

FOIA MARKER

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

Collection/Record Group: Clinton Presidential Records
Subgroup/Office of Origin: Office of Environmental Initiatives
Series/Staff Member: General Files
Subseries:

OA/ID Number: 19506
FolderID:

Folder Title:
Administration, Congressional, NGO, Media, Climate Change Statements 1996 and 1997 (Bill Antholis Files) [1]

Stack:	Row:	Section:	Shelf:	Position:
S	62	1	5	1

WHITE HOUSE

OFFICE OF ENVIRONMENTAL INITIATIVES

**GENERAL OFFICE FILES
SPECIAL ASSISTANT**

Box 1 of 1
Submitted 12/26/2000

Administration, Congressional, NGO, Media, Climate Change Statements 1996 and 1997 (Bill Antholis' Files)

Administration Documents on Climate Change 1996 and 1997 (Bill Antholos' Files)

Climate Change Clips (12/98 to 4/99)

Climate Change Documents (John Gibson's Files) 1/17/97 to 10/22/97

Climate Change Documents 10/97 to 8/99

ENCLOSURES FILED OVERSIZE ATTACHMENTS 19506

VARA # 16710

Administration,
Congressional,
NGO, and Media
Climate Change
Statements

Bill Antholis
White House
231 OEOB
NEC/NSC

Administration Policy Statements

1. *Administration*: President Clinton's Climate Change Proposal, October 22, 1997
2. *POTUS*: Remarks by the President on Global Climate Change, October 22, 1997
3. *White House Press Releases*:
President Clinton: Comments by the President at White House Conference on Childcare, October 23, 1997
White House Press Briefing: Sperling, Tarullo, Steinberg, Stern, McGinty, and Summers, October 22, 1997
White House Press Briefing: Mike McCurry, October 21, 1997
Vice President Gore: Response to Question in the House on Population Control, October 7, 1997

4. Congressional and Related Testimony and Q&As

Former Director of the Central Intelligence Agency R. James Woolsey, Senate Committee on Agriculture, Hearing on Renewable Fuels, November 13, 1997

Assistant Deputy Chief of Air and Space Operations Major General Donald Peterson, Senate Armed Services Committee, November 12, 1997

Assistant Deputy Chief of Naval Operations Rear Admiral Edward Moore, Senate Armed Services Committee, November 12, 1997

Director of Strategy, Plans, and Policy Major General Howard von Kaenel, Senate Armed Service Committee, November 12, 1997

Deputy Under Secretary of Defense Sherri W. Goodman, Senate Armed Services Committee, November 12, 1997

Under Secretary of State Tim Wirth,
House Committee on International Relations, November 13, 1997
Senate Foreign Relations Committee, Subcommittee on International Policy, Export, and Trade Promotion, October 9, 1997
Senate Foreign Relations Committee, Subcommittee on International Policy, Export, and Trade Promotion, June 19, 1997
Conference on Climate Change, Evolving Technologies, U.S. Business, and the World Economy in the 21st Century, June 18, 1996
Senate Energy and Natural Resources Committee, September 17, 1996

Secretary of State Madeleine Albright, Questions from Representative Sensenbrenner, Jr., Leader of the Bipartisan House Observer Delegation to the COP-3, on actions in Kyoto, November 8, 1997

Chair Janet Yellen,
House Commerce Subcommittee on Energy and Power, July 15, 1997
Questions: Subcommittee on Energy and Power, Hearing on Global Climate Change, Follow Up Questions, August 22, 1997

Eileen Claussen,
House Commerce Subcommittee on Energy and Power, September 26, 1996

Reactions to President Clinton's Address on Global Climate Change

5. CONGRESSIONAL STATEMENTS: PRO

Senator Harkin: Senate Agriculture Committee on Renewable Fuels, November 13, 1997

Senator Lugar: Senate Agriculture Committee on Renewable Fuels, November 13, 1997

Senator Harkin: The Importance of Renewable Fuels, October 24, 1997

Senator Kerry: The Climate Change Treaty, October 23, 1997

Representative George E. Brown, Jr. (D- CA): Statement on Clinton Climate Proposal, October 22, 1997

Representative Dingell: Statement on the President's Climate Change Policy Announcement, October 22, 1997

Senator Wellstone: Stronger Negotiating Position, October 22, 1997

Senator Kerry: Global Warming, October 21, 1997

Representative Pelosi: "we can make peace in the House", October 7, 1997

6. CONGRESSIONAL STATEMENTS: CON

Senator Trent Lott: Washington Times Editorial- Mr. President, say no in Kyoto, October 24, 1997

Senator Murkowski: Global Warming, October 24, 1997

Senator Hagel: The Global Climate Treaty, October 23, 1997

Senator Inhofe: Global Warming, October 23, 1997

Senator Craig: Joining the Senator from Nebraska, October 23, 1997

Senator Thomas: Question of Global Warming, October 23, 1997

Senator Murkowski: El Nino, October 23, 1997

Representative Paxon: Q&A Climate Change, October 22, 1997

Representative Young: Regarding Management of National Forests to Reduce Greenhouse Gases, H. Con. Res. 151, October 21, 1997

Representative Faleomavaega: Cosponsoring of H. Con. Res. 151, October 21, 1997

Representative Chenoweth: In Support of H. Con. Res. 151, October 21, 1997

Representative Hansen: In Support of H. Con. Res. 151, October 21, 1997

Representative Smith: In Support of H. Con. Res. 151(Management of National Forests), October 21, 1997

Representative Lewis: Vice President Gore Warns of Overpopulation, October 7, 1997

Representative Pitts: Comments by Vice President Gore Regarding Solution for Global Warming, October 7, 1997

Representative Shimkus: Al Gore's Statements Made at Weather Forecaster's Meeting, October 7, 1997

Representative DeLay: "If the President dares . . .", October 7, 1997

Representative Chenoweth: "It is appalling that Mr. Gore would . . .", October 7, 1997

Representative Graham: "And the Vice President of the United States has suggested . . .", October 7, 1997

7. NGO STATEMENTS: PRO

Business Challenge (Nike, Bechtel, Mitsubishi, etc.): AD: A Business Climate Challenge, October 27, 1997

Dr. Holdren: Letter from John P. Holdren, October 24, 1997

Public Service Electric and Gas Company: PSE&G Applauds President Clinton for Global Warming Leadership, October 23, 1997

The Business Council for Sustainable Energy: Michael Marvin, Lisa Jacobson, Update: The Road to Kyoto, October 23, 1997

Niagara Mohawk Power Corporation: Niagara Mohawk Announces Support of President Clinton's Plan to Reduce Greenhouse Gas Emissions, October 23, 1997

American Public Power Association: Statement Regarding the President's Announcement on Climate Change Policy, October 23, 1997

Association of Home Appliance Manufacturers: Today's Energy Efficient Appliances Save Money and the Environment, Says the AHPM, October 23, 1997

Tuscon Electric Power Company: TEP's CEO Urges Clinton Administration to Continue Dialogue with Utilities on Plan to Combat Global Climate Change, October 22, 1997

Interstate National Gas Association of America: Statement of INGAA (Interstate Natural Gas Association of America) President Jerald V. Halvorsen on President Clinton's Plan to Reduce Greenhouse Gas Emissions, October 22, 1997

Enron Corporation: Statement from Kenneth L. Lay, Chairman & CEO, October 22, 1997

Trigen: CEO Praises White House Climate Policy, October 22, 1997

Centre Financial Press Release: Financial Innovator Calls Clinton's Reliance on Markets to Fight Global Warming "Right on Target", Oct. 22, 1997

Ballard: Letter from Presidents, Oct. 22, 1997

Sycom Enterprises: Energy Efficiency Company Lauds Clinton Climate Policy, October 22, 1997

North American Manufacturers Association & Polyisocyanurate Insulation Manufacturers Association: Statement of Support from NAIMA and PIMA for the President's Climate Change Initiative, October 22, 1997

Solar Energy Industries Association: Solar Industry Lauds Clintons Climate Call as Clean and Classy, October 22, 1997

Alliance to Save Energy: Statement by Mark Hopkins, October 22, 1997

Alliance to Save Energy: Clinton Praises Teacher's Energy Efficiency, October 22, 1997

8. NGO STATEMENTS: MIXED

The Business Roundtable: Letter from Robert Burt, Chairman, The Business Roundtable Environment Task Force, October 24, 1997

National Rural Electric Cooperative Association: Statement of Glenn English, NRECA CEO, In Response to President Clinton's Global Climate Change Proposal, October 23, 1997

American Wind Energy Association: President's Climate Position 'Points the Country in the Right Direction' - Should be Strengthened While Building Consensus, October 23, 1997

Sustainable Energy Coalition: White House Climate Change Goals: A Step in the Right Direction but Much More Can--and Must--Be Done, October 22, 1997

UK: Statement by the Deputy Prime Minister John Prescott on President Clinton's Announcement, Not Dated

Environmental Defense Fund: EDF Encouraged by Clinton Climate Plan- Additional Proposals Still Needed to Slow US Emissions of Greenhouse Gases, Oct. 22, 1997

Sierra Club: Administration Drops Global Warming Reduction, October 22, 1997

Natural Resources Defense Council: Calls Clinton Climate Program Inadequate to Protect Planet, October 22, 1997

Union of Concerned Scientists: President's Plan on Global Warming Doesn't Cut It, October 22, 1997

Pacificorp: U.S. Climate Change Policy, Response from Fred Buckman, October 21, 1997 (Date is a bit curious)

9. NGO STATEMENTS: CON

Climate Countdown: Local Environmental, Religious, Public Health Groups Decry Clinton/Gore's "Broken Promises" on Warming, October 23, 1997

EU: Statement By Luxembourg on Behalf of the European Community and Its Member States

Independent Petroleum Association of America: Oil and Natural Gas Producers Respond to Clinton Global Warming Policy, October 22, 1997

Global Climate Coalition: Administration Climate Proposal Requires New Taxes- And is Complicated by New Demands from Developing Countries, October 22, 1997

10. ARTICLES: PRO

Business Week: Clean Air in an Era of Cheap Oil, (November 3, 1997)

Business Week: Global Warming: Is There Still Room for Doubt?, (November 3, 1997)

Financial Times: Getting Warm, October 24, 1997

Washington Post: Mr. Clinton on Climate Change, October 24, 1997

San Francisco Chronicle: Clinton's Modest Plan Against Global Warming, October 24, 1997

Los Angeles Times: Where Have All the Glaciers Gone? by Bruce Babbitt, October 24, 1997

New York Times: The President Bets on Technology, October 23, 1997

Great Falls Tribune: Global warming proposal a good start, October 23, 1997

Knight-Ridder: President Clinton unveiled an ambitious proposal Wednesday, October 23, 1997

New York Times: Needed: Planet Insurance, October 22, 1997

11. ARTICLES: MIXED

Algemeen Dagblad (Dutch, centrist publication): "Something is Better Than Nothing", October 24, 1997

Australian (Australian, national, conservative publication): "Mugged by the Realities of Domestic Politics", October 24, 1997

USA Today: Cooling the greenhouse, October 24, 1997

Bloomberg: U.S. Climate Plan Could Shape Treaty; Developing Countries Key, October 23, 1997

Miami Herald: No-win issue for Clinton, October 23, 1997

12. ARTICLES: CON

Forbes: Bill and Al's global warming circus, (November 3, 1997)

Time: Courting Disaster, (November 3, 1997)

The New York Times: An Indefensible Treaty by Jack Kemp, October 27, 1997

Los Angeles Times: Immobilized by Propoganda, October 27, 1997

Associated Press: Islands Blast US on Global Warming, October 27, 1997

Washington Times: Cooling down on global warming, October 26, 1997

Yomiuri (Japanese, top-circulation, moderate publication): "Japan Should Convince the US to Commit to Emission Reductions", October 24, 1997

General-Anzeiger (German, centrist publication): "Kowtowing to Interests of U.S. Industry", October 24, 1997

Nihon Keizai (Japanese, business-oriented publication): "U.S. Proposal Irresponsible", October 24, 1997

Guardian (British, liberal publication): "Guzzling to Disaster", October 24, 1997

Le Figaro (French, right-of-center publication): "U.S. Drags Its Feet", October 24, 1997

Liberation (French, left-of-center publication): "Clinton Retreats", October 24, 1997

L'Echo (Belgian, financial publication): "Dispeasing the Hares and the Hounds", October 24, 1997

Politiken (Danish, center-left publication): "U.S. Failure", October 24, 1997

El Mundo (Spanish, independent publication): "Clinton Jumps In . . . and Drowns", October 24, 1997

Associated Press: Delegates Frown on Clinton's Gradual Remedies for Global Warming, October 24, 1997

Washington Post: U.S. Allies Criticize Anti-Warming Plan, October 24, 1997

Washington Times: Global politics, political warming, October 24, 1997

Kyodo: Hashimoto, Kinkel Discuss U.S. Gas Emissions Plan, October 24, 1997

Hong Kong AFP: Kinkel Criticizes Japan, U.S. Greenhouse Gas Proposals, October 24, 1997

Wall Street Journal: Clinton proposal to curb emissions draws global fire, October 24, 1997

Los Angeles Times: Clinton's Global Warming Plan Gets Chilly Reception, October 24, 1997

D. Hetzke, on national radio Deutschlandfunk of Cologne: "A U.S. That Looks Out Only For Itself", October 23, 1997

PRNewswire: European Union Disappointed by US Position on Climate Change: Reaction from European Commissioner for the Environment, Ritt Bjerregaard: Statement on Climate Change, October 23, 1997

Washington Post: Letter to the Editor- 'CO2 Is Not a Pollutant', October 23, 1997

Reuters: France says U.S. plan not green enough, October 23, 1997

Reuters: U.S. allies call Clinton climate plan hot air, October 23, 1997

Reuters: Climate negotiators vexed by Clinton stand, October 23, 1997

Wall Street Journal: By Faith Alone, October 23, 1997

Financial Times: US move over greenhouse gases comes under attack, October 23, 1997

USA Today: Clinton global warming proposal pleases no one, October 23, 1997

Electronic Telegraph: Clinton reneges on pledge over global warming, October 23, 1997

Washington Post: The Oil We Won't Have, October 22, 1997

13. SUMMARIES

New York Times: Fuel Efficiency Falls, Just as More Is Needed, October 26, 1997
Greenwire: Climate Change: Major Allies Assail Clinton Plan, October 24, 1997
New York Times: Trading on the Pollution Exchange, October 24, 1997
Leading the News, Daily Report for Executives: Summary, October 23, 1997
Star Tribune: Clinton Proposes Plan to Combat Greenhouse Gas Emissions, October 23, 1997
Associated Press: Clinton Gets Flak on Global Warming, October 23, 1997
Journal of Commerce: Clinton's global warming plan generates friction, October 23, 1997
Washington Times: Global-warming plan draws fire from environmentalists, October 23, 1997
Wall Street Journal: Clinton Proposes Global-Warming Plan, October 23, 1997
Newsday: Clinton Offers 'Third Way' on Global Warming Issue, October 23, 1997
Philadelphia Inquirer: Clinton outlines plan to combat global warming, October 23, 1997
Star-Telegram: President's plan on global warming modest, October 23, 1997
Dallas Morning News: Clinton unveils plan to combat global warming, October 23, 1997
Denver Post: Fighting global warming, October 23, 1997
New York Times: Battle Stage is Set, October 23, 1997
Reuters: Snowy Canada dithers on global-warming policy, October 23, 1997
New York Times: President Plans Energy Savings In a Moderate Step on Warming, October 23, 1997
Washington Post: Clinton Outlines Global Warming Plan, October 23, 1997
Los Angeles Times: Clinton Outlines U.S. Plan to Combat Global Warming, October 23, 1997
Miami Herald: Clinton will seek tax incentives to curb global warming, October 22, 1997
ABC World News Tonight: Lead story, October 22, 1997
CBS Evening News: Lead Story, October 22, 1997
NBC Nightly News: Third Story, October 22, 1997
NPR: All Things Considered, October 22, 1997
Associated Press: Clinton Proposes Environmental Plan, October 22, 1997
Gannett News Service: Q&A: Plan; a look at what's really at stake in reducing global warming, October 22, 1997
Wall Street Journal: Fast Tax Cuts Would Be Tied To Emissions, October 22, 1997
Wall Street Journal: Clinton's Effort to Curb Global Warming Draws Some Business Support, but It May Be Too Late, October 22, 1997
USA Today: U.S. plan to cut emissions is 'minimum', October 22, 1997
Los Angeles Times: Clinton Backs Broad Plan to Fight Global Warming, October 22, 1997
Washington Post: President Settles On Modest Goals To Fight Warming, October 22, 1997
Rocky Mountain News: White House devises emissions strategy, October 22, 1997
Detroit News: Clinton asks global warming consensus, October 22, 1997
Reuters: Clinton to Unveil US Global Warming Proposals, October 21, 1997
Washington Post: Clinton to Offer Modest Plan for Reducing Gases Linked to Global Warming, October 21, 1997
New York Times: Clinton Alters His Approach Over Warming, October 21, 1997
International Herald Tribune: How Clinton's Goals for Cleaner Air Clouded, October 21, 1997
Associated Press: U.S. Wants Slower Pollution Cuts, October 21, 1997

Clinton Presidential Records Digital Records Marker

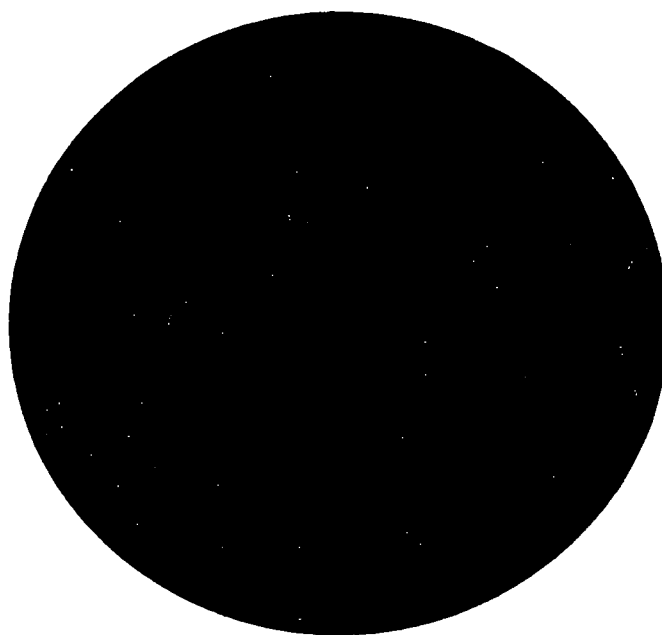
This is not a presidential record. This is used as an administrative marker by the William J. Clinton Presidential Library Staff.

This marker identifies the place of a tabbed divider. Given our digitization capabilities, we are sometimes unable to adequately scan such dividers. The title from the original document is indicated below.

1

Divider Title: _____

**PRESIDENT CLINTON ANNOUNCES THE UNITED STATES
CLIMATE CHANGE POLICY**



**NATIONAL GEOGRAPHIC SOCIETY
GILBERT H. GROSVENOR AUDITORIUM
Washington, D.C.**

October 22, 1997

PRESIDENT CLINTON'S CLIMATE CHANGE PROPOSAL

October 22, 1997

Global climate change is the premier environmental challenge and opportunity of the 21st century, and the risks it poses justify sensible preventive steps. Addressing this issue is one of the United States' greatest imperatives, for this and future generations. Recognizing the solid foundation of climate science, President Clinton is committed to strong and sensible action to reduce greenhouse gas emissions -- including realistic and binding emissions targets.

