residential and commercial buildings. In each case, the conversion of fuel to energy use is extremely inefficient and could be made much cleaner with existing technologies or those already on the horizon, in ways that will not weaken the economy but in fact will add to our strength in new businesses and new jobs. If we do this properly, we will not jeopardize our prosperity, we will increase it.

With that principle in mind, I'm announcing the instruction I'm giving to our negotiators as they pursue a realistic and effective international climate change treaty. And I'm announcing a far-reaching proposal that provides flexible market-based and cost-effective ways to achieve meaningful reductions here in America. I want to emphasize that we cannot wait until the treaty is negotiated and ratified to act. The United States has less than 5 percent of the world's people, enjoys 22 percent of the world's wealth, but emits more than 25 percent of the world's greenhouse gases. We must begin now to take out our insurance policy on the future.

In the international climate negotiations, the United States will pursue a comprehensive framework that includes three elements, which, taken together, will enable us to build a strong and robust global agreement. First, the United

States proposes at Kyoto that we commit to the binding and realistic target of returning to emissions of 1990 levels between 2008 and 2012. And we should not stop there. We should commit to reduce emissions below 1990 levels in the 5-year period thereafter, and we must work toward further reductions in the years ahead.

The industrialized nations tried to reduce emissions to 1990 levels once before with a voluntary approach, but regrettably, most of us, including especially the United States, fell short. We must find new resolve to achieve these reductions, and to do that we simply must commit to binding limits.

Second, we will embrace flexible mechanisms for meeting these limits. We propose an innovative joint implementation system that allows a firm in one country to invest in a project that reduces emissions in another country and receive credit for those reductions at home. And we propose an international system of emissions trading. These innovations will cut worldwide pollution, keep costs low, and help developing countries protect their environment, too, without sacrificing their economic growth.

Third, both industrialized and developing countries must participate in meeting the challenge of climate change. The industrialized world must lead, but developing countries also must be engaged. The United States will not assume binding obligations unless key developing nations meaningfully participate in this effort.

As President Carlos Menem stated forcefully last week when I visited him in Argentina, a global problem such as climate change requires a global answer. If the entire industrialized world reduces emissions over the next several decades but emissions from the developing world continue to grow at their current pace, concentrations of greenhouse gasses in the atmosphere will continue to climb. Developing countries have an opportunity to chart a different energy future consistent with their growth potential and their legitimate economic aspirations. What Argentina, with dramatic projected economic growth, recognizes is true for other countries as well: We can and we must work together on this problem in a way that benefits us all.

Here at home, we must move forward by unleashing the full power of free markets and technological innovations to meet the challenge of climate change. I propose a sweeping plan to provide incentives and lift roadblocks to help our companies and our citizens find new and creative ways of reducing greenhouse gas emissions:

First, we must enact tax cuts and make research and development investments worth up to \$5 billion over the next 5 years, targeted incentives to encourage energy efficiency and the use of cleaner energy sources.

Second, we must urge companies to take early actions to reduce emissions by ensuring that they receive appropriate credit for showing the way.

Third, we must create a market system for reducing emissions wherever they can be achieved most inexpensively, here or abroad, a system that will draw on our successful experience with acid rain permit trading.

Fourth, we must reinvent how the Federal Government, the Nation's largest energy consumer, buys and uses energy. Through new technology, renewable energy resources, innovative partnerships with private firms, and assessments of greenhouse gas emissions from major Federal projects, the Federal Government will play an important role in helping our Nation to meet its goal. Today, as a downpayment on our million solar roof initiative, I commit the Federal Government to have 20,000 systems on Federal buildings by 2010.

Fifth, we must unleash competition in the electricity industry, to remove outdated regulations and save Americans billions of dollars. We must do it in a way that leads to even greater progress in cleaning our air and delivers a significant downpayment in reducing greenhouse gas emissions. Today, two-thirds of the energy used to provide electricity is squandered in waste heat. We can do much, much better.

Sixth, we must continue to encourage key industry sectors to prepare their own greenhouse gas reduction plans. And we must, along with State and local government, remove the barriers to the most energy efficient usage possible. There are ways the Federal Government can help industry to achieve meaningful reductions voluntarily, and we will redouble our efforts to do so.

This plan is sensible and sound. Since it's a long-term problem requiring a long-term solution, it will be phased in over time. But we want to get moving now. We will start with our package of strong market incentives, tax cuts, and cooperative efforts with industry. We

want to stimulate early action and encourage leadership. And as we reduce our emissions over the next decade with these efforts, we will perform regular reviews to see what works best for the environment, the economy, and our national security. After we have accumulated a decade of experience, a decade of data, a decade of technological innovation, we will launch a broad emissions trading initiative to ensure that we hit our binding targets. At that time, if there are dislocations caused by the changing patterns of energy use in America, we have a moral obligation to respond to those to help the workers and the enterprises affected, no less than we do today by any change in our economy which affects people through no fault of their

This plan plays to our strengths: innovation, creativity, entrepreneurship. Our companies already are showing the way by developing tremendous environmental technologies and implementing commonsense conservation solutions.

Just yesterday Secretary Peña announced a dramatic breakthrough in fuel cell technology, funded by the Department of Energy research, a breakthrough that will clear the way toward developing cars that are twice as efficient as today's models and reduce pollution by 90 percent. The breakthrough was made possible by our pathbreaking partnership with the auto industry to create a new generation of vehicles. A different design, producing similar results, has been developed by a project funded by the Defense Advanced Research Products Agency and the Commerce Department's National Institute of Science and Technology.

