Statement
by the
Honorable William K. Reilly
before the
Senate Committee on Environment and Public Works
April 24, 2007

Madame Chairman, Senator Inhofe, Members of the Committee, my name is William K. Reilly. I served as Administrator of the U.S. Environmental Protection Agency under President George H. W. Bush, from 1989 to early 1993.

Thank you for the opportunity to appear before the Committee. I applaud your initiative on this urgent and compelling matter. And I am pleased to appear with my distinguished successors, Administrators Johnson and Browner. With your permission, I will submit my formal statement for the record.

Though I am appearing on my own behalf, I note for the record that since 2002 I have co-chaired the bipartisan National Commission on Energy Policy. Our 2004 report recommended a mandatory program to reduce greenhouse gases with various safeguards, as well as addressing many other issues in energy policy, including oil security, supply, efficiency, technology, and more. The Commission's staff continues to confer widely with Members of the Senate and the House on these matters. Were I the EPA Administrator, or a Member of Congress, I would recognize the extensive research and inclusive membership of the Commission, and take the Commission's recommended policy on climate change as both an effective national starting point and also as the policy proposal that stands the most realistic chance of being enacted. Extensive, detailed research financed generously by the Hewlett and other foundations underlies the Commission's recommendations. The Energy Information Agency has analyzed the costs of the Commission's proposals and concluded they are reassuringly modest. So my advice to the Congress and the Administration is, take a hard look at the Commission's report.

You've asked me to discuss EPA's role in the wake of the Supreme Court decision holding that EPA has authority as a matter of law to regulate carbon dioxide. I'm not going to delve into the legal reasoning or the language of the Court's decision. I read it as expansive with regard to taking action on harmful pollutants. Suffice to say, the law has now been settled and EPA does have the authority. I might add that if I were EPA Administrator, I would welcome that authority.

The Court's decision is of immense consequence and signals the growing significance of concern about climate change. The decision represents the intersection of science and public policy. All that follows must be grounded in good science. Indeed, the science is becoming increasingly compelling. This Administration, as well as those of President Clinton and of President Bush, whom I served, deserves great credit for their support for the scientific research underpinning our understanding of climate change. The nation has spent billions of dollars to get to this point. This year's reports of the Intergovernmental Panel on Climate Change (IPCC) affirm the high degree of confidence that hundreds of participating scientists have in the scientific findings.

When I was named EPA Administrator, one of my first briefings was on climate change, by Dr. Frank Press, then president of the National Academy of Sciences. EPA also had underway in the policy office a couple of reports on the effects of climate change and policy options to address them. Most of this work and the work of others was premised on computer modeling

and projections, and the findings were subsequently subjected to a lively debate about the assumptions inherent in the models and their accuracy.

We are no longer limited to relying on computer models. As the IPCC reports made clear, we are already seeing signs of climate change and variability associated with the buildup of greenhouse gases in the atmosphere. The models have been greatly refined and it is my understanding that they now comport well with the mounting evidence from field observations and related research in any number of areas, from wildlife behavior to snow pack and melting glaciers, to sea level rise, changes in precipitation, temperature records that cannot be dismissed as merely the result of urban heat island effect, and more.

Not all matters are resolved, of course. Questions remain about the timing, the magnitude, and the local impact of the effects, and there is still much to learn about how the systems function to shape climate on earth. But given what the IPCC reported, we cannot afford to wait until all matters are resolved. That was the thrust of the *amicus brief* that I submitted in concert with Administrators Browner, Costle and Train. We have not required in the past, nor should we require in the future, an unrealistic level of certainty in addressing serious and urgent problems such as climate change, even as we acknowledge that we may have to change course, to take more or less aggressive action as further information becomes available. To delay action on climate change means that down the road, what we do will necessitate more expensive and more draconian measures.

In light of this evidence and the Supreme Court's decision, what should EPA do?

The Court's decision confronts the EPA with a choice of contesting the scientific consensus regarding the causes of global warming, which it has conceded, and then of asserting or rejecting in its judgment the merits of regulating what the Court has determined to be a "pollutant." It is difficult to see how the Agency can now refrain from moving forward to regulate greenhouse gases from automobiles and by implication from other sources as well. The practical realities must be faced, however. The regulation of greenhouse gases is hugely consequential for many sectors of the economy, as for the health and well-being of Americans and others. To ask EPA to assume the full burden of recommending in a regulatory program the full gamut of measures necessary to the task is unrealistic. It is particularly so given that the Agency is part of an Administration that has consistently declined to embrace the regulation of carbon dioxide. One cannot expect a robust rulemaking in such a circumstance. The situation cries out for Congressional action and that, in my view, is a principal merit in the Court's decision.