Key elements of President Clinton's climate change proposal include:

- **Binding Targets to Reach 1990 Emissions Levels by 2008-2012 and Reductions Below 1990 Levels in the 5-Year Period That Follows.** A critical component of the President's comprehensive framework is a realistic, achievable, and binding target of reducing greenhouse emissions to 1990 levels by 2008-2012 and reductions below 1990 levels in the 5-year period that follows.
- **\$5 Billion Program of Tax Cuts and R&D for New Technologies.** To spur energy efficiency and the development of new technologies, the President proposes a major new package of tax cuts and R&D spending amounting to \$5 billion over five years.
- **Industry-by-Industry Consultations and Early Credit.** The Administration challenges key industries to prepare plans over the next 9 months on how they can best reduce emissions. To provide an incentive for near-term actions to cut emissions, the President is committed to ensuring appropriate rewards for firms that act early.
- **Developing Countries Must Participate.** Climate change is a global problem, and requires a global solution. That's why the United States has spear-headed joint implementation projects, and the President has committed that the United States will not adopt binding obligations without developing country participation.
- **Broad-Based Domestic and International Emissions Trading System Begins After A Decade of Experience Has Accumulated.** The President is committed to a market-based emissions trading system, both domestically and internationally, that will harness the power of the market to reduce emissions to 1990 levels by 2008-2012. The trading system would begin after a decade's worth of experience with tax incentives, R&D, early credit, electricity restructuring, Federal efforts, and other measures.

BINDING TARGETS: The U.S. binding target is realistic: It seeks to return U.S. emissions to 1990 levels in the period 2008-2012 and reduce them further thereafter. We reject the European proposal for more stringent early reductions, as well as the "do-nothing" approach of some interests. The target is achievable: By providing incentives for early action to reduce emissions, attacking domestic energy inefficiencies, and putting in place a market-based emissions trading system, we can reach 1990 levels in the proposed time frame with minimal economic costs. And it is meaningful: Achieving 1990 levels in the period 2008-2012 would amount to almost a 30 percent reduction off a business-as-usual path, an important first step on the road toward stabilizing greenhouse gas concentrations in the atmosphere.

SOLID PRINCIPLES: The President's five climate change principles include: that the policies should be guided by science, rely on market-based, common-sense tools, that we should seek win-win solutions, that global participation is essential to addressing the global problem of climate change, and that we must have regular common-sense reviews of the economics and science of climate change.

SOUND AND SENSIBLE THREE-STAGE APPROACH: Reflecting his five key principles, the President's plan includes three stages: Stage 1 includes priming the pump through programs such as R&D, tax incentives, incentives for early action, and Federal leadership, and industry consultations. Stage 2 builds upon the first stage by including a review and evaluation in preparation for the permit trading system. Stage 3 -- which does not occur for a decade -- involves meeting binding targets through a domestic and international emissions trading program. The President is committed to working with labor and Congress to insure that we give proper assistance to any workers dislocated by the changes in energy usage inherent in any climate change plan.

INITIAL ACTION PLAN: The President's immediate action plan includes 9 elements:

1. *\$5 Billion in Tax Cuts and Federal R&D:* To spur energy efficiency and encourage the development and deployment of lower-carbon energy sources, the Administration supports a major new package of tax cuts and R&D spending amounting to \$5 billion over five years.
2. *Credit for Early Action:* To provide an immediate incentive for near-term actions, the President is committed to ensuring that firms acting early are rewarded appropriately.
3. *Industry-by-Industry Consultations:* The Administration challenges key industry sectors to prepare plans over the next 9 months on how they can best reduce emissions.
4. *Encouraging the Use of Energy-Efficient Products:* The President will complement his tax incentives, commitment to early action credit, and industry consultations by engaging in a broad-based effort to expand the use of *existing* energy-efficient technologies.
5. *Federal Procurement and Energy Use:* The Department of Energy will spearhead a comprehensive effort to reduce greenhouse gas emissions from Federal sources.
6. *Electricity Restructuring:* To deliver a significant downpayment on emission reductions, while saving consumers billions, we will pursue a bold plan for electricity restructuring.
7. *Setting a Concentration Goal:* The United States supports developing a specific, long-term concentration goal with the assistance of the National Academy of Sciences and other bodies.
8. *Bilateral Dialogues:* In addition to pursuing agreement in Kyoto, the Administration will pursue bilateral dialogues with key developing countries to promote clean energy.
9. *Economics and Science Reviews:* The President proposes regular scientific and economic reviews. These reviews will ensure that policy-makers have the best possible information on climate change.

WIN-WIN: There are numerous win-win solutions to reducing carbon emissions. For example, a breakthrough in fuel cell technology announced yesterday will clear the way toward developing cars that are three times as efficient as today's models -- cutting pollution while also cutting driving costs.

INITIAL CLIMATE CHANGE ACTIONS

October 22, 1997

President Clinton has proposed nine immediate actions to begin addressing climate change:

- 1. Tax Cuts and Federal R&D:** To spur energy efficiency and the development of lower-carbon energy sources, the Administration supports a major new package of tax cuts and R&D spending amounting to \$5 billion over five years. Many of the ideas from the recent report of the President's Committee on Science and Technology (PCAST) will be considered in constructing this package.
- 2. Credit for Early Action:** To provide an immediate incentive for near-term actions to cut emissions, the Administration is committed to ensuring that firms which act early are rewarded appropriately. We will work with companies to build a program that appropriately rewards those who take prompt and early actions before the beginning of the mandatory emissions budget period in Stage 3.
- 3. Industry-by-Industry Consultations:** The Administration challenges key industry sectors to prepare plans over the next 9 months on how they can best reduce emissions, including how the Federal government can remove regulatory hurdles that discourage energy efficiency. The Administration will work in partnership with industry to develop sensible efficiency standards in a variety of areas.
- 4. Encouraging the Use of Energy-Efficient Products:** As the Department of Energy's 5-Labs study illustrates, many existing technologies produce win-win solutions to reducing carbon emissions -- but nonetheless are still not widely used. The President is committed to expanding their reach. He will therefore complement his other programs by engaging in a broad-based effort to expand the use of existing energy-efficient technologies -- while also spurring the development of new technologies.
- 5. Federal Procurement and Energy Use:** To reduce greenhouse gas emissions from Federal sources, DOE will spearhead a comprehensive effort that includes expanded performance contracting to make Federal buildings more energy-efficient, improved Federal procurement of energy-efficient technology, and partnerships to improve the energy efficiency of Federal aircraft, ships and vehicles. Federal agencies will also be called upon to assess emissions in major initiatives.
- 6. Electricity Restructuring:** To spur further efforts to clean our air and deliver a downpayment on greenhouse gas emission reductions, while saving consumers billions, we will pursue a bold plan to restructure the energy sector. It is time to change the rules that are often more than 70 years old -- stifling innovations that can save money and impede newer, cleaner technologies.
- 7. Setting a Concentration Goal for Greenhouse Gases in the Atmosphere:** The goal of the existing climate treaty is to stabilize concentrations of greenhouse gases, but the specific concentration has never been defined. The U.S. supports developing a specific, long-term goal, with the assistance of the National Academy of Science and other appropriate bodies.
- 8. Bilateral Dialogues:** In addition to pursuing agreement in Kyoto, the Administration will pursue bilateral dialogues with key developing countries to promote clean energy.
- 9. Economics and Science Reviews:** The President proposes regular scientific and economic reviews, to ensure that policy-makers have the best possible information on climate change.

INDEX

Title

1. President Clinton's Climate Change Proposal
2. Initial Climate Change Actions

Background Information

3. President Clinton's Five Climate Change Principles
4. President's Three-Stage Plan on Climate Change
5. Comprehensive Framework for Effective, Sensible Action
6. Fact Sheet on International Emissions Trading
7. Fact Sheet on Joint Implementation
8. Fact Sheet on Electricity Restructuring
9. Fact Sheet on Federal Energy Management
10. Fact Sheet on U.S. Global Change Research Program
11. Fact Sheet on PNGV
12. Fact Sheet on Fuel Cells
13. Fact Sheet on PATH
14. Fact Sheet on Potential Industry Sector Savings
15. Fact Sheet on Potential Building Sector Savings
16. Fact Sheet on Potential Transportation Sector Savings

PRESIDENT CLINTON'S FIVE CLIMATE CHANGE PRINCIPLES

October 22, 1997

Global climate change is the premier environmental challenge and opportunity of the 21st century, and the risks it poses justify sensible preventive steps. Addressing this issue is one of the United States' greatest imperatives, for this and future generations. Recognizing the solid foundation of climate science, President Clinton is committed to strong and sensible action to reduce greenhouse gas emissions -- including realistic and binding emissions targets.

President Clinton's climate change plan is based on **five key principles**:

- **Guided by science.** The vast majority of the world's scientists have concluded that if the countries of world do not work together to cut greenhouse gas emissions, temperatures will rise and disrupt the global climate. Indeed, most scientists say this process has already begun. But there is much we still don't know about how the climate and human health will react to increased greenhouse gas concentrations. That's why the President's plan includes regular science reviews, to ensure that our policies are guided by the best science available.
- **Market-based, common-sense tools.** We have learned that the costs of protecting the environment is substantially lower if we harness the power of markets to do so. That's why the President's plan emphasizes flexible and market-based mechanisms. His plan includes a domestic and international permit trading system for greenhouse gas emissions, similar to the highly successful permit trading system that has dramatically cut acid rain at a fraction of the predicted cost.
- **Seek win-win solutions.** There are a multitude of win-win solutions to reducing carbon emissions, that can improve our energy efficiency and save consumers money. For example, a breakthrough in fuel cell technology announced yesterday will clear the way toward developing cars that are twice as efficient as today's models -- cutting pollution while also cutting driving costs. The President believes that we must seek such win-win solutions to addressing climate change.
- **Global participation.** Climate change is a global problem, and requires a global solution. A ton of carbon emitted in Argentina has just as much effect on the global climate as a ton of carbon emitted in the United States -- and within the next few decades, emissions from developing countries are expected to exceed those from developed countries. And many win-win opportunities exist to reduce greenhouse gas emissions in developing countries. That's why the United States has spear-headed joint implementation projects and the President has committed that the United States will not adopt binding obligations without developing country participation.
- **Common-sense economic reviews.** Our knowledge of the challenges and opportunities we face will grow over time. Therefore, the President is calling for regular 5-year economic reviews and updates, to ensure that policy-makers, both in the Administration and in Congress, have the best possible information on how the economy is responding to the effort to address climate change, how other countries are performing relative to their own commitments, and how the climate is changing in response to human activities.

THE PRESIDENT'S THREE-STAGE PLAN ON CLIMATE CHANGE

October 22, 1997

Reflecting his five key principles, the President's plan will proceed in three stages:

- **Stage 1: Priming the Pump Through R&D, Tax Incentives, Incentives for Early Action, Federal Leadership, and Industry Consultations.** The first stage of the President's package includes a 9-point action plan -- including \$5 billion in tax incentives and spending for R&D and energy efficiency, incentives for early action, a set of Federal government energy initiatives, and industry-by-industry consultations to explore their best ideas on how to reduce emissions in a cost-effective manner (including market-oriented standards for energy efficiency). The first economic review would occur near the end of Stage 1.
- **Stage 2: Review and Evaluation.** The second stage, which would begin around 2004, will build upon the programs adopted in Stage 1, by including a review of our progress and an evaluation of next steps as we move toward a market-based permit trading system for carbon emissions. During this second stage, the details of the permit system would be refined and perhaps tested. Such a permit system is similar in concept to the one that dramatically cut acid rain emissions -- although the scale would be significantly larger than the current acid rain program. The second economic review would occur near the end of Stage 2.
- **Stage 3: Meeting Binding Targets Through Domestic and International Emissions Trading Program.** In the third stage, we would reduce emissions to 1990 levels by 2008-2012, and below 1990 levels in the 5-year period after that, through a market-based domestic and international emissions trading system. Before beginning this third stage, the second economic update and review would allow Congress and the President to evaluate how the economy had responded to a decade's worth of experience in the first two stages of the President's plan. The President is committed to working with labor and Congress to insure that we give proper assistance to any workers dislocated by the changes in energy usage inherent in any climate change plan.

This three-stage program recognizes the long-term nature of the effort to address climate change in three ways:

- By adopting a graduated approach to emissions reductions, it allows us to exploit the tremendous opportunities for win-win reductions first.
- By adopting a system of regular scientific and economic updates and reviews, it allows us to monitor our progress and re-assess our success in reducing emissions, the state of scientific knowledge, and how the economy is responding to our efforts. Only after we have accumulated ten years of experience with the first two stages of the program would we enter the internationally binding period.
- By insisting that the United States will not adopt binding obligations without developing country participation and by emphasizing the importance of an international trading system and joint implementation, we take advantage of low-cost reduction possibilities wherever they occur -- either here or abroad.

COMPREHENSIVE FRAMEWORK FOR EFFECTIVE, SENSIBLE ACTION

October 22, 1997

GREENHOUSE GAS EMISSION REDUCTION TARGET

Under the current international climate change agreement (signed in Rio de Janeiro in 1992), industrialized countries accepted a non-binding emissions reduction goal. Most nations, including the United States, will fall short of meeting it. This fact, coupled with better scientific evidence on the seriousness of the climate change threat, led the U.S. to propose last year that a new agreement set binding limits on emissions. The proposed U.S. emissions target is designed to provide important environmental gains while maintaining strong economic growth. It is:

- **Realistic.** Seeks to return U.S. emissions to 1990 levels in the period 2008-2012 and reduce them further thereafter. Rejects European proposal for more stringent early reductions, as well as the “do-nothing” approach of some interests.
- **Achievable.** By providing incentives for early action to reduce emissions, attacking domestic energy inefficiencies, securing flexible international implementation mechanisms, and putting in place a market-based domestic emissions trading system, the U.S. can reach 1990 levels in the proposed time frame with minimal economic costs.
- **Meaningful.** Achieving 1990 levels in the period 2008-2012 would amount to almost a 30 percent reduction off a business-as-usual path, an important first step on the road toward stabilizing concentrations of greenhouse gases in the atmosphere. Emissions accounting will include all greenhouse gas sources and sinks (including reforestation).

FLEXIBLE, MARKET-BASED IMPLEMENTATION

Just as the effects of climate change will be felt globally, so too are the causes of climate change global in nature. Greenhouse gas emissions do equal harm to the atmosphere whether they come from a coal plant in China or a bus in Boston. For this reason, any regime to reduce greenhouse gases must be global. It must also allow all nations the ability to seek out the most efficient way of reducing emissions so that the greatest gains are achieved at the least cost. For these reasons, the United States strongly supports the inclusion in a new climate change agreement of two innovative, flexible mechanisms for reducing emissions:

- **International Emissions Trading --Using Markets to Lower Costs.** The principle of emissions trading is to use the efficiency of the market place to achieve environmental objectives at the lowest possible cost. Under an international emissions trading regime, a country (or firm) would be able to meet its emissions reduction target by reducing pollution itself, purchasing reductions from another country (or firm) that was able to achieve excess gains, or some combination of both.
- **Joint Implementation --A Global Solution to Low-Cost Reductions.** Joint Implementation (JI) is an innovative, market-based approach for addressing global climate change that uses international partnerships to achieve low-cost reductions in greenhouse gas emissions. Under JI, a company in the United States invests in a project which reduces emissions in another country and uses those reductions as a less expensive means of meeting its own target.

PARTICIPATION OF DEVELOPING COUNTRIES

In addition to its non-binding emissions reduction aim for developed countries, the Rio climate change agreement required all countries to take policies and measures to reduce emissions. Many developing countries have made real strides, through, for example, reducing energy subsidies. Nevertheless, given that developing country emissions will eclipse those from the developed world within several decades, these countries need to do more. Accordingly, the U.S. calls on developing countries to strengthen their existing commitments and to agree that their obligations must increase over time to include binding emissions limits. Our principles include:

- **Global Participation.** All countries must participate. Every nation would be required to take meaningful actions to limit emissions. The U.S. will not assume binding obligations until developing countries agree to participate meaningfully in the challenge of addressing climate change.
- **Equity.** The obligations of poorer and less developed countries should take into account their state of economic development and their relative contribution to the climate change problem.
- **Assistance.** While insisting that developing countries take meaningful actions to address climate change, the U.S. recognizes that many of these countries face significant development challenges that hamper their ability to reduce emissions. President Clinton is reemphasizing his commitment to working with these nations to help build more sustainable energy futures. This includes a \$1 billion package of assistance from USAID and a renewed commitment to provide financial assistance through the Global Environment Facility, as well as our pathbreaking joint implementation proposals.

FACT SHEET ON INTERNATIONAL EMISSIONS TRADING

October 22, 1997

Description

The principle of emissions trading is to use the efficiency of the market place to achieve environmental objectives at the lowest possible cost. Under an international emissions trading regime, a country (or firm) would be able to meet its emissions reduction target by reducing pollution itself, purchasing reductions from another country (or firm) that was able to achieve excess gains, or some combination of both.

Given an effective international regime, emissions trading provides a powerful incentive for nations to reduce below the amount required and then sell excess reductions to others who in turn avoid more costly actions. The U.S. has proposed that emissions trading be permitted among all countries that agree to a binding emissions target.

How it would work

Consider a simplified example for how international emissions trading might work. Country A and Country B must reduce emissions by 100 tons each. It might cost each country \$1,000 to reduce 100 tons individually for a total cost of \$2,000. However, if Country A could reduce its emissions by 200 tons for a total cost of \$1,500 and sell half of these reductions to Country B, the overall target would be achieved for \$500 less, a savings of 25 percent.

U.S. experience

Emissions trading is being used successfully at the domestic level to reduce sulfur dioxide emissions (which cause acid rain) under the Clean Air Act. Achieving targeted reductions was originally estimated to cost \$5 billion annually if traditional controls had been required and \$4 billion with emissions trading. A GAO estimate after the initial stage of emissions trading now puts the cost at \$2 billion per year, or 60 percent below the original estimate with pollution reductions significantly ahead of schedule. Emissions trading has also been successful in cutting the costs of phasing out leaded gasoline and in curbing the production of chlorofluorocarbons which deplete the ozone layer.

Cost savings

According to the 1997 Economic Report of the President, international emissions trading for carbon dioxide could lower the cost of reductions by 50 percent below the minimum achievable using purely domestic programs.

FACT SHEET ON JOINT IMPLEMENTATION

October 22, 1997

Description

Joint Implementation (JI) is an innovative, market-based approach for addressing global climate change that uses international partnerships to achieve low-cost reductions in greenhouse gas emissions. Under JI, a company in the United States invests in a project which reduces emissions in another country and uses those reductions as a less expensive means of meeting its own target. The U.S. has proposed that a formal regime that gives credit for JI projects be part of a new climate change agreement.