The Energy Department discovery is amazing in what it does. Today, gasoline is used very inefficiently in internal combustion engines; about 80 percent of its energy capacity is lost. The DOE project announced yesterday by A.D. Little and Company uses 84 percent of the gasoline directly going into the fuel cell. That's increased efficiency of more than 4 times traditional engine usage.

And I might add, from the point of view of all the people that are involved in the present system, continuing to use gasoline means that you don't have to change any of the distribution systems that are out there. It's a very important but by no means the only discovery that's been made that points the way toward the future we have to embrace.

I also want to emphasize, however, that most of the technologies available for meeting this goal through market mechanisms are already out there; we simply have to take advantage of them. For example, in the town of West Branch, Iowa, a science teacher named Hector Ibarra challenged his sixth graders to apply their classroom experiments to making their school more energy efficient. The class got a \$14,000 loan from a local bank and put in place easily available solutions. The students cut the energy use in their school by 70 percent. Their savings were so impressive that the bank decided to upgrade its own energy efficiency. [Laughter] Following the lead of these sixth graders—[laughter] other major companies in America have shown similar results. You have only to look at the proven results achieved by companies like Southwire, Dow Chemical, DuPont, Kraft, Interface Carpetmakers, and any number of others in every sector of our economy to see what can be done.

Our industries have produced a large group of efficient new refrigerators, computers, washer/dryers, and other appliances that use far less energy, save money, and cut pollution. The revolution in lighting alone is truly amazing. One compact fluorescent lamp, used by one person over its lifetime, can save nearly a ton of carbon dioxide emissions from the atmosphere and save the consumer money.

If over the next 15 years everyone were to buy only those energy-efficient products marked in stores with EPA's distinctive "Energy Star" label, we could shrink our energy bills by a total of about \$100 billion over the next 15 years and dramatically cut greenhouse gas emissions.

Despite these win-win innovations and commitments that are emerging literally every day, I know full well that some will criticize our targets and timetables as too ambitious. And of course, others will say we haven't gone far enough. But before the debate begins in earnest, let's remember that over the past generation we've produced tremendous environmental progress, including in the area of energy efficiency, at far less expense than anyone could have imagined. And in the process, whole new industries have been built.

In the past three decades, while our economy has grown, we have raised, not lowered, the standards for the water our children drink. While our factories have been expanding, we have required them to clean up their toxic waste. While we've had record numbers of new homes, our refrigerators save more energy and more money for our consumers.

In 1970, when smog was choking our cities, the Federal Government proposed new standards for tailpipe emissions. Many environmental leaders claimed the standards would do little to head off catastrophe. Industry experts predicted the cost of compliance would devastate the industry. It turned out both sides were wrong. Both underestimated the ingenuity of the American people. Auto makers comply with today's much stricter emissions standards for far less than half the cost predicted, and new cars emit on average only 5 percent of the pollutants of the cars built in 1970.

We've seen this pattern over and over and over again. We saw it when we joined together in the seventies to restrict the use of the carcinogen vinyl chloride. Some in the plastics industry predicted massive bankruptcies, but chemists discovered more cost-effective substitutes and the industry thrived. We saw this when we phased out lead in gasoline. And we see it in our acid rain trading program, now 40 percent ahead of schedule, at costs less than 50 percent of even the most optimistic cost projections. We see it as the chlorofluorocarbons are being taken out of the atmosphere at virtually no cost in ways that apparently are beginning finally to show some thickening of the ozone layer again.

The lesson here is simple: Environmental initiatives, if sensibly designed, flexibly implemented, cost less than expected and provide unforeseen economic opportunities. So while we recognize that the challenge we take on today is larger than any environmental mission we have accepted in the past, climate change can bring us together around what America does best: We innovate; we compete; we find solutions to problems; and we do it in a way that promotes entrepreneurship and strengthens the American economy.

If we do it right, protecting the climate will yield not costs but profits, not burdens but benefits, not sacrifice but a higher standard of living. There is a huge body of business evidence now showing that energy savings gives better service at lower cost with higher profits. We have to tear down barriers to successful markets, and we have to create incentives to enter them. I call on American business to lead the way, but I call upon government at every level, Federal, State, and local, to give business the tools they need to get the job done and also to set an example in all our operations.

And let us remember that the challenge we face today is not simply about targets and time-tables. It's about our most fundamental values and our deepest obligations.

Later today, I'm going to have the honor of meeting with Ecumenical Patriarch Bartholomew I, the spiritual leader of 300 million Orthodox Christians, a man who has always stressed the deep obligations inherent in God's gift to the natural world. He reminds us that the first part of the word "ecology" derives from the Greek word for house. In his words, in order to change the behavior toward the house we all share, we must rediscover spiritual linkages that may have been lost and reassert human values. Of course, he is right. It is our solemn obligation to move forward with courage and foresight to pass our home on to our children and future generations.

I hope you believe with me that this is just another challenge in America's long history, one that we can meet in the way we have met all past challenges. I hope that you believe with me that the evidence is clear that we can do it in a way that grows the economy, not with denial but with a firm and glad embrace of yet another challenge of renewal. We should be glad that we are alive today to embrace this challenge, and we should do it secure in the knowledge that our children and grandchildren will thank us for the endeavor.

Thank you very much.

NOTE: The President spoke at 2:57 p.m. in the Gilbert Grosvenor Auditorium. In his remarks, he referred to Reg Murphy, president and chief executive officer, National Geographic Society.