So it is enormously ambitious to expect that a regulatory agency alone, even one as well-versed as U.S. EPA, can craft a regulatory regime governing something so far-reaching with such substantial impacts on our economy and industry, on the natural resources on which we depend, on U.S. foreign policy and the prospects for development in the world's poorest countries. And yet that is the challenge.

I would note that regarding the Clean Air Act of 1990, with which I had something to do, it took more than a decade for this legislation to come together—on acid rain, standards for air toxics, upper atmospheric ozone depletion, and the other issues it addressed—and for the political context to ripen. EPA staff had spent the 1980s preparing the analyses which they knew would one day be needed when the moment came that clean air legislation stood a serious chance of passage. Between my swearing in and the President's submission of a comprehensive legislative proposal to Congress, we required just four months.

That we could move so quickly is a tribute to the substantial and rigorous work done by the Agency during the 1980s, including seminal work on emissions trading with Environmental Defense Fund and Resources For the Future, analyses of costs and benefits, and more. The acid rain trading program, which emerged from the 1990 clean air law and which by all accounts has been a resounding success, is the reference case for our way into a cap-and-trade regime for carbon dioxide.

I would be remiss if I didn't state my high regard for the senior career staff in the EPA's Air Office and those who served in what was our Office of Policy, Planning and Evaluation. Contrary to the belief in some quarters, they are not eco-cowboys who find something to regulate under every rock they lift. They are smart, creative, experienced, and dedicated people, and they grasp full well the implications and tradeoffs, the costs and benefits associated with fulfilling their mission to clean up and safeguard our nation's air. The country has been well served by these civil servants, and I expect no less from them in dealing with climate change.

During the past few years they have been carrying out the research and analysis of options for regulating greenhouse gases just as in the 1980s they prepared analysis of directions a new clean air act might take. What are realistic targets and timetables? Would analysis show a carbon tax to be more effective? Or a cap-and-trade system? What are the downsides? Clearly, a carbon tax is beyond EPA's jurisdiction and I would be wary of recommending one if the implication was that EPA would therefore take no steps to regulate carbon pursuant to the Agency's authority.

For an emissions trading program, do we want a safety valve to contain costs? What is the point of regulation, which sectors? How would permits be distributed, how many, and based on what criteria? What are the implications of these approaches? What is the state of technology, the connections with other emissions of concern, notably mercury, sulfur dioxide and other criteria pollutants? EPA staff are more prepared than we know to put forth the options for designing a carbon policy. They have spent more than 15 years preparing for this moment. So my advice is, challenge them to present the policy options.

I do not expect that even with heroic efforts, these matters will translate immediately into a regulatory program. There is a lengthy regulatory process, as you know, involving not just interagency reviews, but consultations with states and industrial sectors and others outside the federal family. There are formal administrative procedures to follow and a record to prepare, and that could be substantial for an issue as complex as regulating carbon dioxide. And of course, there is the potential for litigation once a rule is adopted. Bill Ruckelshaus once observed that 4 of every 5 major EPA decisions wind up in court.

To be sure, there is much activity in Congress, both in the Senate and the House, and I believe that ultimately the issue of climate change needs to be addressed by Congress. That said, there is no reason for EPA to delay. On a parallel track, EPA should begin the regulatory process for carbon dioxide. This would be a timely and useful step, and would both inform the legislative debate and keep pressure on Congress to continue its work. At the same time, EPA's efforts now will prepare the Agency for quick progress in implementing any legislation after enactment, as was the case after passage of the 1990 Clean Air Act.

I would welcome the full involvement of the President and the Administration in these deliberations. Indeed, that would help engage some who are still skeptical about the science or the nation's ability to take the issue head on, and would help ensure that economic impacts,

foreign policy concerns, and other important considerations are taken into account. I do not support the case for awaiting the arrival of a new President and a new Administration to address this issue.

Besides beginning this process, there are a number of other important steps the Agency should take.

First, California has a request pending for a waiver to reduce CO2 emissions from automobile fuels by 30 per cent, beginning with the 2016 model year. I understand that process is getting underway, and I would urge all due speed. California's proposal is the product of a bipartisan effort and has tremendous public support. The Supreme Court's decision should remove any roadblocks with respect to the review process.