How it would work

Consider the example of a project announced today as part of a pilot program on joint implementation instituted by the United States. Two U.S. companies (Solar Electric Power and Light of Washington, D.C. and Trexler and Associates, Inc of Oak Grove, Illinois) will work with Renewable Energy Services Company of Asia, Ltd. to market and install 812,000 solar home systems in Sri Lanka. These systems will replace the use of kerosene lamps for lighting and the use of diesel-electric charging of lead-acid batteries for powering small home appliances. The result will be a 1.5 million metric ton reduction in greenhouse gas emissions and cleaner energy for tens of thousands of people.

U.S. experience

Under the U.S. pilot program on JI (formed under the existing climate change convention), 28 projects have been approved in 12 countries, including Costa Rica, Bolivia, the Czech Republic, and Russia. These projects span a range of technologies, including solar, geothermal, and wind power; fuel switching for district heating; biomass energy; and reforestation. U.S. companies and organizations already participating include Commonwealth Edison, Wisconsin Electric Power, Kenetech Windpower, Sealweld Corp., American Electric Power, PacificCorp, Detroit Edison, Clean Air Coalition, and many others.

Benefits

Lower costs: JI provides a strong incentive for companies and countries to search the globe for the lowest cost ways of reducing greenhouse gas emissions.

Expanded exports of U.S. technology: The enormous potential for JI projects around the world creates major opportunities for the increased sale of U.S. energy efficiency and alternative energy technologies.

Technology transfer: Increased reliance on more energy efficient technologies and less carbon-intensive energy alternatives will help developing countries meet their growing energy needs with more environmentally sustainable solutions.

FACT SHEET ON ELECTRICITY RESTRUCTURING

October 22, 1997

As part of his climate change initiative, President Clinton announced his support for appropriately crafted electricity restructuring legislation that will save consumers billions of dollars while reducing carbon emissions.

Description

The electricity sector is our nation's most capital intensive industry -- and has sales of over \$200 billion. Under electricity restructuring, competition would be the primary mechanism to set electricity generation prices. Utilities would open up their distribution and transmission wires to all qualified sellers. The transmission and distribution of electricity would continue to be regulated because they will remain monopolies for the foreseeable future. The system would be restructured, not deregulated. Done correctly, this process can save consumers in their utility bills and reduce carbon emissions. A properly structured retail competition system can deliver electricity more efficiently, and just as reliably, as our present system of regulated monopolies.

Cost savings

Most experts are confident that restructuring will reduce the cost of electricity, although there is a diversity of views over the potential size of the savings. Because the industry is so large, even modest savings represent billions of dollars. DOE economists estimate potential savings of \$20 billion a year, which would mean average direct savings of about \$100 a year to a typical family of four and indirect savings to such a family through lower cost goods and services of about another \$100 a year. Other studies predict far larger savings.

Carbon reductions

With appropriate market-based provisions, electricity restructuring legislation could reduce carbon emissions by creating incentives to produce and use electricity more efficiently and with less pollution. As emphasized at the White House Conference on Climate Change, two-thirds of the energy used to produce electricity is currently wasted. Restructuring should introduce incentives for reducing this waste heat. Restructuring legislation could also include other provisions -- such as various incentives and mandates to promote energy efficiency and renewable energy -- that offer potential carbon savings.

Next steps

The Administration looks forward to working with interested parties on crafting comprehensive electricity restructuring legislation.

FACT SHEET ON FEDERAL ENERGY MANAGEMENT

October 22, 1997

Aggressive energy management can substantially reduce carbon emissions from the activities of the Federal government, which has the nation's largest energy bill at almost \$8 billion per year. Significant strides have already been made --energy consumption per square foot in Federal buildings is down 15 percent and energy use in civilian and military vehicles is down about 27 percent from 1985 levels. However, we can do much more.

The initiatives below will reduce Federal emissions of greenhouse gases through enhanced focus on energy efficiency and renewable energy. They address areas which can deliver the greatest energy savings, best leverage private sector funding and improve the Federal procurement system.

1. Expand Energy Savings Performance Contracting

- Expand use of Energy Savings Performance Contracts. ESPC uses private investment capital and expertise to accomplish energy and cost saving projects in Federal facilities. When a private sector firm which has invested in federal energy efficiency improvements is fully repaid from its share of the delivered savings, all additional savings accrue to the government. Streamlined ESPC contracts put in place by DOD and DOE are beginning to speed large investments in energy projects at Federal facilities. However, use of ESPC's is still limited in the Federal government. The Office of Management and Budget will lead an effort to increase their use. It will include new policy and budget guidance for agencies. ESPC authority can also be extended to other areas including:
 - *Leased Federal buildings.* These include buildings where the Government either pays for the energy use directly or in other building where ESPC can provide a better lease for the Government.
 - *Federal mobility.* There may be great potential for energy savings from more efficient energy use in aircraft, ships and vehicles.
 - *Water conservation.* Water conservation projects save energy because each gallon contains energy from pumping, heating, chilling or treatment.
 - *Non-federal facilities* where the Government makes indirect payment of energy expenses. These include, for example, National Guard facilities which the state owns but where the Federal Government covers utility expenses and public housing facilities which are Federally supported but owned by public housing authorities.
 - *State and local government facilities.* Federal energy experts can help transfer ESPC techniques to state and local governments so they can access this important approach to energy efficiency.

2. Improve Federal Procurement of Energy Efficient Technology

- *Accelerate the development of Product Energy Efficiency Recommendations.* These cover products that are in the top 25 percent of their class for energy efficiency or have Energy Star ratings, for example electric motors and air conditioning chillers. They provide a guide to Federal purchasers

of the energy efficiency level to request in a specification or procurement.

- *Establish as standard practice, the purchase of energy efficient products for Government use.* Traditionally, federal purchases have been based on lowest price, ignoring the substantial savings many energy efficient products can achieve over their life. The Executive Office of the President will lead an interagency team to streamline and update Executive Orders and procurement practices to encourage the acquisition of these products. Use of alternative contracting vehicles to acquire energy-efficient products will be encouraged, and purchase of products in the top 25 percent of class for energy efficiency or conforming to Energy Star standards will become standard practice, subject to necessary exceptions. The initiative will be augmented by publication of a “best practices” buying guide and expanded training of purchasing decision-makers.
- *Use consolidated purchasing to stimulate markets and lower prices.* Consolidated Federal purchasing can stimulate commercial markets for new and emerging products which offer greater energy efficiency, lower operating costs, and sales opportunities for small businesses that produce these products.
- *Increase Federal procurement of renewable energy.* In states that have implemented retail competition in their electricity industry, Federal facilities will work with their suppliers to ensure that the facilities purchase competitively supplied non-hydro renewable energy at levels equivalent to the percentage specified in that state’s retail competition legislation.
- *Report Federal Agencies’ Contributions to Reduction of Carbon Emissions.* This initiative will develop an appropriate measurement methodology to convert currently available data on Federal energy use to carbon emissions to aid national carbon reduction efforts.

3. Building for the 21st Century

- *Establish a new level of excellence for Federal building construction and renovation that incorporates energy efficiency, quality, affordability, and sustainability.* By using the latest construction techniques and tapping the knowledge of the building community and local partners, agencies will work to ensure that new Federal buildings achieve energy efficiency increases of 30-50 percent by 2000 as compared to existing facilities. This will be accomplished through a “whole building” approach that treats buildings as integrated systems rather than a series of independent component selections.
- *Deploy solar technologies in Federal buildings.* Show Federal leadership by installing solar photovoltaic and solar thermal systems on 20,000 Federal roofs by 2010 in support of the President’s ‘Million Solar Roof Initiative’. Utilize alternative financing methods to provide the rapid infusion of investment necessary to support the cost-effective installation of these systems.
- *Expand the use of combined heat and power generation at Federal facilities.* Combined heat and power makes greater use of the waste heat produced in the generation of electricity.
- *Use biomass fuels in Federal boilers.* Biomass would come from agricultural and wood waste and methane from landfill and treatment plant operations.
- *Expand public awareness of energy efficient technologies.* By showcasing energy efficient and

renewable energy technologies at National Parks, Federal offices, embassies, military bases, and other facilities the public will be more aware of their potential to reduce pollution and lower costs.

- *Seek increased resources for civilian agency staffing to expand energy management activities and complete energy efficiency projects.* In recent years, budgets for energy management in several key agencies have been cut by more than 80 percent. These Federal appropriations often provide the most cost-effective funding for Federal energy efficiency projects.

4. Improve Aircraft, Ship, and Heavy Vehicle Fuel Efficiency

- *Public-Private partnerships to improve the energy efficiency of Federal aircraft, ships and vehicles.* Energy use in Federal aircraft, ships and vehicles, predominantly in the military services, is responsible for 43 percent of the \$8 billion Federal energy bill. This initiative would improve the energy efficiency of main propulsion systems, with particular emphasis on medium and heavy diesel engines and high performance turbine technology. The initiative -- designed along the lines of the Partnership for a New Generation of Vehicles -- would involve a partnership between Federal agencies and the private sector. Advances under this initiative will have significant application in commercial markets. In addition, the initiative will focus on near-term energy efficiency opportunities such as lighting retrofits on ships.
- *Increase the use of alternative fueled vehicles (AFVs) in the Federal fleet.* Federal agencies are increasing the use of alternative fuel vehicles which, among other things, helps reduce emissions of greenhouse gases. This initiative would enhance the focus of the current program on AFVs such as electrics, hybrid-electrics, natural gas and renewable-fueled vehicles.

5. Greenhouse Gas Assessments

- Federal agencies will be required to assess their greenhouse gas emissions in major actions they undertake.

FACT SHEET ON U.S. GLOBAL CHANGE RESEARCH PROGRAM

October 22, 1997

Background: The U.S. Global Change Research Program (USGCRP) is a National Research Program conducted under the auspices of the National Science and Technology Council (NSTC) Committee on Environment and Natural Resources. The NSTC is a cabinet-level council established by President Clinton in November 1993 to coordinate Federal science and technology efforts. The program's fundamental purpose is to increase understanding of the Earth system, and of human and naturally induced changes in the Earth's environment, and thus provide a sound scientific basis for decision making on global change issues. The USGCRP began as a Presidential Initiative, and was codified by the Global Change Research Act of 1990. The overall FY 1997 USGCRP budget was \$1.81 billion.

The core program of the USGCRP is focused on four key scientific areas:

- *Seasonal to Interannual Climate Variability:* The development and refinement of forecasts of seasonal and interannual climate variability, including study and prediction of the El Niño phenomena.
- *Climate Change Over Decades to Centuries:* Analysis and projection of the effects of long-term climate change on natural resources, public health, and socio-economic sectors.
- *Changes in Ozone, UV Radiation, and Atmospheric Chemistry:* Research on the causes, rate, magnitude, and human health and ecological consequences of changes in stratospheric ozone, UV radiation, and atmospheric chemistry.
- *Changes in Land Cover and Terrestrial and Aquatic Ecosystems:* Research on the causes and consequences of land-cover changes, and on basic processes governing the functions and structure of terrestrial, aquatic, and marine ecosystems.

New Research Directions: Global change research is providing the information about the changing Earth system, and in particular, about climate change, that is needed to achieve a sustainable future. New research efforts include:

- *A National Assessment of Climate Change Impacts* to aggregate information across regions and sectors, analyze national-scale consequences, and support development of mitigation and adaptation strategies.
- *Improved Regional-scale Analyses*, including regional estimates of the rate and magnitude of climate change, analyses of the environmental and socio-economic consequences of climate change in the context of other stresses, and integrated assessments of the implications for society and the environment of climate change.
- *Regional Workshops* to examine the vulnerabilities of various regions of the United States to climate change.

FACT SHEET ON PNGV

October 22, 1997

Announced at the White House on September 29, 1993 by President Clinton, Vice President Gore, and the CEOs of the domestic auto makers, the Partnership for a New Generation of Vehicles (PNGV) is a partnership between the U.S. Federal government (7 agencies and 20 federal laboratories) and Chrysler, Ford, and General Motors that aims to strengthen America's competitiveness by developing technologies for a new generation of vehicles. Its programs include research support for over 350 automotive suppliers, universities, and small businesses.

PNGV's long-term goal is to develop production prototypes of an attractive, affordable car that can meet all applicable environmental and safety times and achieve up to three times the fuel efficiency of a comparable automobile sold today. This would mean that a typical midsize car would be able to achieve 80 mpg. The partnership also aims to (i) improve automotive manufacturing, and (ii) introduce efficiency technologies into production vehicles as soon as they are economically justified.

There are numerous reasons for pursuing PNGV, including:

- **Environmental:** Automobiles are a major contributor to atmospheric carbon dioxide, a major greenhouse gas. Already, concentrations of carbon dioxide are 25 percent higher than pre-industrial levels and are expected to double within the next century. Since the number of registered vehicles in the United States is expected to climb from 194 million in 1993, to as many as 270 million in 2010, PNGV's success is critical to any program of controlling US and world greenhouse gas emissions. It will also result in low cost methods for controlling the emissions that contribute to urban air pollution.
- **Reducing U.S. Dependence on Foreign Oil:** The United States currently imports 50 percent of the oil we consume -- this share is expected to grow to more than 60 percent by 2010. Petroleum imports make up ten percent of our country's import inventory and account for a large chunk of the nation's trade deficit. This dependence on foreign oil makes the United States vulnerable.

PNGV Status Report: The industrial partners are now in the process of selecting technologies that will be included in concept vehicles that will be completed by the turn of the century. The federal agencies are working to revise their research priorities to support both technologies that can be incorporated in production prototypes for 2004 and that can be integrated into even more advanced vehicles that would be designed in later years.

The goal of the program, while extremely ambitious, still seems possible given the advances in key technology that have been achieved during the life of the program. These include advances in production of low-cost, light-weight materials for the vehicle body and frame; electrical control systems, batteries; and compact, inexpensive fuel cells -- including the new technology for using gasoline to power fuel cells announced yesterday; and, advanced internal combustion engines for use in hybrid vehicles.

FACT SHEET ON FUEL CELLS

October 22, 1997

THE BREAKTHROUGH: A gasoline-powered technology that would allow you to double the fuel efficiency of a car and emit half the greenhouse gases and virtually no other air pollution. For the first time, gasoline was used to produce electricity from a pollution-free fuel cell, allowing the use of the existing gasoline infrastructure. Previously, fuel cells have been powered by hydrogen or methanol, which are less convenient for use in cars.

The Department of Energy, together with Los Alamos National Laboratory, and A.D. Little, have developed a breakthrough fuel processor, which can extract hydrogen from gasoline and other fuels such as ethanol and natural gas. Last week, this fuel processor was combined with a fuel cell from Plug Power to demonstrate for the first time that a fuel cell electric car could be fueled by gasoline or ethanol. This eliminates the limited driving range and lengthy recharging times associated with electric cars that run on batteries.

WHAT IS A FUEL CELL: The fuel cell converts the chemical energy of a fuel directly into usable electricity and heat without combustion. Fuel cells are similar to batteries in that both produce a direct current by means of an electrochemical process, but fuel cells can operate indefinitely as long as fuel is supplied to them. Fuel cells can provide power for cars and other applications, such as electricity and hot water for buildings.

The Department of Energy working with its partners has brought down the cost of proton exchange membrane (PEM) fuel cells by a factor of twenty in the last ten years. Continued R&D, coupled with the economies of scale from mass production of fuel cells as they enter the marketplace, should allow us to maintain this pace of cost reduction for another decade.

PARTNERSHIP FOR A NEW GENERATION OF VEHICLES (PNGV): The fuel cell breakthrough was accomplished as part of President Clinton's PNGV initiative, an innovative partnership between the government, the national laboratories, the big three automakers, and their suppliers. PNGV's goal is to develop a family-sized vehicle with triple the fuel efficiency of today's cars, without compromising cost or convenience.

POTENTIAL GREENHOUSE GAS REDUCTIONS: One-third of the nation's carbon dioxide emissions comes from the transportation sector, primarily cars. Fuel cell technology alone can directly double fuel efficiency and cut carbon dioxide emissions in half. In combination with other PNGV advances, such as lightweight materials and regenerative braking, fuel cells will allow a tripling of fuel efficiency and a further reduction in greenhouse gas emissions. Powering the fuel cell with renewable fuels, such as ethanol, could eliminate automotive greenhouse gas emissions entirely in the long run. The buildings sector also generates one-third of the nation's emissions of carbon dioxide. A building that uses the electricity and hot water from a fuel cell fueled by natural gas would have about half of the greenhouse gas emissions of the average building today. Plug Power expects to introduce fuel cells for homes and other buildings in 2000 that will provide electricity for less than the current residential rate. By 2010, fuel cells in buildings could be providing emissions savings of five million metric tons of carbon.

FACT SHEET ON PATH

October 22, 1997

What is PATH? We are working to develop a partnership for 21st century housing bringing together government and industry to develop, demonstrate and deploy housing technologies, designs and practices that can significantly improve the quality of housing without raising the cost of construction. The **Partnership for Advancing Technologies in Housing** includes government (DOE, HUD, EPA, Labor, Commerce, FEMA, and DOD) and industry working together develop, demonstrate and deploy housing technologies and practices so that homes can be built cheaper, more environmentally sustainable, more disaster resistant, and provide a safer working environment.

PATH has a five-part approach:

- Industry-driven research on new technologies and practices
- Working with industry on pilot programs building thousands of marketable houses
- Streamlining of federal, state and local codes and regulations
- Judicious use of existing authority on standards
- Information campaign to influence consumer demand

R&D: Support more funds for accelerated research and demonstration of inexpensive, highly efficient, highly attractive housing. Link with million solar roofs program.

Standards: The success of PATH will in some part be based on utilizing existing authorities on standards for a select few products that have the potential for great savings. There are five appliance/products currently under review by DoE; Clothes Washers, Ranges/Ovens, Ballasts, Residential water heaters, transformers. Of these, the Clothes Washers and Water Heaters seem to have greatest potential.

Creating Markets: The key to making the Partnership successful will be the ability to create markets and consumer demands for homes that meet the PATH goals. The Partnership will work with states and communities to help them understand the benefits of building these homes, and the opportunities it affords the communities for economic growth. The Partnership will attempt to gain agreements between communities that PATH homes can go through an expedited permitting process.

Education and Outreach: Marketing the benefits of these homes to consumers and to encourage consumers to begin to ask for homes that are built to the quality level of >PATH= homes. This will need to be an intensive campaign of getting the message out to communities, builders and developers. This will provide incentives for more and more builders to want to build these homes.

Pilots: The pilots will play an important role in the success of PATH. The pilot sites will begin of developing the markets and demonstrate the feasibility of the homes. The pilot sites can also act as training sites for builders and community leaders to learn about the benefits of the technologies and as a classroom for training on how to use the technologies. Sites under consideration are Stapleton Airport, Denver (Redevelopment of old airport site near downtown) and Florida (Working with the State to link energy and environment to disaster resistance and affordability).

Regulatory Streamlining: Working with states and communities on making the code approval process more efficient and less time consuming.

FACT SHEET ON POTENTIAL INDUSTRY SECTOR SAVINGS

October 22, 1997

The industrial sector produces approximately one-third of total U.S. emissions. We can cut emissions substantially in this sector through the right mix of tax incentives, accelerated research and development, electricity restructuring, and environmental regulatory reinvention. According to a recently released report from five of the nation's energy laboratories, programs such as the ones below can reduce emissions in the industrial sector in 2010 by 28 million metric tons even with no increase in energy prices.

Increasing Energy Efficiency: Energy audits encourage systematic approaches to energy efficiency that typically have high yields. Southwire Corporation, a large manufacturer of wire, rod, and cable, cut their use of natural gas by 60 percent and cut electricity use by 40 percent per pound of product produced. Motors consume 70 percent of industrial electricity used, and there is room for improving their efficiency. The Greenville Tube Company, for example, increased productivity by 15 percent, increased energy efficiency by 30 percent, reduced scrap by 15 percent, and achieved \$77,000 per year savings -- a 6 month payback -- by improving the efficiency of their motors.

Cogeneration (Combined Heat and Power): New technologies available in the industrial sector will allow us to capture the waste heat the U.S. now throws away. With the right policies, industrial cogeneration of natural gas or biomass could cut annual carbon emission significantly by 2010. Advanced turbines developed by DOE with industry will be available in three years (orders are already being taken). They have an overall efficiency of 80 percent to 90 percent, produce steam together with low-cost electricity and significantly reduce NOx emissions. These turbines can run on natural gas or biomass. Some industries have their own low-cost biomass feedstocks (for example, black liquor gasification in the pulp and paper industry), which makes possible cogeneration with nearly zero carbon emissions.

Expanding Industries of the Future: The seven most energy-intensive industries—steel, aluminum, petroleum refining, chemicals, pulp and paper products, glass, and metal casting—account for about 80 percent of the carbon emissions in U.S. manufacturing and more than 90 percent of the hazardous waste. Industry, partnering with the Department of Energy, has developed long-term visions of energy-efficient, low-polluting, highly competitive "Industries of the Future" as well as technology roadmaps to identify an R&D and deployment pathway to achieving the vision. Visions typically foresee annual energy efficiency improvements of 1.0 percent to 1.5 percent for two decades.

FACT SHEET ON POTENTIAL BUILDINGS SECTOR SAVINGS

October 22, 1997

The buildings sector also produces approximately one-third of total U.S. emissions. There is substantial opportunity to improve the energy efficiency of our buildings and the appliances in them. Many of these technologies improve the quality of service delivered (i.e. higher quality lighting), and have also been documented in a number of cases to improve productivity. According to a recently released report from five of the nation's energy laboratories, programs such as the ones below can reduce emissions in the buildings sector in 2010 by 25 million metric tons even with no increase in energy prices.

Standards: Substantial carbon emissions reductions in 2010 can be achieved through existing authority of the Department of Energy to establish market-oriented efficiency standards for appliances, such as refrigerators and air conditioners. The Department of Energy uses a consensus-based approach in which manufacturers, environmentalists, consumer advocates, and the states work together to develop applicable standards.

Voluntary Programs: Significant carbon reductions in 2010 could also be achieved by expanding voluntary programs such as the joint EPA-DOE Energy Star program. Energy Star labeling has already transformed a number of markets. For example, it has cut the energy used by computers, monitors, and printers by 50 percent at virtually no incremental cost. It is now being extended to dozens of other products.

Adopting Best Electricity Engineering Practices: Electronic equipment consumes electricity in stand-by mode (even when not being used) generating 12 MMTs of carbon emission each year. Preliminary analysis suggests that 80 percent of that could be saved through adopting best engineering practices without reducing service.

Research and Development: Designing buildings with advanced technology can reduce energy consumption by 25 to 50 percent without increasing the building's initial cost. The extra cost of some of the energy-efficient equipment is offset by the smaller required heating and cooling system.

Combined Heat and Power: As in industry, we can reduce the carbon intensity of the buildings sector by accelerating the use of combined heat and power (CHP). Two CHP technologies—small turbines and proton-exchange membrane (PEM) fuel cells—can convert natural gas to useful energy with 80 to 90 percent efficiency, significantly cutting carbon emissions from a building.

FACT SHEET ON POTENTIAL TRANSPORTATION SECTOR SAVINGS

October 22, 1997

The transportation sector produces approximately one-third of total U.S. emissions. According to a recently released report from five of the nation's energy laboratories, programs such as the ones below can reduce emissions in the transportation sector in 2010 by 73 million metric tons even with no increase in energy prices.

High Efficiency Cars And Light Trucks: The goal of the President's Partnership for a New Generation of Vehicles is to produce cars that are three times more efficient than current vehicles with no compromise in size, safety, comfort or cost. The objective is a production prototype vehicle with a fuel efficiency of 80 mpg in 2004 and commercial availability soon after. A variety of efficient technologies such as hybrid vehicle design, advanced engines, regenerative braking and lightweight materials are under development. These technologies are also applicable to light trucks and sport utility vehicles, so that a PNGV for these heavier passenger vehicles is quite possible with an expanded research effort.

High efficiency heavy trucks: Ongoing federal R&D on advanced diesel engines and lightweight materials have the potential to substantially reduce carbon emissions from heavy trucks. These technologies are projected to be available by about 2003 and be quickly adopted by trucking manufacturers since energy is a major cost component of freight transportation (a truck typically gets 7 to 8 miles per gallon while traveling over 50,000 miles a year).

Advanced Efficient Aircraft and Rail: Ongoing federal R&D on advanced aircraft engines, improved airframes, and air traffic control have the potential to improve aircraft energy efficiency by 35 percent, with an additional increment of carbon emissions reductions achieved by increasing the efficiency of trains.

Low-Carbon Fuel: Government-industry R&D partnerships have brought the cost of ethanol from cellulosic waste (such as crop waste) and dedicated crops (such as switchgrass) from \$3.60 per gallon in 1980 to \$1.20 per gallon today. Such fuels are carbon neutral because the crops capture carbon dioxide when they grow and release it during combustion.

Clinton Presidential Records Digital Records Marker

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

This marker identifies the place of a tabbed divider. Given our digitization capabilities, we are sometimes unable to adequately scan such dividers. The title from the original document is indicated below.

2

Divider Title: _____

REMARKS BY THE PRESIDENT
ON GLOBAL CLIMATE CHANGE

National Geographic Society
Washington, D.C.
October 22, 1997

Thank you very much. Mr. Murphy, Mr. Vice President. 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 the 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, the West today.

One of the gentlemen said, you know, we got a lot of interesting comments on the articles, including a letter referencing a picture we had of the bust of Emperor Vespasian. The reader asked why in the world did you put a statue of Gene Hackman in a piece on the Roman Empire? And I say that basically to say, the more things change, the more they remain the same.

For what sustains any civilization, 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, to begin 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.

Together, we've made a lot of progress in the last nearly five 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.

This has happened, in no small measure, 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 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; a strategy consistent with our commitment to reject false choices.

America can stand up for our national interest and stand up for the common interest 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 five-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 road blocks 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 five 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 down payment 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 down payment 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 own.

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 Pena 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 path-breaking 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 four 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 6th 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.

Following the lead of these 6th graders -- 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 claim 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 '70s 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 industries thrived. We saw this when we phased out lead and 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 and 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 give better service at lower cost with higher profit. 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 timetables. 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 300,000,000 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.

Clinton Presidential Records Digital Records Marker

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

This marker identifies the place of a tabbed divider. Given our digitization capabilities, we are sometimes unable to adequately scan such dividers. The title from the original document is indicated below.

3

Divider Title: _____

H8510

CONGRESSIONAL RECORD—HOUSE

Question. Kerri Coleman (sp), CBS Nightly News in Cleveland, Ohio. Mr. Vice President, you were talking about global population, you know, growing essentially out of control. Has the administration thought in any way, shape or form about policy affecting those developing countries relative to overpopulation. I know it's a sticky subject, but have you guys sat down and thought about the recommendations to the rest of the world.

VICE PRESIDENT GORE: Yes sir, we have. And one of the first things actually in the first few days that President Clinton was in office, he signed an executive order changing a policy that had been called the Mexico City Policy because the last worldwide conference on population was in Mexico City and a previous administration had said the United States would not participate in any of these international programs and the president changed that. Then we went to the next worldwide conference which was in Cairo on population and development. The president asked me to lead the delegation there. We created a new consensus and got a new worldwide approach that most everybody in the world has joined into.

Now we probably don't want to spend much time on this, but the—this doesn't have to be as controversial as some people make it out to be. There are certain conditions which, when established in a country, lead to a dramatic change in their population growth rates. The scientists talk about what they call a demographic transition that goes from high birth rates and high death rates to low birth rates and low death rates. And most all of the developed countries, the advanced countries, have made that transition.

And you know, we think back—we don't need to think back more than one or two generations in the United States to when our parents—and certainly our grandparents—were in families with six, eight, 10 kids and more. It hasn't been that long ago. But now, you know, it's—the two-child family is the average and so forth.

Well, the developing countries still have very, very large families. What makes for that difference? It turns out that there are about three things:

Number one, child survival rates, which, when you think about it, is really important, because most of these countries don't have a Social Security system. They count on the fact that at least some of their children will survive into adulthood and take care of them when they're old. If you have a very high child mortality rate, and a high percentage of the children die in infancy or in childhood, then you've got to have a lot of children in order to guarantee stability and—I mean, you know, in your old age. And that's just a factor. So when you increase the survivability of children and decrease child mortality, it tends toward a lower family size.

Second, availability of birth control information and culturally appropriate and acceptable techniques. And that's the controversial part. But they decide that for themselves. And when that's available, that's the second factor.

The third factor is the empowerment of women, socially, politically, and in the context of the family, to participate in the decisions about childbearing. And I guess with some people that's controversial, too. I don't think it should be.

But when those three conditions are established, those countries make that change, and their population begins to stabilize.

We're actually beginning to experience some good news around the world with the beginnings of a stabilization in world population. But the momentum in the demographic system is such that we're inevitably

going to go to eight or nine billion. The question is whether these changes will keep us from going to 10, 12, 14 billion. But there's emerging good news there. Now, that same kind of momentum, of course, is in the greenhouse gas emission part of this, too.

Yes, right here.

THE WHITE HOUSE

Office of the Press Secretary

For Immediate Release

October 23, 1997

REMARKS BY THE PRESIDENT
AND FIRST LADY
AT WHITE HOUSE CONFERENCE ON CHILD CARE

The East Room

10:00 A.M. EDT

MRS. CLINTON: Thank you and please be seated, and welcome to the White House Conference on Child Care. We are delighted to have with us in the East Room today members of Congress and the President's Cabinet, other officials from the government here in Washington. We have many elected officials from around the country and a great group of distinguished guests, including parents and experts in this important issue.

I also want to greet the hundreds of people gathered at the Departments of Agriculture, Labor, and Health and Human Services here in Washington, and to the thousands more who are joining us via satellite from the more than 100 sites at universities, hospitals and schools and businesses around the country.

I'd like to take a minute for all of us to think about what's happening in America this morning, and about what happens every morning. Parents are making the preparations to get to work, and those preparations include for most working families putting their children in the care of others. And most, even before they're out the door, are worrying about the logistics of the care that their children will receive. Some are even worrying about the safety or quality of that care.

There are many who are wondering whether they would get better quality care if they could pay more. Others are struggling to determine how they'll be able to afford next month's payment. And there are many who are in the work force who worry every day about how they'll care for their child and hold down the job that they need. Many parents will go to work, but have trouble focusing on work because they are worried about the sniffle that their daughter had or wondering how their son is faring.

And before we finish today, many more working parents will keep looking anxiously at the clock and will murmur into telephones the instructions that their children need after school, because their concerns don't end at the end of the day for their children's school time, because parents won't get home, so that they have to worry about what happens to keep their child safe and well occupied during those hours, as well.

These are just some of the questions that America's parents are asking themselves this morning and every morning that they prepare to go to work. Some parents ask themselves these questions in the afternoon, as they prepare to go to a swing shift, or at midnight as they start to work in one of the other jobs that are essential to keeping our economy strong.

Earlier this month I went to the University of Maryland to visit its center for young children, and as soon as I walked in the door I knew immediately it was the kind of place any of us would feel comfortable sending our children. I was, frankly, tempted to

MORE

THE PRESIDENT: I learned that from him, that word, you know. (Laughter.) But I'm sure you could see there was more there.

It occurred to me, listening to you talk about this, that this child care issue is an example of what makes our work both wonderful and maddening. How many times has Secretary Riley and I said that every problem in American education has been solved by somebody in some school somewhere, so why don't we get uniform excellence.

I just had the most difficult policy development process I have been through I think since I've been President, that Secretary Rubin and I did together; it was on trying to develop America's position on climate change. But it had very little to do with the science. There is literally enough technology out there today to enable us without lowering our standard of living, indeed while raising our standard of living, to substantially cut our emissions of greenhouse gases. And I can cite you industry after industry after industry that's made a ton of money doing it on their own, so why doesn't everybody do it? Why don't we even have a critical mass of companies doing it? And I ask you that question. So we've got another example here with child care.

If you can cite these examples where all of these companies are making money and having happier, more productive employees, what are the barriers? Why is the market dysfunctional in cases like this, and what can we do to make it work? Because if we were trying to get hookups to the Internet, we'd have 100 percent penetration in one-tenth of the time it takes us to get 10 percent penetration for educational excellence, environmental conservation or spread of child care. What's the difference? (Laughter.)

SECRETARY RUBIN: Are you asking me? (Laughter.)

THE PRESIDENT: I think it's the single, most important question about social policy today. You and I think about this all the time, but I don't know what you think about this.

This is not in the notes, he's not prepared to say this.

SECRETARY RUBIN: You're the President of the United States, you're supposed to know the answer to these things. (Laughter.) But having said that, I'll give you a view, whatever it's worth.

I think, Mr. President, you make a very good point. And I think you can point to a lot of other areas where the same thing is true. I think what we need to do -- and it's true with respect to the importance of our country and the global economy, -- the importance of trade liberalization and a lot of other things -- I think there is a need for a massive effort of trying to improve the understanding of people in all parts of our economy and our society about what we really need to do in this new and modern global economy. And I think one of the great difficulties is trying to communicate what really matters -- issues such as this in a world which has so much else coming in at people that, really, in my judgment, matters very little.

But I think that your point here, which is to set up a private sector group of some sort -- or it wouldn't be totally private sector necessarily, but a group of people of some sort, try to identify the best practices, try to identify what works, try to identify problems, and then go out and amongst their peers try to bring to their peers the same understanding they they've acquired through their own experience is maybe the most effective and best way to do this, rather than having somebody else who is not part of their world talking to them and trying to bring them into a shared understanding. And that's at least what we're going to try to do with this, Mr. President.

Statement of Senator Tom Harkin for
Senate Agriculture Committee Hearing on Renewable Fuels
November 13, 1997

I want to thank you, Mr. Chairman, for holding this timely hearing on this very important topic. As you know I have long been an advocate of biobased renewable fuels. I am especially interested in ethanol and switchgrass as fuels which can raise rural income levels and help increase U.S. energy security, and I am pleased that these fine witnesses are here with us to talk about the importance of biobased fuels. You and I both know the importance of biobased fuels to rural America and the nation as a whole. This hearing should furnish us and our colleagues with a reminder of why investment in renewable fuels is so critical at this time.

Recently the Secretary of Agriculture visited the small town of Centerville, Iowa to witness a part of the future. In nearby fields, farmers had planted hundreds of acres of switchgrass as part of a biomass energy project. Here farmers, local power utilities, researchers and the federal government have joined in a partnership to prove that electricity can be generated economically from biomass. This pilot project will convert switchgrass to electricity in a coal fired power plant, and is another step toward the development of home-grown energy supplies in Iowa.

The next step is the development of biomass energy systems which utilize hydrogen fuel cell to produce electricity. I call this concept electrofarming and it has many advantages over the coal-fired biomass system. For example, hydrogen fuel cells produce no emissions, only water and electricity. Fuels cells are more efficient than turbines, even at lower power levels. Farms could use electrofarming systems to provide the energy for their farm and sell the excess to the power grid, leading to higher rural incomes and more decentralized power production. What we need now is a commitment from the Administration to help to develop an electrofarming demonstration project.

That is the future. Ethanol is the present and the future. The ethanol industry provides a tremendous opportunity to supply energy to Americans. Although the U.S. ethanol industry currently has the capacity to produce about 1.6 billion gallons annually, that is only a fraction of the potential energy resources that can be drawn from the American agriculture sector. In a report on energy R&D strategies for reducing greenhouse gases released last week by the President's Committee of Advisors on Science and Technology (PCAST), a panel of industry experts and scientists suggested a need for biofuel production capacity by 2030 of 19 billion gallons in this country alone.

Ethanol has a greater impact than merely providing energy for our nation. It also provides increased income for our rural citizens. A recent report by John Urbanchuk sponsored by the National Corn Growers, suggests that over 100,000 jobs are created directly and indirectly by the ethanol sector, generating more than \$2.0 billion annually in additional farm income. If we attain the goals suggested in the PCAST report, those numbers could increase by a factor of at least ten.

In addition to the energy benefit, ethanol could represent a tremendous income opportunity for rural America. An increasing share of the country's ethanol productive capacity is held by small- and medium-sized producers, many of which are operated by farmer-owned cooperatives. This trend suggests that much of the income from expanded production would go to those we most want to help, our family farmers. As technology is refined and cultivation of more energy crops are devoted to this purpose, more and more farmers will share in this bounty, across the country.

The environmental gains from this increased use of bio-based fuels could also be considerable. When biomass is used for the generation of energy, there are low lifecycle CO₂ emissions from its use, especially for the energy crops currently being studied in pilot projects sponsored by the Department of Energy. The perennial grasses or short rotation woody crops like poplars have the added benefit of helping to manage erosion problems in vulnerable soils, as witnessed in those fields around Centerville.

Finally, these biobased fuels could play a significant role in allowing us to better control our energy security. Mr. Chairman, this topic has long been of intense interest to you, and I share your concerns. The recent tensions in the Middle East over the renewed grandstanding by Saddam Hussein underline the political instability of that region, the world's largest exporter of petroleum products. Clearly, we

need to do more at home to reduce our reliance on imported energy supplies. I believe our energy future could be growing in the fields of Iowa and Indiana. We cannot remind our colleagues of that fact too often. I look forward to an interesting and informative hearing.

THE WHITE HOUSE

Office of the Press Secretary

For Immediate Release

October 22, 1997

PRESS BRIEFING

BY

CHAIR OF THE NATIONAL ECONOMIC COUNCIL GENE SPERLING,
ASSISTANT TO THE PRESIDENT FOR INTERNATIONAL ECONOMIC POLICY
DAN TARULLO,
DEPUTY NATIONAL SECURITY ADVISOR JIM STEINBERG,
STAFF SECRETARY TODD STERN,
CHAIR OF COUNCIL ON ENVIRONMENT QUALITY KATIE MCGINTY,
AND DEPUTY SECRETARY OF TREASURY LARRY SUMMERS

The Briefing Room

1:15 P.M. EDT

MR. MCCURRY: We are bringing before you a parade of administration officials, harmoniously and vigorously united together -- brown and green alike, they march out, and all colors in between.