Second, I would urge EPA to take a good look at what Governor Schwarzenegger of California has called for, via Executive Order, to set a low carbon standard for fuels. This seems to me a very innovative approach to ensure that, as we struggle with the very real issue of oil security, we do not substitute for what we now use new fuels with worse greenhouse gas impacts. I doubt any regulatory entity has the experience with fuels that EPA does, with a world-class mobile source laboratory in Michigan, and from the Agency's prior experience in removing lead from gasoline, and the work regarding particulates, ozone, and the recent well-regarded rule lowering sulfur content in diesel fuel. I applaud Administrator Johnson's decision and the support he had from the Administration in getting this rule out. It is one of the most significant contributions to clean air. I should point out that the low carbon standard for fuels initiative also enjoys widespread support in California, including that of ConocoPhillips, the nation's largest refiner.

Third, I would like to see EPA develop the regulatory approach for carbon capture and sequestration. That is the key to using our abundant coal resources and to ensuring that other countries with substantial coal reserves do not undo all that we might accomplish in reducing greenhouse gases. Because of its experience and its record in dealing with underground injection, EPA's Water Office in partnership with other parts of the Agency, and most importantly with the Department of Energy, is well-suited to undertake this task. It is my understanding, however, that although the Energy Department has substantial funding to develop this critical technology, EPA has little, making it difficult to draw on the Agency's experience and credibility with the various stakeholders. I would add that many in the power industry want to see a regulatory program for carbon capture and sequestration quickly, lest the absence of a regulatory framework delay testing and deployment of this promising, indeed, *essential* technology. Not just America, but China, India and other coal-rich nations stand in urgent need of carbon sequestration technology.

Fourth, a number of states are taking action on greenhouse gas reductions and I would ensure that EPA is well-versed on these actions and the regional compacts that are beginning to emerge. A national program invariably invites the question of federal pre-emption and that will surely surface with respect to regulating carbon dioxide. Moreover, it behooves us to learn from what the states are doing. I would add that virtually every law in the EPA administrator's portfolio had origins at the state level, none more so than California and air quality.

I would also call your attention to the good work of the Center for Climate Strategy, which has been working with a couple of dozen states to prepare greenhouse gas inventories, consider policy options, costs, and associated measures, with an eye toward state action and the role of states in implementing a national program.

Fifth, I would urge EPA to become fully versed in the European Union's emissions trading program. There is evidence that too many credits were distributed in the first round of permit allocations, resulting in less than optimal performance, a drop in permit values, and a windfall for some firms. We need to learn from that experience in this area of allocation, lest we repeat it.

Sixth, I would encourage EPA and others in the federal government to remain on top of climate developments in China and India, two critical countries with respect to greenhouse gas emissions. My experiences in China with the Energy Foundation's China Sustainable Energy Program suggest that although not now party to any international protocols requiring it to reduce greenhouse gases, China is well aware of the potential impacts and is taking measures to improve efficiency of energy use. We will need to engage these countries in international forums and we would be well-served by following developments in those countries closely, and by establishing contacts at the technical level which I believe the Chinese would welcome.

In closing, let me state that as important as a mandatory national program is to reduce carbon dioxide emissions, it is but one measure we need. If scientists are right about the impact of doubling carbon dioxide in the atmosphere over pre-industrial levels, which is where we are heading under business as usual—indeed, we may see a tripling or more if we don't take action soon—then we will be called on to make far more drastic cuts in greenhouse gas emissions, well below today's level, even while we continue to grow in population and economic activity.

That goal would be achievable only with a suite of policies and programs going beyond a cap-and-trade system. We will need substantially improved mileage standards for automobiles, trucks, and other vehicles, which will help on oil security as well. We will want a national renewable portfolio standard to advance deployment of renewable energy technologies, much as a couple of dozen states have already enacted. We will need to invest heavily in technology research, development, and deployment. I mentioned carbon capture and sequestration. Cellulosic ethanol and other promising bio-fuels also merit increased funding. We will want to move aggressively on efficiency standards. Some 22 or so are currently under development at the Department of Energy. We will need to involve the states, for they have a major role in building codes, water resource management, land use and transportation planning. They build and operate public buildings and institutions, and we now know that for all of the design techniques to improve energy efficiency, most of the savings come in operations over the life of a facility.

And as important as mitigation is in fending off the worst scenarios, we will need to prepare to adapt, for the science is telling us that we are seeing the effects today and we know that carbon dioxide and other greenhouse gases are long-lived in the atmosphere, so more elevated concentrations are already built into the system.

Congress has engaged the climate issue in a direct and serious way. Within the next several months, there may be a window of opportunity for legislation on climate change. You know better than I. After that, we may well see 2008 campaign politics adding to the hurdles. That would make EPA's endeavors all the more important. I wish you and your colleagues success. The country, indeed the entire world, is counting on it.

Thank you.