The President's global climate change team is here with you, including all of the following and more: Gene Sperling, Assistant to the President for Economic Policy, Chair of the National Economic Council; Dan Tarullo, Assistant to the President for International Economic Policy; Jim Steinberg, Deputy Assistant to the President for National Security Affairs; Todd Stern, Assistant to the President and Staff Secretary and really the shepherd of all of our global climate folks at the White House; Katie McGinty, the chair of the Council on Environmental Quality; and Larry Summers, Deputy Secretary of the Treasury.

They are here at your disposal, but we are going to do the following. We'll start with Gene giving a little overview of the policy directions the President has now put in place as we head to Kyoto. Katie will tell you a little bit, expand a little bit on the specifics of the policy. And I guess Jim and Todd can talk about the negotiating process that we foresee looking ahead to Kyoto.

Mr. Sperling.

MR. SPERLING: The President, the Vice President and everyone in the administration who has worked on this issue feels very strongly that this is perhaps the major environmental challenge of our generation. All of us believe strongly that the science compels action; that the science, based on the scientists that came together from over 150 countries, makes clear that there has been a discernable human influence on the climate with potentially disruptive effects for our future; and that the United States must play a leadership role in addressing this environmental challenge.

The President today puts forward an ambitious, but sensible and sound approach for addressing this. He sets timetable and targets of reaching 1990 levels by the period of 2008 to 2012. Our policies will be based on five fundamental principles, that we be, one, guided by the science; two, that our approach be market-based and common sense; three, that we should first look for the win-win, positive solutions that exist before us; fourth, that there must be global participation, that this is a global problem that requires a global solution; and, fifth, recognizing the uncertainty in engaging on a long-term we need to have common sense, economic and scientific review periodically.

MORE

reduce emissions, to improve the environment and to seize economic opportunity in doing that.

How? One, through a very innovative new initiative on tax incentives to encourage investments in energy-efficiency, renewable energy, in encouraging the turnover of older, less efficient capital stock -- things like that. Second, through a program of designing and affording credit to industries who are willing to step up to the plate and take action early -- earlier than any of the periods that are being discussed in the international arena. The President will want to work in partnership with industry, affording them credit for taking early action to reduce emissions, through new investments in the important technologies that the United States can develop and has the opportunity to lead the world in developing.

And, fourth, and importantly, by unleashing the forces of competition in the electricity markets. Today, electricity generation and transmission is governed by rules that in some instances are 70 years old. That antiquated system has stifled some of the most efficient and effective technologies we have that can dramatically reduce greenhouse gas emissions from the electricity sector. The President is putting that forward today, something we can begin to move forward on that can help us to reduce emissions and seize tremendous economic opportunity.

The President has underscored in previous statements on this issue that today we throw out two-thirds of the energy we generate. These policies are about capturing those inefficiencies, enhancing the economy and the environment at the same time. So the first principle, through the President's leadership, we are getting to work today.

Second, the President's leadership increases our ability to bring the entire world to a binding, but realistic and achievable set of goals in reducing greenhouse gas emission -- binding first. Why? Because our experience since 1992, the Rio Earth Summit, shows us that simply voluntary actions aren't sufficient to meeting this challenge. The voluntary actions have achieved some reductions, but not enough, and we have continued to see emissions grow.

So the President is saying it's time to give the issue the seriousness it merits; binding reductions are very important. But those reductions should be realistic and achievable. What the issue really demands is action, not the pie in the sky kind of rhetoric we've heard, nor the doomsday scenarios we've heard, either -- 1990 levels by the year 2008 to 2012 is significant, first; it represents a reduction in U.S. emissions on the order of 28 percent from where we would otherwise be in the year 2010. But it's realistic and achievable. As Gene underscored, the President is seizing on this decade of opportunity we have from 1998 to 2008 to find those ways to harness market forces to help us get this job done.

That leads to the third principle. The President's leadership here is about harnessing market forces to help us to achieve environmental objectives in a cost-effective way and in a way that helps us build new industries. We have great experience in this country in using market forces to reduce the costs of achieving environmental goals.

The Clean Air Act has provided us with a wonderful example. We've reduced the emissions that cause acid rain by more than 40 percent of what was required under the law for less than a tenth of the price that was predicted. How? Because we used innovative means, a marketable permit scheme, where firms can trade among themselves the right and the obligations to reduce emissions. We've reached targets that way, but in a much more cost-effective

domestic agenda on climate change; it must be an essential component of the international agenda on climate change. That means international emissions trading; it means international joint implementation proposals and mechanisms so that the most cost-effective means of reducing emissions are available to all the countries of the world to seize.

Third, the President will say this afternoon, as I think both my colleagues have mentioned, that the United States cannot assume binding obligations in this area without developing country participation. The developing countries of the world will, over the course of the next couple of decades, become the most significant, in quantitative terms, emitters of greenhouse gases. That is notwithstanding the fact that, to date, the developed countries have been. Thus, as a matter of science as well as policy, we simply cannot solve this problem without the participation of developing countries.

Now, in pursuit of that, we have made quite clear, Katie alluded to the President's discussions with President Menem -- this has been the subject of numerous consultations at a staff and ministerial level as well, and this will be an important component of our negotiators' positions taken in Bonn and all the way to Kyoto.

I think I'll stop there. Who is running the questions here?

Q The word "bold" isn't very -- the environmentalists don't think this is very bold. You haven't mentioned -- emissions. It's a real retreat, is it not?

MS. MCGINTY: Let me say, first of all, that many in the environmental community have spoken very favorably, especially to the President's insistence that we are going to get to work now. The President's idea that we will offer incentives to industry to step up to the plate and take early actions to reduce emissions is a proposal that is very important to the environmental groups and that they support wholeheartedly.

Would they like to see additional reductions, reductions on the order of what the European countries and others have been talking about? Certainly. Would some in the business community like to have seen less reductions? Certainly. But what the President has put together here is an ambitious plan that will reduce U.S. emissions by 28 percent in the year 2010. It's an aggressive plan to move us forward.

Q -- on developing countries -- you talk in terms of assuring that developing countries must participate in whatever regime results. But I don't hear you saying that there would have to be some point at which they accept binding obligations. Would there be, perhaps at a later date, perhaps on a case-by-case basis different standards, but are you going to propose in Kyoto that there be binding totals and limits on the developing nations?

MR. STERN: As I said a moment ago, our position is one of the indispensability of participation. The nature of that participation is to be defined obviously in the course of negotiations. I think it is useful, however, to refer to President Menem's own observations on the subject last week where he did make reference to the need for developing countries to take on obligations on emissions as well.

Q How is this package tailored to meet the requirements on the Hill and to win the ratification you'll need for anything coming out of Kyoto?

MR. STERN: That's the next briefing. (Laughter.)

energy. But the truth is, it's pretty hard for any of us to know. And so I think the President, in providing a sensible path, in going forward and making sure that we are doing all of the win-win, positive things first, that down the road Congress and the President will have to evaluate whether those have been enough and whether we have to take more strenuous steps.

Q So no increase in energy prices?

MR. SPERLING: The plan that we have as you look forward does not include increased energy prices. I think that one has to acknowledge that one you enter the emissions trading period in 2008, that there will probably be costs, those emissions. But how much and what the price of energy will be and what kind of success we've had at having other efficiencies by then is, again, very hard to predict. I doubt people would have predicted the tremendous real decrease in gasoline oil prices we've had.

Q Do you have a target for the five-year period after 2012 for those reductions?

MS. MCGINTY: The President will indicate that the United States proposal includes both a binding target of reaching 1990 levels emissions between the year 2008 and 2012; and that then in the next five-year period of years, that emissions should be reduced below 1990 levels. And the extent to which they should be reduced is an issue that we will take up in the international arena and have discussions there.

MR. SPERLING: I'm just going to let Larry follow up on mine, and then we'll take the next question.

DEPUTY SECRETARY SUMMERS: Thank you, Gene.

If I could just add, this is a helping-hand approach, rather than a heavy-handed approach to working to reduce energy consumption. It doesn't provide for mandated increases in prices on energy over the next decade. And it does contain a number of provisions that are likely to work to reduce energy costs.

Those provisions include measures that will support the introduction of technologies that will increase fuel efficiency, such as vehicles that have more miles per gallon. Those provisions include measures that by encouraging energy conservation will reduce demand for energy, which will tend to reduce its price worldwide. And those provisions include electricity restructuring, which by harnessing competition in an important network industry has the potential to bring down the costs of energy to consumers, just as we've seen in telecommunications and in airlines, and that on fairly conservative estimates could mean as much as \$20 billion to households.

So this is an approach that is, as Gene has emphasized, one that is very much focused on doing all we can over the next decade to exploit win-win solutions that can come from harnessing market forces to do things that are both good for the economy and good for the environment.

Q Can I stay on this question of cost for a second? What you guys are saying is we're kind of hazy in this 2008 to 2012 period, we can't know for sure. But I seriously doubt that the administration's economic team would have signed off on these 1990 levels without doing a hard analysis that said, based upon our knowledge now we predict that this scheme would mean energy cost of X by the year 2008 or 2010 or 2012. Are you saying you don't and haven't done that? Or if you have, what are the numbers?

MR. SPERLING: First of all, I think we were pretty clear that, as Larry said, there is not a mandated energy price increase between the year 1998 and 2008. We're acknowledging that in the binding -- in the emissions trading period that it can't be ruled out that there could be some effect on energy prices. We're saying that part of that is going to depend on what the success of the variety of different efforts, many of the nine steps that the President has had there.

Q Well, what I'm saying is, haven't you guys done an analysis that say best case scenario it's X, worst case scenario it's Y. And if you have, won't you share that with us?

MR. SPERLING: I think I'll let Larry speak. First of all, there is -- you know, I've been around here five years. If you want an econometric model to show you something 13 years out, you can do anything you want. You can show anything that you want. What we're trying to do is --

Q We'll keep that in mind the next time you --
(laughter.)

MR. SPERLING: What's that? The next time that we predict what a particular policy right now will be 13 from now with an econometric model, you can be free to show that to me, and I would say you'd have a hard time showing a time in the past that we've tried to predict 13 years out in that sense. But we have certainly been locked in doing a tremendous amount of economic analysis. When you look at the things there, you will see, for example in the five-lab study, that there is, from the Energy Department, there is very careful analysis on what the potential is for reducing metric million tons of carbon through the efficiencies in the three main sectors -- the building, the transportation, and the industrial sectors.

As Larry said, and this really is the first time today that the President will be and is announcing that he will be supporting an electricity restructuring proposal, there is certainly in that area a tremendous amount of waste because there is not incentives to capture the full amount of energy that is used.

We have gone through all of this analysis, but I think that what we have tried to do, and I think what the economic team has worked to stress, was to recognize where there is really is uncertainty, that rather than to try to pretend that you can draw a road map from here to Los Angeles with every street and turn in it over the next 13 years, is to try to have a process where we have the ability to incorporate what we are learning, what we are seeing, what works. That is, I think, the soundest and most realistic approach for us going forward.

We clearly think that if things -- if this country mobilizes the right way, that we can get there without having a significant price increase, even after the year 2008. One of the things that will be a key element, and I can let Larry speak to that, is the success of having a truly international system with international trading. Where you allow for the most market efficiencies, where people have the ability to seek out the places where there is the greatest capacity to reduce carbon greenhouse gas emissions at the lowest price, that will be one of the most key elements in determining how much we can do this in a cost-effective way.

And that's one of the points one has to understand in climate change. When you reduce a million metric tons of carbon, when you reduce carbon emissions anywhere in the globe, it has the same impact. And so having a system develop over time that allows that to happen will be absolutely critical and vital to what the costs are. If you assume that that will work very well, extremely

budget the exact specifics. Certainly, the -- recommendations will be highly considered and certainly many of those will make it into our budget.

Q How flexible, Gene, are you going to be in the negotiations this week, next week, up to Kyoto, with regard to your binding target proposal for the industrialized world? Is this a take it or leave it proposal from the United States, or are you flexible enough in these pending negotiations to perhaps strengthen the binding targets the President outlined today?

MR. SPERLING: This is our position; this is a position that the President has worked on himself. He has developed this plan himself. He took this from a variety of different recommendations, all of this, gave him -- he pulled different pieces and put together a strategy that he feels comfortable with. This is our position. And when I say that we're not seeing anymore, I'm not commenting one way or the other on what would happen in negotiations. This is our position and this is where we stand.

Q Gene, what has happened since the time the President set the year 2000 as the goal? What's changed since then?

MS. MCGINTY: I think this is an important point. We have a lot of attention to this issue now because Kyoto is on the horizon, but the fact is that the President has been hard at work on this issue since 1993. First, he reversed the position of the previous administration and signed the United States up to the goal of reducing emissions to 1990 levels by the year 2000. He followed that immediately with a 50-point plan to help us to achieve that goal.

Now, that plan has delivered very significant reductions in emissions from where they otherwise would have been. Did it get us or are we on track to get to the year 2000? As we articulated more than a year and a half ago, we are not on track to do that. Why? One, economic growth has been quite robust and more robust than even we had anticipated in the beginning of 1993. Two, oil prices have proven to be lower than were anticipated in early 1993. But, three, and most compellingly and importantly, is that the Congress had as part of its anti-environmental agenda, had not funded the President's initiatives in energy efficiency and renewable energy. Now, despite those three factors, the President's efforts have delivered significant emissions reductions from where we otherwise would have been, on the order of about -- for the jargon -- on the order of about 40 million metric tons of carbon emissions.

You will see today major utilities in the United States standing up and saying that the President has outlined today a very sensible and very strong policy to move forward on reducing greenhouse gas emissions. Many of those utilities have been working in partnership with us since 1993, with the President's leadership. They have signed up voluntarily and have voluntarily reduced their emissions significantly.

So we have been at this consistently since 1993. Kyoto presents us an opportunity with taking this issue now to the next steps where we can join together with the world community, looking beyond the year 2000 and the steps that have to be taken then.

Q Are the utilities that began participating in '93 going to get credit for those reductions?

MS. MCGINTY: One of the points that the President wants to emphasize today is that we will build a program to provide credit for those who will take early action. As part of our effort to do this, to undertake this effort in partnership with industry, we will

- 12 -

going to cost a lot more money than we thought it would? There's no opt out, is there?

MS. MCGINTY: The notion of economic reviews as scientific reviews is just common sense. We are putting forward here some very ambitious ideas that we think can deliver both environmental and economic results. But we want to make sure we are seizing all the best opportunities that are out there, and the point of that review is to make sure that all the best ideas are ideas that we are implementing.

Q If you don't envision a clause that lets you out -- is what I'm asking, is there any clause that lets you out of this? If it says this is going to cost a lot more than we thought and we can opt out or not, is it really binding?

MS. MCGINTY: It is a binding treaty and it's very important to the President and a principle that he has consistently put forward is that we are now moving into a period where binding emissions reductions are absolutely required, certainly.

Q So there's no -- if five years from now we say it's going to cost a lot more money --

MS. MCGINTY: Look, there's no treaty in the world that would require a country to bankrupt itself. And this treaty is no different than any other treaty in the world in that respect.

Q When does the United States expect to stop increasing its greenhouse gas emissions and start decreasing them? How will we know if we're not performing, because the track record so far is one of saying you are going to meet targets and then missing them, saying you were going to review them and then postponing them. When are we going to actually turn the corner and start cutting down?

MS. MCGINTY: Well, let me just say that the whole point of the series of efforts that we have announced today is to enable us not to wait until the year 2008, but to move forward now. We are going to do our level best through providing the tax incentives we've spoken about, by designing a program that affords credit to industries for taking early action, by investing in new technologies to begin to turn those curves just as soon as we can. But we are moving as ambitiously and as aggressively as we can toward that target period.

Q When do you expect U.S. greenhouse gas emissions to start going down?

MS. MCGINTY: From where they would otherwise be, we would hope --

Q To stop going up. They're going up. It's a very simple question.

MS. MCGINTY: You may be on a level of technical detail that I can't provide.

Q Can anybody say when the emissions are going to start going down?

Q The EU has put forward a much stricter proposal and the developing countries in Bonn just signed a statement saying they support the EU proposals. So how good do you think the chances are of getting a treaty out of Kyoto?

MS. MCGINTY: Well, let me underscore, this is a very difficult undertaking, and the President is addressing it with tremendous seriousness of purpose, as was referred to here before. He has worked this issue very hard with leaders from around the world. Now, I just say and underscore that U.N. processes operate

THE WHITE HOUSE

Office of the Press Secretary

For Immediate Release

October 21, 1997

PRESS BRIEFING
BY MIKE MCCURRY

The Briefing Room

12:38 P.M. EDT

MR. MCCURRY: Ladies and gentlemen, welcome to the White House Briefing Room for today's daily briefing -- and that wake-up call. The President of the United States of America will address business leaders, scientists and environmentalists about global climate change in remarks at the National Geographic Society on Wednesday, October 22nd. The Vice President will also be in attendance for the President's address.

Q What time?

MR. MCCURRY: At 2:40 p.m. And we'll have a briefing here at about 4:00 p.m.

Q Does that mean, Mike, that the President has not signed off on all of the boxes that he's supposed to check off on?

MR. MCCURRY: A lot of boxes; some of them are still in check, but most of them are checked. The President has been working a great deal on this issue, including talking to some of his counterparts around the world, exchanging views on what we hope will be an approach that will lead to success at Kyoto.

Q Is this the U.S. position for Kyoto, previewed, then, tomorrow?

MR. MCCURRY: This will be the thinking of the President and the United States government on issues central to the discussion in Kyoto.

Q And is this in some sense, then, being floated so that it can be further discussed between now and the beginning of December with other nations?

MR. MCCURRY: It will be further discussed because there is an international negotiation underway.

Q Would he discuss the mission levels?

MR. MCCURRY: He'll discuss a range of issues that are central to reducing greenhouse gas emissions, producing binding targets that can be achieved through flexible implementation, over time that will lead to curbs on the greenhouse gas emissions that are responsible for global warming.

Q We never heard his reaction to the Energy Department report that came out yesterday as it relates to this whole issue. How does that affect his thinking?

MR. MCCURRY: The President believes it underscores the importance of moving vigorously to address this issue and having a position that really reflects what ought to be a leadership role for the United States in this debate.

Q Will we see numbers tomorrow?

MR. MCCURRY: You'll see all kinds of things. It will be a big speech. There will be a lot in it, there will be lots of news in it.

Q Will he talk about specific levels that he would like to see --

MR. MCCURRY: I think he'll talk about dates and timetables and all the issues that are relevant to the debate.

Q And what world leaders has he discussed this with?

MR. MCCURRY: I'm not going to detail that. Some of those calls are ongoing.

Q You won't tell us who?

MR. MCCURRY: I don't want to. He's been working the phone pretty extensively and attempting to build what we hope will be a consensus position in the international community. I think it would be best if the leaders can lead and sometimes quiet diplomacy is the most effective diplomacy.

Q Are these the leaders of the Western industrialized nations, or leaders --

MR. MCCURRY: -- who you call.

Q Are these developing nations or --

MR. MCCURRY: -- who you call?

Q Developing or developed?

MR. MCCURRY: I'm not going to drop hints.

Q You said industrialized this morning.

Q Yes, he did.

Q -- countries other than Argentina in the developing world that he can --

MR. MCCURRY: Well, he's had a number of conversations as a result of his trip to Latin America on this subject with leaders in that region, and we've had extensive diplomatic consultations.

Q This morning you said he was discussing with leaders of industrialized nations. Has he broadened that group or would you stick by that?

MR. MCCURRY: He's pretty much worked with the people that will be instrumental in crafting a consensus international position. Mostly industrialized -- in fact, all industrialized.

Q What's the White House reaction to the fact that the Supreme Court is considering the issue of crack cocaine sentencing versus powder, and especially since Congress and the Congressional Black Caucus --

MR. MCCURRY: Well, the case, if I understand correctly from the White House Legal Counsel's Office, is about how judges apply sentencing criteria when there are a mix of drugs in play. There have been different opinions rendered in lower courts. The U.S. government has rendered opinions in the Circuit Court

consideration of these issues. It's not fundamentally an issue of drug disparity when it comes to sentencing. It's more about judicial discretion in applying sentencing recommendations. The White House Legal Counsel's been in contact with the Justice Department today, talking about what position, if any, the U.S. government might take in the case. But that would be up to the Solicitor General to advise on later.

Our views on the underlying issue are very well-known. I think the President, as you know, has endorsed a change that will ameliorate some of the disparities that exist in the sentencing recommendations for crack cocaine versus powder cocaine.

Q Do you would stand firm to the 10-to-1 recommendation?

MR. MCCURRY: Yes, this court -- if I understand the case, this case doesn't have anything to do with that issue.

Q Did Daschle or Lott give any indication about when fast track legislation may come up on the floor? And what else can you tell us about --

MR. MCCURRY: Majority Leader Lott is still here, and so I've conveniently kept you held hostage here so you won't be able to see him if he tries to sneak out. The Minority Leader had a very good conversation with the President. They talked about the agenda in the Senate in coming weeks. They did have a good discussion of fast track and where things stand, and the President and the Minority Leader agree that we ought to make a good-faith effort to continue bipartisan progress on all of the issues that are going to be on the Senate's calendar, whether it's campaign finance reform, whether it's fast track trade authority, whether it's making improvements that we need in education -- that the important thing is to keep momentum and keep building a spirit of bipartisan cooperation that can lead to results, not gridlock.

Q Where do you think fast track does stand? Where did they determine that it stands?

MR. MCCURRY: They had a good conversation about that subject.

Q Is Daschle firmly supporting the administration on fast track?

MR. MCCURRY: He's discussed his views publicly, and I don't want to attempt to speak for him.

Q Mike, any progress on locating the Jenrette letter or figuring out why --

MR. MCCURRY: I haven't been working on that, but you should ask Lanny Davis. I don't know what they're doing. I haven't heard that they have figured out where it went or where it was.

Q There's growing talk on Capitol Hill that fast track may be delayed until after the recess. Administration officials last week indicated that that would kill it. Is that still the administration's position?

MR. MCCURRY: I think it's still the administration's view that it's very important for the President to have the authority he needs to continue opening markets, to continue to provide opportunities as we saw reflected in trade numbers today that have led to record exports of U.S. goods and services abroad. He needs to continue to have the authority to negotiate those kinds of agreements, and the sooner we get it, the better. Therefore, making

progress on that issue in the remaining weeks of this session is a very high priority for the President.

Q But does he agree with Daley?

Q But does there have to be a vote for it to survive

--

MR. MCCURRY: I think the importance of this and the role that free trade plays in building a strong economy will make it abundantly clear sooner or later that having these kinds of agreements is good for all the people of the United States of America. But I think it will be especially clear that we need it sooner rather than later, and so our view is that we're going to press hard to try to get it now.

Q Mike, what do you hear from your people in Beijing with regard to discussions on the proliferation issues, sale of Chinese missiles to Iran?

MR. MCCURRY: -- been hearing long, complicated readouts of the important meetings they're having. I'm not going to provide any more detail beyond that.

Q Are they still ongoing? I gather there has been no conclusion.

MR. MCCURRY: They are ongoing and I believe, if I'm not mistaken, that our Senior Director for Asian Affairs has also now gone to join them, Sandy Kristoff, so that's added to the nonproliferation experts who are there currently.

Q Do you think it's a good idea that China would release some prisoners in advance of the summit next week?

MR. MCCURRY: We always have said that it would be a good idea for them to release people who are incarcerated only for political reasons; that's been our longstanding view.

Q But you believe there are prisoners who are incarcerated only for political reasons?

MR. MCCURRY: Absolutely. We've so stated and raised our concerns directly with the government on numerous occasions.

Q Do you know how many there are?

MR. MCCURRY: If you check with the Human Rights Office at the State Department, they can give you a better assessment of that. I don't have that right with me, but I think they've made a good-faith effort to assess what the conditions are.

Q Response to Chairman Archer's latest IRS proposal?

MR. MCCURRY: Our understanding, now that we have had an opportunity to learn more about it, is that the burden of proof language that he has suggested is fairly narrowly drawn and might affect only a handful of cases. In any event, we continue good conversations on the Hill on a measure that would reform the IRS and give the American people a tax collection agency that is user-friendly and that meets the standards the American people would expect of any government agency and we're encouraged by some of the conversations we've had.

Q Does that mean this is now acceptable to you? This new version is acceptable to you?

MR. MCCURRY: I'm not the person to pronounce that, but I think there are a lot of people who are looking carefully at that language.

Q Positively carefully?

Q The proposal as far as the IRS Oversight Board is concerned also would give that new body the authority to improve IRS budgets and to improve their long-term strategy, although the President would submit his own IRS budget.

MR. MCCURRY: I'm not familiar with that provision. I do know that they've modified the bill so that the President would continue to have the authority to appoint the IRS Commissioner, which was a very important and necessary change, and there have been other accommodations in the bill as well. But that particular detail of the legislation I'm not familiar with.

Q What accounts for this friendlier attitude overnight towards this proposal?

MR. MCCURRY: We have been -- I don't know that I said anything different yesterday. I said we would look at Chairman Archer's language. We had concerns -- a wholesale shift in burden of proof would be a step in the wrong direction, but our understanding of the language is that it's fairly narrowly drawn.

Q How is it narrowly drawn?

MR. MCCURRY: Apparently, it only affects a smaller number of cases than what some of the initial news reporting indicated.

Q Does that make the administration more favorably inclined to it?

MR. MCCURRY: I said again that we are having good, positive discussions on the Hill, looking for some kind of consensus. Again, we want to achieve results, not political theater. So we're interested in seeing if we can get to a point where we have bipartisan accommodation on a bill that will do what the administration wants to do and what I think in good faith the sponsors of the legislation on the Hill want, which is a reform for the IRS that will give the American people the kind of tax collection agency they desire.

Q Does it make any difference that Congressman Gephardt is going to formally endorse this proposal later today?

MR. MCCURRY: No. If he does, that's fine. We just prefer to find out more about it before we endorse it.

Q Given that the independent board issue is an even bigger one than this burden of proof, why hasn't that been looked at in --

MR. MCCURRY: We've been looking very carefully at that part of the bill, too, and having good discussions on that part of the bill.

Q Back on fast track. Does the administration still want a Senate vote first to try to push the House along? And if so, doesn't it hurt your case that the Minority Leader is talking about amending campaign finance to it --

MR. MCCURRY: The President has had a good discussion with the Minority Leader about that and since he's having a

discussion with the Majority Leader presumably on much the same topic right now I'd rather not speculate on what the timing might be.

Q But you don't like that strategy?

MR. MCCURRY: I don't want to speculate on the timing. I think the leaders are meeting with the President and they are no doubt discussing timing.

Q Is the White House saying anything on the cyber terrorism issue?

MR. MCCURRY: Not today, but we'll have a statement available tomorrow on it. And again I would remind you that we have said all along that the work of the commission will need to be carefully reviewed and will lead over time to the development of our own recommendations. I don't really anticipate, as I said this morning, that happening much before the end of the year. But we'll have more to say on that tomorrow.

Q Mike, on next week's summit, will the President hold meetings with Jiang on both Tuesday and Wednesday?

MR. MCCURRY: I believe our meetings are on Tuesday. He will be here for additional meetings during the day. Wednesday is our day.

Q Wednesday's your day. What is --

MR. MCCURRY: What else is he doing?

Q When does he meet with Congress?

MR. MCCURRY: Thursday. Do you have the paper -- just hold on, Leo. I'll get it for you. China -- number 12. All right? (Laughter.) Wrong China. Where is that? We had it yesterday? Oh, no. Number 13.

Q You hardly ever use that guidance --

MR. MCCURRY: No, I've got it right here. Tuesday is the 28th. So he arrives on the 28th. He'll be here from the 28th to the 30th. This will be the first state visit of a Chinese president in 12 years. He meets the President on October 29th. By the way, when he's here, we have a welcoming ceremony on the South Lawn in the morning, a meeting with the President, followed by a press availability, a lunch at the State Department, and a state dinner at the White House that evening. This does not say what else he's going to do.

COL. CROWLEY: The Embassy of China will give a press briefing tomorrow at 11:00 a.m.

MR. MCCURRY: Very good. We're leaving it to the Chinese to -- I suppose that's fair. We would prefer announce the schedule of our President ourselves as well.

Q Could you clarify your answer to -- question. In the past, the President has said that he is full -- foursquare behind the campaign finance reform supporters who want to attach it to anything and everything. Is he no longer in favor of --

MR. MCCURRY: Oh, no. We fully well understand that people who are working these issues on the floor take advantage of whatever tactical situations they have, and that's clearly what Senator Daschle has done. And since we are sympathetic to his underlying purpose, I think we are sympathetic to his tactics. My only point was he's talked about this with Senator Daschle today and

is talking about it with Senator Lott right now and I just don't want to get cross ways by speculating on what the outcome of those discussions might be.

Q Right, but it would be wrong to say the White House is discouraging campaign finance reform supporters from attaching it to the President's priority items --

MR. MCCURRY: That would be very wrong. It would be very wrong to say we are in any way discouraging the supporters of campaign finance reform on the Hill. And tactics, while the tactics are their choice, we are often very sympathetic of the tactics pursued by those who are advancing objectives that the President believes are worthy.

Q Can I go back to the press availability?

Q Say what?

MR. MCCURRY: Those were a whole lot of words that didn't say very much.

Yes, Peter.

Q You said a press availability with Jiang as opposed to a joint news conference, is that right?

MR. MCCURRY: The same sort of deal we usually do.

Q A joint press conference.

MR. MCCURRY: Joint press conference, 450.

Q How much of Jiang's visit is actually vetted by the White House, his various movements, activities, stops, lunches and meals?

MR. MCCURRY: Well, we normally in terms of protocol, work with any visiting head of state to arrange -- make sure we have suitable arrangements made and make sure that our law enforcement people, our security people, people in charge of logistics understand. But they also have a right to pursue interests and objectives of their own. In this case, I think the People's Republic has elected to do that. He has a whole schedule outside of Washington that the Chinese Embassy can brief you on tomorrow.

Q Williamsburg is not in any way a White House sponsored visit?

MR. MCCURRY: No. We are not -- they make their own determinations about where to go. Now, they work cooperatively with us so that we can, as good hosts for a state visit, assure that proper arrangements and logistics are made. That's what we would expect when we travel to a foreign country and that's what we offer to those who travel here.

Q Do you expect the allegations of Chinese influence in political campaigns here in the United States to be an issue during this summit?

MR. MCCURRY: We have raised that at high levels before. I don't want to predict what will be on the agenda for the summit.

Q Are there any particular goals for the summit?

MR. MCCURRY: We have a number of them and the President will be addressing them in a speech later in the week, and we'll be briefing on that speech. I'd really prefer to let the President set

out what his fundamental objectives are. First and foremost, it's to continue the very important engagement we've had with the People's Republic, a constructive engagement with that country that allows us to pursue objectives of mutual interest and to advance our own interests in that region. And our view has long been that engagement and the exchange of visits, the pursuit of an active diplomacy with the People's Republic is a far better way to advance our own interests in that region than isolation or containment.

Q Is there any degree of pomp or -- that you are not giving China that --

MR. MCCURRY: I'll let others brief. My understanding is that we are conducting this state visit as we do, in protocol terms, similar to other state visits.

Q What are the concerns for the meeting with the Mexican official this week for this bilateral -- against narco trafficking?

MR. MCCURRY: Are we having a meeting?

Q Yes, this week.

MR. MCCURRY: Is McCaffrey going from Colombia -- will he be in Mexico as part of that same trip?

Q No, he is going to be here in Washington.

MR. MCCURRY: You will have to check with our NSC folks after. I'm not aware of it.

Q One more on the IRS reform. It's the opinion of some lawmakers that it's a moot point, or it's becoming a moot point whether or not the White House supports the Archer plan because they believe that a veto-proof margin is building in favor of this proposal.

MR. MCCURRY: I think this is, you may have gathered, an unfolding situation. (Laughter.) So that question itself may be moot.

Q -- to beat this dying horse on NAFTA and campaign finance one more time -- no, fast track. If those -- even if they could succeed, which they can't, in attaching it, it would kill fast track. So why can't you just say that you oppose this strategy?

MR. MCCURRY: Look, we've had -- there are meetings going on right now and we've had a meeting earlier today, and suffice it to say we would like to find a way to advance both of these important objectives -- giving the President the authority he needs to negotiate trade agreements and to get a date certain or a way in which we can move forward with campaign finance reform. And there are discussions underway and I'm not going to stand here and sort of speculate how we might resolve that, other than to say we hope that all of these questions at the end of the day might be moot, so that the Senate can proceed on both priority matters that the President considers important.

Q Yesterday, Senator Daschle said that he doesn't believe many Americans are overtaxed. Does the President agree?

MR. MCCURRY: I think the President has long made tax relief, especially for the middle income, a hallmark of his economic strategy, and we've found ways to do that in a way that spurs economic growth. In fact, the way in which we have brought tax relief first to the poorest working Americans through the EITC and then expanding it through the middle income tax relief has been smart

economic strategy and has contributed to some of the growth we see in the U.S. economy.

The best thing for all the working people of this country is that we've had a strong, growing economy and is providing job opportunities at low rates of inflation, and that has contributed to a rising standard of living for many Americans, and doing all of that in the context of also providing tax relief. That's the President's plan, and it's working.

Q He agrees or disagrees with him?

MR. MCCURRY: The President favors tax relief and has long favored tax relief and will no doubt continue to look for ways to ease the tax burden on the American people.

Q Back to cyber terrorism for a minute.

MR. MCCURRY: I can't say anything, really, on that today, but I will be happy to do it at greater length tomorrow.

Q Two separate questions. One, are you hailing the advent of the electric car that the Energy Department --

MR. MCCURRY: Yes, I'm hailing the advent of the electric car. (Laughter.) Secretary Pena is going to brief reporters in a short while on a breakthrough in fuel cell technology that holds great promise for the reduction of greenhouse gases. We've been talking about our overall strategy on greenhouse gas reductions. One way in which we can do that is through the vigorous application of new technologies, and there's been apparently a very exciting breakthrough in fuel cell technology, developed in part with a \$15-million grant from the Department of Energy, which would allow the conversion of gasoline to electricity, yielding twice as much energy per gallon of gas as a conventional car engine. That's very good news, and Secretary Pena will be briefing people about it in greater detail shortly.

Q -- wonder why you would get excited about something that's not going to see a showroom floor for a dozen years.

MR. MCCURRY: What are the time frames that we're talking about? For those of you who are following the Kyoto discussions, the time frames we're talking about are periods between now and 2010, 2015 and beyond. So the discussions that are going to be -- that's been the public debate about this issue and achieving the kind of greenhouse gas emissions reductions and leveling off the levels of emissions has been something that is going to be clearly a multi-decade effort. So that could be very significant in helping to achieve whatever binding, realistic targets are developed as a result of the international regime. That's the significance.

Q The trade deficit figures that came out today showed the wide gap with China growing. I think it's the worst in like -- the deficit is the biggest in seven months. Do you find this troubling before the summit, and how much --

MR. MCCURRY: I think it's important on all of these trade deficit numbers to step back and look what the bigger picture is -- rather than looking at bilateral trade numbers, to look back at the overall picture. Now, we did have, obviously, some change in the overall numbers, but the trade deficit for the last full quarter is lower relatively to the size of the economy than at any time now since the period 1984 to 1990.

The fundamental importance of the numbers are that there's been record export level, so we're selling more goods and services abroad and the strength of U.S. economy makes it possible

for the U.S. consumer to buy more from abroad, which is why we have a high level of imports. That's a picture of a strong economy. But the key thing is that we are creating economic livelihood in America by increasing our levels of exports abroad.

If you start looking at country by country -- China, we have a growing deficit, but we're buying a lot from them. Mexico has now surpassed Japan as our second largest export market for the second month in a row, and exports to Mexico are up by 18 percent. So you have to look country by country what the overall picture suggests.

Q So it's good news?

MR. MCCURRY: Look, it's good news that we have a strong economy that allows people the buy goods and services from China. That is good news. Now, can we work out -- work more balance into this trading relationship over time? Of course, and we have bilateral trade discussions underway with China for that purpose.

Q Commerce Secretary Daley said today that he was seriously concerned about the trade deficit with China. How do we square these two --

MR. MCCURRY: He's a trade negotiator and -- or, in part is a trade negotiator, and they want to reduce those -- they want to increase levels of exports to China. We want to open that market to more goods and services from the United States. And that, of course, is one of the things a Commerce Secretary would pursue.

Q But not the White House?

MR. MCCURRY: Well, the President, too. That's been a fundamental premise of our entire economic strategy, to open markets overseas for U.S. goods and services. Everyone knows that.

Q Does this mean that that's not happening?

MR. MCCURRY: It means that we're buying more. It's simple: we have got a lot of income. Incomes are rising. We have a strong economy. Therefore, we are buying more from China than we are selling them. We need to sell them more, we will look for ways to sell them more. But it's not necessarily a bad thing that U.S. consumers are purchasing goods and services from China.

Q As a part of that effort are we likely to increase the sale of nuclear reactor technology to China?

MR. MCCURRY: That's a back-door way to try to get me to comment on something I avoided earlier. Let's go on.

Q I thought it was a rather front door -- (laughter.)

Q How involved will the Vice President be in the summit next week? Will he be joining the President --

MR. MCCURRY: As he always is at important international occasions, he will be at the President's side and will be a vigorous participant. Unless he's going to be out of town. (Laughter.) No, I'm sure he plans to participate.

Q Dr. Satcher's nomination hearing tomorrow -- expect it to be a walk?

MR. MCCURRY: We would hope so, given the overall caliber of the nominee. And I have not heard anything indicating that there was any opposition developing. I think he's had very successful meetings with members of the committee and set forth his

very impressive credentials along with, I think, his very impressive personal experience. And I think, from the reports I've had, the Senators who have met him look forward to giving him a favorable consideration.

Q Mike, now that you're about to announce a climate change position, can you say whether or not the President or Vice President will go to Kyoto?

MR. MCCURRY: No. It's too early to make any determination like that. I've heard nothing about initial planning that would suggest either one is going, but it would be some time before we know what the outcome in Kyoto is going to be. This is going to very, very hard work, and one purpose of the President's diplomacy in the last day and a half has been to really see what the prospects are for success in Kyoto. They are far from certain that there can be success there because there is a great range of opinions within the international community, spanning the horizon on what country's belief should be an effective response to the problem of global warming.

Q If it's not successful, will the President commit the administration to meeting whatever position he sets out independently?

MR. MCCURRY: That's not proper to address that question at this point

Q You say these talks in the last day and a half have confirmed that it's far from certain that Kyoto will --

MR. MCCURRY: That was already known. I think the effort of the President was to see what the prospects are for bridging some of the gaps that do exist.

Q And what do you think he's learned from this?

MR. MCCURRY: I think that he continues to believe it's going to be difficult, but that's -- I think everyone knew that going into this process.

Q Do you think it would be appropriate, as a matter of principle, that if there is a reduction in oil consumption, to compensate the OPEC nations for that, as they're demanding, as an issue for this agreement?

MR. MCCURRY: I have not seen that addressed in any of the work-up on this issue.

Okay, see you tomorrow.

THE PRESS: Thank you.

END

1:06 P.M. EDT

#420-10/21

Clinton Presidential Records Digital Records Marker

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

This marker identifies the place of a tabbed divider. Given our digitization capabilities, we are sometimes unable to adequately scan such dividers. The title from the original document is indicated below.

4

Divider Title: _____

Senate Committee on Agriculture, Nutrition, and Forestry

November 13, 1997

Hearing on Renewable Transportation Fuels

Testimony of R. James Woolsey

Mr. Chairman, members of the Committee, I was honored at the invitation to appear before you today to discuss the implications of new developments in biofuels technology for our security -- in many senses of the word -- and how we might most effectively make such technology serve our needs.

The Wall Street Journal published a piece that I wrote on this subject on October 24, and with your permission I would submit it as an attachment to this testimony. Today I will skip over most of the points made in the article except to state its central thesis: that genetic engineering has now made possible the development of new biocatalysts and microbes that are able to break down cellulosic biomass (grass, trees, aquatic vegetation, many organic wastes) to form ethyl alcohol (ethanol); that the ability to use biomass instead of feed grains as a feedstock for ethanol looks as if it makes possible, once the process is industrialized, further modest reductions in the cost of ethanol production that would be sufficient to make it directly competitive with gasoline as a transportation fuel; that since there are no substantial investments necessary in wholly new types of vehicles or fuel distribution systems to use ethanol to substitute for up to 85% of gasoline, it appears plausible to begin promptly a steady movement toward it and other biofuels and away from fossil fuels for transportation; and that this transition has such substantial advantages for virtually the entire world except for some oil-exporting states -- in the reduction of international tensions, reduction of global warming gases, some improvements in air quality and added income for, particularly, farmers world-wide -- that it should be encouraged by the U.S. government's policies and purchases.

Although my friend, Bill Holmberg, first introduced me to biofuels issues some fifteen years ago, Mr. Chairman, I only came to investigate the potentially enormous effects of the recent work on genetic engineering of biocatalysts and microbes over the last year. This process was initiated by your invitation to testify before this Committee in the fall of 1996. I became further convinced of the importance of spelling out these implications in some detail when I was invited early last summer to speak at a conference largely attended by experts from Harvard and M.I.T. on energy and security. One expert told the group confidently that there was nothing new in the field of alternative fuels because it had been exhaustively reviewed during Project Independence; another expert said with equal confidence that ethanol had the major disadvantage of being of much lower octane than gasoline. Many at the conference seemed to focus on pipeline routes as the key strategic question in the field of energy.

Well, Project Independence is now years out of date -- eons in the fast-moving world of genetic engineering. One good reason, well-known as long ago as the 1920's, to use ethanol in internal combustion engines is that it prevents knocking. And while oil pipelines and tanker routes are, today, of substantial strategic importance, surely an even more fundamental issue is whether we might be able to begin to make them, and indeed oil itself, considerably less important. If genetic engineering makes it possible to use biomass feedstocks to further reduce the cost of ethanol by a fraction of what it has already been reduced in the last decade, then we might look forward to a day when there would be a substantially different attitude toward the Mid-East's perpetual crises than there is now. If all that the leaders of Iraq or Iran could threaten were to occupy oil fields that supplied the world with a substance, gasoline, that was needed as a 15% additive to biofuels in temperate climates for cold-weather starting, such threats would barely make the back page of the newspaper's business section -- a rather substantial strategic change from today's world.

It would, of course, take a long time to get to that point, Mr. Chairman. But trends are important in matters of this kind and, if they are clear, they can influence behavior and the weight of events well before change fully takes place. Would a rogue nation in the Mid-East be likely to go to war in order to control additional capacity to produce a substance that was on a clear path toward becoming merely a 15% additive to biofuels, the principal transportation fuel? And not only is gradualism in these matters

not a disadvantage, Mr. Chairman, there are important reasons why it is an advantage that a transition from gasoline and diesel oil to biofuels could be slow and steady. This would give the oil-based sector of the world's economy time to diversify and adjust -- time to amortize investments in oil refineries, for example.

I believe that the implications of such a transition to biofuels may be compared in a way to the process that was begun when, in the mid-1960's, we began to produce integrated electronics circuits from silicon. At first, most people who noticed the development at all probably saw only the prospect of somewhat cheaper electronics. But what had in fact begun was nothing less than the democratization of the information market. Silicon chips first cracked the foundations of companies built around main-frames, then of empires. The late Albert Wohlstetter only exaggerated slightly when he wrote in the 1980's, addressing the people of the Soviet Union, that "The Fax Will Make You Free." The democratization of the production of transportation fuel may be no less dramatic and positive in effect.

We should realize that there is a long history behind the use of ethyl alcohol as an automobile fuel. In the mid-1920's, when the new higher-compression-ratio automobile engines began to knock on the gasoline then available, there was a period of time when it appeared as if alcohol's anti-knock quality would lead to its being used in substantial amounts as a gasoline additive. Three things intervened: the discovery that very small amounts of tetraethyl lead would serve the same purpose (there was much less concern about lead's toxic qualities in the 1920's than developed in the 1970's when we "got the lead out"); concern about illegal consumption of alcohol (we were in the middle of prohibition); and concern about excessive demands being put on the feed grains markets, and a consequent escalation of food prices. Only the latter issue has been relevant in recent years, and it is addressed by the recent genetic engineering work that frees us from the need to use feed grains for alcohol production.

To move forward and give effect to the creativity that has now made it possible for cellulosic biomass to be used to produce ethanol as a transportation fuel, Mr. Chairman, I would suggest that it is time for the government to take steps to help initiate a biorefinery industry that can then be sustained by the marketplace and can take full advantage of this new technology.

The existing capacity in this country to produce and distribute around 1.5 billion gallons of ethanol annually has been created by the hard work of grain farmers and their colleagues in the ethanol industry. The cost of using feed grains in ethanol production is today partly offset by the co-production of enhanced animal feeds. But as commercial operations develop using cellulosic biomass as a feedstock, the cost of producing sugars for fermentation from biomass should, in time, drop below the cost of producing them by using feed grains. I see no incompatibility of interest here. It would seem likely to me that existing ethanol plants might at first be best situated to take advantage of this new technology by accommodating a side-stream of production using cellulosic biomass as feedstock. In time many production facilities that rely on biomass as a feedstock may turn out to be small and community-based -- producing in the range of thousands of barrels a day rather than tens of thousands. Should this scale of operation turn out to be efficient, such facilities might be especially important engines of economic development in developing countries.

Whether in this country or abroad, however, it seems to me particularly important that farmers may be able to look toward the availability of a cash crop grown on land that would otherwise lie fallow; indeed some biomass crops such as switchgrass replenish the soil. Other possible feedstocks for ethanol in the future could consist of agricultural residues such as stover or bagasse, or forest residues and other organic wastes. Even aquatic biomass may one day become a cost-effective feedstock.

I would point out, Mr. Chairman, that the advantages of biomass fuels are not limited to their use in the internal combustion engine. When Secretary of Energy Pena recently announced what he termed a breakthrough technology in automotive fuel cells, Mr. Jeffrey M. Bentley, Vice President of Arthur D. Little, Inc., the inventor of this new fuel cell concept, stated that, although a variety of liquid fuels could be used by the fuel cell to produce hydrogen, "ethanol provides higher efficiencies, fewer emissions and better performance than other fuel sources, including gasoline." He added that, "[w]here ethanol is available, it will be the fuel of choice by consumers."

Moreover, Shell International has recently set forth a scenario in which renewable fuel sources will

expand to become the world's primary energy resource by the latter half of the next century. The use of biomass to generate electricity plays an important role in that scenario and in the report, "Scenarios of U.S. Carbon Reductions", prepared for DOE this past September by an Interlaboratory Working Group from five leading national laboratories. One major reason is that the CO₂ produced by using fuels produced from biomass is CO₂ that has been fixed very recently in the photosynthesis process. Thus no new CO₂ is added to the atmosphere, contrary to the case when fossil fuels are burned, since the latter process releases CO₂ that was fixed by plants millions of years ago, became oil, and would otherwise stay underground. As the Interlaboratory Report puts it, "[t]he most recent estimates indicate that ethanol derived from cellulosic feedstocks (as opposed to grain) produces less than 1% as much greenhouse gas emissions on a fuel cycle basis as conventional gasoline or diesel fuels." And in the production of electricity, the same report indicates "improvements in biomass power conversion as well as feedstock production and processing could reduce the cost of electricity from biomass to about 3-4 cents/kWh. This would make biomass power very economical in comparison to other mainstream electricity sources."

For transportation use, in spite of the cost reductions in ethanol produced from biomass that will come about due to the breakthroughs in genetic engineering, it will not be directly competitive with gasoline on an unsubsidized basis until oil reaches around \$25 a barrel -- this is in part because of ethanol's lower energy content. For the reasons set out in the attached article from the Wall Street Journal, however, I believe that a substantial increase in demand for oil is likely. Thus, Mr. Chairman, the question in my mind comes down to this: In view of biomass-generated ethanol's substantial advantages in reducing air pollution, its very sharp advantages in reducing global warming gases, and the positive impact on international security and economics (for most of us) of moving away from reliance on a few oil exporting states in the Mid-East and toward reliance on the world's far more numerous and broadly distributed farmers, is the nation willing to pay something to begin to industrialize the process of producing ethanol from biomass even before such an oil price increase occurs?

I believe that the chance of seeing \$25-a-barrel oil is quite high. But even if this should not come to pass, in my view the environmental, global warming, international security and economic effects of moving toward ethanol and away from gasoline would alone justify the relatively modest cost of hedging against oil dependence. The cost is relatively modest because, unlike many other energy initiatives, very little investment in infrastructure is needed for this undertaking, either for new methods of fuel distribution or for vehicles of radically new design. I believe that the nation, indeed the world, could reasonably regard the cost of encouraging the industrialization of this production process as an insurance premium that in time will reduce the risks of both international conflict over energy, especially in the Mid-East, and global warming -- and will enhance air quality in the bargain.

Let me suggest, Mr. Chairman, how the government might take some positive steps toward this end. If we take a leaf from the book of the Defense Department's very successful implementation of the Goldwater-Nichols Act and the concept of jointness, so praised by General Shalikashvili recently upon his retirement, I think we might get some useful hints. Many parts of the federal government -- USDA, DOE, EPA, the TVA, and several national laboratories -- have much to contribute to this effort. But I confess that my impression of the current situation from an outside perspective is very much like that of some aspects of the Grenada operation in 1983, prior to most of the recent DoD reforms. I'm speaking particularly of the U.S. Army officer in Grenada who couldn't communicate directly with the Navy ship that he could see offshore, and so was reduced to using his calling card in a Grenada phone booth to call Norfolk and have his message relayed. In short, we need not only a clear mission to work toward, but a way to get the components of the executive branch to work together.

I would suggest the following.

This Committee and other interested government officials might first consult on a concrete set of objectives. For purposes of discussion, let's say that those who take part in this process determine that a reasonable goal for commercialization of the new technology might be the production of a few tens of millions of gallons of biofuels from cellulosic biomass by the year 2000 and a few billion gallons a year therefrom by 2005.

One would then need a mechanism to ensure that government policies contributed steadily toward both

production and efficient use. One possibility would be to give the responsibility to a single Cabinet Department, such as the Department of Energy or the Department of Agriculture. The problem is that several departments' and agencies' responsibilities would be involved in any such effort, and it is not uncommon for one cabinet department or agency to give little attention to the objectives of another. For example, if a policy were set forth that the entire government should, wherever possible, purchase the sort of flexible fuel vehicles now on the market and use increasingly large shares of ethanol in them, someone would need to ensure that EPA does not abandon the effort to encourage the production of such vehicles and that the parts of the government which purchase large numbers of vehicles, such as DoD, give this objective a high priority wherever possible. This might suggest the wisdom of instead assembling a small team from the best people at each agency and laboratory, giving it a strong Director, and locating it somewhere in the Executive Office of the President. Another approach would be to designate a lead agency and to use an executive order to put some teeth in that agency's authority. However it is done, only strong leadership that can extend, on at least a few issues, across the entire government would be capable of harmonizing the policy, resource allocation, and procurement decisions that could make such an evolution a reality.

But, Mr. Chairman, nothing in the world of public policy is perfect and free of cost. That is certainly true of the course I have suggested as well. Let me close by addressing three often-stated objections to such an effort by the government.

To those who say that action by the government such as I have described is unwise because it would involve the government's picking winners, and that only the market can do that, I would say the following: If the government spends a few tens of millions of dollars helping commercialize a production process that later turns out to be unnecessary -- because permanent peace breaks out in the Mid-East, because cold fusion provides us all with limitless energy, because global warming fears turn out to be totally unfounded, or for any other reason -- then it would turn out that we would have paid a modest insurance premium to cover a contingency that did not materialize. Governments have done worse things.

To those who say that if we burn a fuel mixture that is 85% ethanol we will need about 25% larger gasoline tanks in cars to get the same mileage on a full tank, that this may lead to a demand for environmentally undesirable larger cars (and that there are better ways to combat air pollution than burning ethanol in internal combustion engines in any case), I would say: the effect of the gap in energy content is likely to be mitigated over time, but the main point is that smaller cars and better mileage per gallon are chiefly desirable as a way of dealing with problems caused by fossil fuels. Isn't the larger goal, making a decisive move away from such fuels, worth at least as much support in the interest of the environment as, say, recycling? Nothing in what I have suggested would hinder other efforts to improve air quality, e.g. developing fuel-cell-powered cars, and for some recent breakthroughs in automotive fuel cells, ethanol would be the fuel of choice in any case.

To those who say that we should not damage economic growth in dealing with concerns about the environment, global warming, and dependence on the Mid East, I would say: Fine. Don't. That is a good reason for society to spend only the modest amount required to begin commercializing the production of biofuels from biomass rather than the vast amounts required for the infrastructure changes needed to implement almost all other approaches to these issues. In the case of biofuel production from biomass the market will do most of what needs to be done. But I would also suggest that the economic fruits of supplying the world's transportation fuel would be far more broadly distributed among nations and among individuals if those who work the land began to replace, as fuel producers, the owners of oil resources in a few oil-exporting states. By any reasonable measure such an evolution should be regarded as economically positive.

Thank you, Mr. Chairman, for the opportunity to testify today. If it would be helpful, I would be pleased to submit some additional and more detailed suggestions on a few of these points within the next two weeks or so.

Statement by

Major General Donald L. Peterson

Assistant Deputy Chief of Staff, Air and Space Operations

before the

Senate Armed Services Committee

November 12, 1997

DRAFT

Mr. Chairman and members of the Committee, I greatly appreciate the opportunity to appear before you this morning to discuss the impact of an International Global Climate Change Protocol on the training and operational readiness of our Air Force – the world's most capable air and space force.

The Air Force fully supports the DoD and the President's framework for an International Global Climate Change Protocol. We believe the current DoD position that endorses a Protocol which includes a National Security Provision, or other arrangements that provide similar protection for ourselves and our allies, balances our national security and environmental goals. This provision will protect our ability to conduct operations as directed by the National Security Strategy while ensuring we have a well trained and ready force to carry out our assigned missions. Our Air Force has a strong record of improving our environment and reducing energy consumption while maintaining the required levels of readiness. Within our fiscal resources, we are continuing to increase the efficiency of our operations in order to meet our energy savings goals.

Over the past several years the Air Force has instituted and continues to pursue numerous energy reduction measures. These measures, combined with the drawdown of our force, have resulted in a dramatic reduction in aviation fuel consumption since 1990. These reductions occurred despite the fact that since 1990, the Air Force deployment rate has risen 400% supporting numerous UN resolution enforcement missions (Bosnia, Iraq, etc.), international humanitarian, peacekeeping, noncombatant evacuation, and disaster relief missions. Part of this improvement is due to new weapons systems we have developed that are more efficient than their predecessors. For example, the C-17 is 37% more fuel efficient than the C-141. The on-going upgrade of the KC-135 to the new R-model engines saves 21% on fuel consumption, for an average saving of \$1,650 per flying hour. Further reductions are built into nearly every program we execute. For example, we continue the saving trend with the F-22 Raptor, designed to be far more fuel efficient at high airspeeds than current fighters. In addition, we are transitioning significant flight training to simulators to save further fuel consumption. C-17 aircrews already perform 50% of their initial and recurring training in the simulator, while our KC-10 and KC-135 aircrews will reach that plateau in 2002. In facilities, we have exceeded federal energy

○
DRAFT

DRAFT

reduction goals for energy use per square foot, and we will further reduce those numbers each year. In short, the Air Force has an aggressive plan already underway to continuously reduce our energy consumption.

Arbitrarily reducing Air Force energy consumption could have serious safety and readiness impacts, and break the delicate balance we maintain between energy conservation and mission readiness. Any cut would result in a proportionate cut directly from flying hours. Such a loss could result in several significant reductions in readiness – the degree of additional reduction would determine the severity of impact. Listed below are a host of immediate potential impacts that could be realized were even minimal additional reductions imposed on Air Force fuel consumption.

- Forfeiture of fighter and bomber special mission capabilities due to lack of training hours
- Inability of the airlift fleet to meet its wartime or current peacetime mission requirements
- Transportation Working Capital Fund losing large amounts of revenue and forcing its customers to seek transportation elsewhere at potentially higher cost
- Reduction in tanker forces ability to support training and operational sorties, not only for the Air Force, but their large sister Service and Allied customer base
- C-130 aircrews being unable to fulfill airdrop training requirements that would directly affect Army mission readiness
- Inability of command and control, reconnaissance, search and rescue, and intelligence aircraft to meet the current level of JCS tasking in Bosnia, Iraq, and counterdrug operations
- Reduction of aeromedical evacuation training flights
- Reduced testing of new aircraft and aircraft technologies thereby prolonging weapons development and increasing costs
- Loss in schoolhouse training at a time when we are ramping up pilot and navigator training to compensate for serious shortages

Of course, any attempt to protect one mission area would result in even more drastic cuts in all the others. There is also a potential for increased mishaps as reducing flying time would reduce pilot proficiency. **Net result: The Air Force ability to fully support the National Security Strategy would clearly be reduced.**

DRAFT

DRAFT

Along those same lines, our allies must have similar protective provisions in the Protocol for their national security missions as well as their participation in multi-national operations and training. The US military operates routinely with allied and host nation forces, and bases a portion of its National Security Strategy on allied contributions. Without equal protection for our allies, US operations will be hampered, thereby significantly reducing our overall capability.

Furthermore, we believe the National Security Provision should exclude deployed military forces from being counted against a host nation's consumption quota or credits. Such a provision is critical as our extensive global deployments put US-flagged aircraft and personnel in dozens of countries every day and virtually every country in the world each year. We support many of our international operations through the purchase of fuel from our host nations. A quota or credit system without a National Security Provision could result in our Air Force or allies/host nations paying premium prices, or an ally or host nation becoming unwilling or unable to provide the required fuel. The impact would be a reduction in both US and allied nations' ability to train and operate together, and therefore decrease allied readiness.

The Air Force is committed to further reducing its energy consumption in both facilities and operations. We have already met the goals of the Rio Summit by reducing our fuel consumption below 1990 levels, and we are on track for additional savings despite our numerous global commitments to UN support, peacekeeping, and humanitarian missions. These reductions are best made intelligently over time, not overnight. Correspondingly, our weapon systems are very long lived compared to our civilian counterparts', with some aircraft lasting 30-40 years or longer. In a fiscally constrained environment we cannot appreciably accelerate the replacement of all weapons systems with newer, more efficient systems. But we have a plan that includes progressively greater energy savings and efficiencies, and we ask that Congress support a National Security Provision, or some arrangement that provides similar protection for our military and those of our allies, to prevent arbitrary cuts leading to a potentially severe drop in readiness and safety.

Thank you for the opportunity to appear before your Committee. I look forward to answering your questions.

○

DRAFT

DRAFT

STATEMENT OF
REAR ADMIRAL EDWARD MOORE
ASSISTANT DEPUTY CHIEF OF NAVAL OPERATIONS
(PLANS, POLICY, AND OPERATIONS)
BEFORE THE READINESS SUBCOMMITTEE
OF THE
SENATE ARMED SERVICES COMMITTEE
ON
GLOBAL CLIMATE CHANGE TREATY AND NAVY OPERATIONS
NOVEMBER 12, 1997

DRAFT

I'm pleased to be here today testifying on behalf of the Navy regarding Global Climate Change. I want to thank you for the opportunity to deliver the Navy's point of view on this important issue. During my testimony today, I would like to address three main points:

First, the Navy supports the Global Climate Change framework proposed by President Clinton. We feel that National Security can be preserved while taking action to combat climate change.

Second, I would like to discuss the progress that the Department of the Navy has already made in preserving our environment and conserving natural resources. The primary sources of greenhouse gases emitted from Navy assets include aircraft and ship propulsion systems, and energy consumption at our shore facilities. The Navy has made significant strides to reduce emissions in all of these areas.

Between 1990 and 1997, 149 Navy and Marine Corps bases have been closed or realigned, representing a significant reduction in our overall greenhouse gas emissions. The existing Navy Shore Energy Conservation Program focuses on reducing costs and energy usage while improving operational capability. Since 1985, the Navy energy program has reduced energy consumption at our shore facilities by approximately 20% per square foot. Additionally, the Navy is working towards a goal of reducing our energy consumption at these facilities a total of 30% by the year 2005.

Here are some specific examples of the Navy's achievements in energy reduction in both shore facilities and at-sea operations:

DRAFT

- At Patuxent River Naval Air Station, a shared energy savings contract completed lighting retrofits in 52 buildings in January 1992. These efforts reduced energy consumption by 38.3 billion BTU's over a three year period in addition to saving taxpayers a projected \$700,000 over a ten year period. In addition, energy production from renewable sources in the Department of the Navy such as the Geothermal Energy facility at Naval Air Weapons Station, China Lake, California has risen to 16 percent of total shore energy consumption.
- In the operational area, the Navy has taken several steps to reduce fossil fuel consumption of our ships and aircraft. Since 1990, we have reduced total emissions as we have drawn down from 550 ships to 347 ships in our battle force, a reduction of 37%. We have instituted a program to achieve energy savings by routing ships at sea to take advantage of ocean currents. We also continue to evaluate the design of future weapons systems that are both energy efficient and environmentally friendly. We are currently funding research to demonstrate the viability of a bulbous bow concept for our DDG-51 class destroyers. The bulb will decrease fuel consumed for ship propulsion by approximately 4%. Fuel savings will be achieved due to reduced hull resistance without affecting other ship performance characteristics.
- Other ways that we are examining to reduce greenhouse gas emissions aboard ships include upgrades to air conditioning and cooling systems as well as high-efficiency lighting fixtures. For application to future ship design, we are funding research to develop fuel cells for shipboard use to generate electric power with reduced carbon dioxide and unburned

DRAFT

hydrocarbon emissions. These high-technology power plants will be 20-30% more fuel efficient than our present generators and reduce emissions proportionately. For aircraft operations, we are in the process of implementing fleet-wide the use of computerized flight management systems that provide 2-4% fuel savings for each mission by analyzing variables such as aircraft weight, fuel load, and aerodynamic drag for each class of aircraft.

As a final point, I would like to emphasize that although the Navy supports the administration's efforts for energy conservation and the reduction of greenhouse gases, it is important to stress our concern about the potential impacts of this treaty on our readiness. Since the actual provisions of the treaty are unknown, it is difficult to ascertain the exact effect the treaty would have upon Naval operations. However, it is possible to come to some conclusions on potential impacts that any forced reduction would produce.

On the domestic front, any incremental mandatory reduction in emissions could lead to a cut of flying hours and steaming days available for training the crews of our ships and aircraft. Any training cuts in addition to those necessitated by past draw-down efforts would lead to the potential for decreased readiness and safety.

We are also concerned about the impact that the treaty would have on our multilateral operations overseas. For example, today our forward-deployed Naval Forces are conducting eight multilateral exercises and we have ships visiting eleven foreign countries. We must work carefully to ensure that our forces are able to continue these engagement activities unencumbered. Another important issue concerns accountability for emissions from fuel that is bunkered in overseas ports.

DRAFT

There are currently no plans at the Kyoto conference to discuss how emissions from bunker fuels used by our aircraft and ships overseas will be allocated among various nations. It is imperative that the treaty provisions do not hamper our ability to operate in international and foreign waters, base and refuel our forces in overseas ports, and participate in multinational training, exercises, and operations.

Mr. Chairman, the Navy does not want to get into the business of budgeting BTU's the way we currently budget dollars. The next time Naval Forces are called upon to respond to a crisis around the globe as they have been many times in recent years, we do not want the Carrier Battle Group Commander or Amphibious Task Group Commander to have to ask, "Is this operation within our greenhouse gas emissions budget?" Neither do we want our allies to ask themselves the same question prior to cooperating with the United States on a joint enterprise.

In conclusion, the Department of the Navy is committed to identifying economically viable opportunities for shore facilities and operational components that reduce greenhouse gas emissions without adversely impacting military readiness. We strongly believe the protocol must include a provision that preserves our ability to conduct Naval operations and training necessary to meet our national security commitments.

RECORD VERSION

STATEMENT BY

MAJOR GENERAL HOWARD J. VON KAENEL

DIRECTOR OF STRATEGY, PLANS AND POLICY
OFFICE OF THE DEPUTY CHIEF OF STAFF FOR OPERATIONS AND PLANS
DEPARTMENT OF THE ARMY

BEFORE THE

COMMITTEE ON ARMED SERVICES

UNITED STATES SENATE

FIRST SESSION, 105TH CONGRESS

ON THE

IMPACT ON THE ARMY OF POTENTIAL FUEL REDUCTIONS
UNDER THE GLOBAL CLIMATE CHANGE TREATY

12 NOVEMBER 1997

CLEARED
FOR OPEN PUBLICATION

NOV 7 1997 6

DIRECTORATE FOR FREEDOM OF INFORMATION
AND SECURITY REVIEW (OASD-PA)
DEPARTMENT OF DEFENSE

NOT FOR PUBLICATION
UNTIL RELEASED
BY THE SENATE
ARMED SERVICES
COMMITTEE

Office Chief of Public Affairs
Security Review Office
SARA CON. ROOM 2105
Washington, DC 20310-1506

CLEARED
FOR OPEN PUBLICATION

NOV 7 1997 6

**STATEMENT OF
MAJOR GENERAL HOWARD J. VON KAENEL
DIRECTOR OF STRATEGY, PLANS AND POLICY
OFFICE OF THE DEPUTY CHIEF OF STAFF
FOR OPERATIONS AND PLANS
DEPARTMENT OF THE ARMY
BEFORE THE SASC
THE POTENTIAL IMPACT ON THE ARMY OF PROPOSED
GREENHOUSE GAS EMISSION REDUCTIONS UNDER
THE GLOBAL CLIMATE CHANGE TREATY**

DIRECTORATE FOR FREEDOM OF INFORMATION
AND SECURITY REVIEW (OASD-FA)
DEPARTMENT OF DEFENSE

Mr. Chairman and members of the Committee:

I am pleased to appear before the Committee today to discuss the potential impacts on the Army's military training and readiness levels related to the greenhouse gas emission reductions proposed in Protocols to the Framework Convention on Climate Change.

The Army fully supports the current Department of Defense position calling for a protocol to the convention that preserves national security and protects our nation's ability to conduct military operations with trained and ready forces while supporting Administration goals of reducing global greenhouse gas emissions. As you know, the current draft protocol to the convention does not address national security or military activities in any way. The Army has been an active participant with the Joint Staff and Department of Defense in crafting a provision that exempts greenhouse gas emissions that are attributed to military and military support systems used in the preparation for, in support of, or engagement in military operations. Specifically, military operations for national or collective security, humanitarian activities, peacekeeping, peace enforcement or United Nations and other multinational actions must not be subject to an emissions limit. This type of "national security provision" is necessary to maintain the Army's ability to execute the National Military Strategy in support of the President's National Security Strategy. In this regard, any protocol that is negotiated within the treaty must not threaten the Army's ongoing contributions to shaping the international environment and creating conditions favorable to global security. Additionally, the protocol must not adversely affect our readiness to respond to the full spectrum of crises with trained and ready forces.

To achieve the objectives outlined in our strategy, the Army must maintain the capability to fulfill four strategic purposes: reassure friends and allies, deter potential adversaries, compel an enemy force in the event of confrontation or hostilities, and support the nation in times of domestic crisis. Our ability to fulfill these purposes depends on trained and ready forces based in the Continental

United States and forward-deployed, who are prepared to respond on a moment's notice to the needs of the Nation. Since 1990 alone, the Nation has called upon the Army to deploy forces 25 times with little or no notice, and, given the conditions that characterize the emerging strategic environment, there is every indication that this trend will continue. Reductions in fossil fuels consumed by Army units for training will ultimately result in lower readiness rates, reducing our ability to respond to an emergency in a timely manner.

Fulfilling the Army's strategic purposes also requires that we sustain a high level of engagement activity abroad. Today the Army has over 33,000 soldiers deployed in 71 nations. Additionally, soldiers remain forward stationed in both Korea and Europe, demonstrating our commitment to regional stability. Exercises such as "Bright Star" in Egypt, "Intrinsic Action" in Kuwait, and "Cobra Gold" in Thailand are further examples of the Army's commitment to remaining globally engaged. Should we be forced to reduce fossil fuel consumption, it is doubtful that we could sustain an appropriate level of engagement. Though the Protocol to the Convention is still being negotiated and its defined terms and implementation plan remain undetermined, specific impacts are likely to be complex and far ranging. Some crucial questions for important ongoing operations overseas are:

1. How will critical engagement activities like military-to-military contacts and Partnership for Peace programs be affected?
2. Will our current efforts to address transnational threats such as drug trafficking and Weapons of Mass Destruction proliferation be impacted?
3. How will emissions be accounted for in humanitarian operations in Rwanda, de-mining operations in Africa, or peace keeping operations in Bosnia?
4. Will access to international bases, airfields and ports be affected?
5. Will airlift and sealift assets vital to our force projection Army be able to travel unencumbered without regard to where they procure or consume fuel in other nations?
6. Will forward deployed soldiers and their families continue to receive the appropriate host nation support to preserve their quality of life?

Additionally, any negotiated Protocol must not create a disincentive to other nations to participate in multinational exercises and operations that support our mutual security interests. Nations should not be put into the position of having to choose between greenhouse gas reduction targets and activities important to national and international security.

The Army does recognize the hazards of global warming and has been participating in supporting the nation and the world in meeting emissions reduction targets. We have done so by pursuing a considered strategy that balances energy reduction objectives with readiness requirements. The Army has made great strides in energy conservation through implementing energy efficient measures in its installation infrastructure. Since 1985, the Army has reduced its facility energy consumption by 18.9% and is on the glide-path to achieve a full 30% reduction by 2005 as mandated under the Energy Policy Act of 1992 and Executive Order 12902. In response to these same laws, and through down-sizing the force, the Army has achieved a 39% reduction in mobility fuel consumption since 1985, far exceeding the 10% reduction mandated in this category. These figures put the Army well below the 1990 emission levels that were originally established as the baseline for reductions in the 1992 Rio Summit. These early achievements in reducing mobility fuel consumption cannot be matched in the near and mid-term without significant readiness degradations.

There are other near term initiatives. The Army is developing a family of simulators that will assist in meeting training readiness, and will provide modest reductions in our fossil fuel emissions by reducing some field training requirements. For example, the Close Combat Tactical Trainer (CCTT) and the Fire Support Combined Arms Tactical Trainer (FSCATT) are two such simulators that the Army has developed and is fielding. They provide the means for tank crews and self-propelled howitzer crews to accomplish a portion of required training with minimal consumption of fuel and other resources.

The Army is also pursuing several long-term science and technology programs that are focused on reducing fuel demand in future weapons systems that hold the promise of further reductions in emissions. These include investments in research for high performance turbine engine technology, composite armor technology to reduce vehicle weights, and hybrid electric power systems for combat vehicles.

Environmental concerns and considerations will continue to be important as we strive to design forces and capabilities for the Army of the next century, however, fighting and winning the Nation's wars as part of the joint team remains the Army's foremost task. Thus, remaining trained and ready is crucial, and we are therefore committed to supporting the inclusion of a national security provision in the current Protocol for Climate Change Convention.

I appreciate this opportunity to appear before the Committee. The Army will continue to work with our colleagues in the other Services, the Joint Staff, the Department of Defense, and with the members of Congress to ensure we preserve the nation's ability to conduct military operations and protect national security while simultaneously maintaining our environmental stewardship responsibilities. I look forward to answering any questions that you may have. Thank you.

DRAFT

11/06/97 1915

STATEMENT OF
SHERRI W. GOODMAN
DEPUTY UNDER SECRETARY OF DEFENSE
(ENVIRONMENTAL SECURITY)
BEFORE THE SASC

GLOBAL CLIMATE CHANGE - NATIONAL SECURITY ISSUES

I want to thank you for the opportunity to testify today on behalf of the Department of Defense regarding Global Climate Change. The Department supports President Clinton's proposed Global Climate Change framework and we believe it is compatible with our national security goals. In fact, the President has committed that we will continue to protect national security in taking action to address climate change. I can assure you that the President, the National Security Council, and the Department of State are working very hard with us to ensure that concerns related to limitations on emissions connected with military operations are addressed in the Protocol; indeed, the US delegation made the following statement in October at the negotiations in Bonn on climate change:

"This Protocol must not create a conflict between our collective ability to preserve peace and the need to reduce greenhouse gas emissions. We must pursue both goals. We believe we have an obligation to the world community, our individual nations, and to the men and women who serve in our military forces to carefully consider how we address the implications of this Protocol for military operations."

During my testimony today, I want to discuss three main points:

1. First, the Administration is working to ensure that the climate change protocol now being negotiated, as well as the domestic legislation that would be needed to implement the

DRAFT

that any agreements we enter into on climate change be consistent with protecting our national security

("That any agreements we enter into be consistent with protecting our nat'l sec.")

DRAFT

protocol, protects national security. The Administration's goal is to ensure that there are no impediments to our ability to conduct military operations with trained and ready forces.

2. Second, reducing greenhouse gas emissions and energy consumption can be both financially and operationally beneficial. Therefore, the Department of Defense is committed to pursue such reductions to the extent consistent with national security, and
3. Third, if the United States, together with the other nations of the world, does not take action to reduce greenhouse gas emissions, the resulting changes to the global climate will lead to instabilities around the world that will themselves threaten our national security. To prevent these, we fully support the President's global climate change proposal.

Global Climate Change and National Security-- Preserving Readiness

The three core objectives of President's National Security Strategy are: "to enhance our security with effective diplomacy and with military forces that are ready to fight and win; to bolster America's economic prosperity; and to promote democracy abroad." As the deliberations on the Global Climate Change Protocol proceed, the Department is determined to protect the nation's ability to conduct military operations with trained forces, both unilaterally and with other nations.

To achieve this, both the Global Climate Change Protocol and our domestic implementation strategy must recognize national security implications. Before I describe what we are doing in each of these important areas, I want to emphasize that the Administration is committed both to protecting national security and to reducing greenhouse gas emissions.

DRAFT

DRAFT

Within the Department, we have shown and will continue to show leadership in reducing our energy use and emissions of greenhouse gases, without affecting our national security obligations. In fact, it is in our best interest to improve the fuel efficiency of DoD operations. Reducing our energy and fuel use reduces operational costs, freeing up operations and support dollars for other critical needs, reduces the logistics portion of military operations, and in some cases, like the use of the electric hybrid vehicle, may in fact provide stealth characteristics (by reducing noise and heat signatures of combat vehicles). I will discuss the Department's past and present efforts to reduce greenhouse gas emissions in some detail later in my testimony.

International issues associated with the proposed Greenhouse Gas Protocol

The President's National Security Strategy promotes regional stability by promoting "the building of coalitions, forward stationing or deployment of forces; Defense cooperation and security assistance; training and exercises with allies and friends; and the security of key allies and friends through alliances and coalitions." Today the US military operates in 70 countries and is involved in 11 multi-national exercises. Over the past decade, the United States has responded to a major regional conflict and conducted an array of major contingency operations that include: peace operations (Bosnia), disaster relief (Indonesia forest fires), humanitarian assistance (Operation Provide Comfort), noncombatant evacuation (Sierra Leone), maritime escort (Persian Gulf), migrant rescue and support and deployments to quell civil disturbances (Haiti), to name a few. A common feature in most of these operations is their multi-national composition of forces.

As these examples illustrate, our national security interests require that the US maintain a capability to operate internationally in multilateral operations. We do not want potential partners

DRAFT

forced to choose between meeting their Global Climate Change reduction targets or supporting the US in a contingency operation. This choice could arise in several ways. For example, an unexpected increase in a nation's own military operations could cause it to exceed its reduction

target. Alternatively, because the current draft of the protocol does not resolve the issue of emissions from aircraft and ships associated with bunker fuels (fuels used for international transport), an allied country that provides US forces access to its bases could exceed its target due to the emissions from the US forces.

As an illustration of the second possibility, during Desert Shield/Desert Storm, airlifting US forces and equipment to the region required the support of several US allies. Over the initial seven months of the conflict, one country provided access to airlift aircraft and sold US forces an average of 2.7 million gallons a day (563 million gallons overall) of fuel, about six percent of the host nation's daily fuel use. This is a significant amount. In future overseas deployments, we do not want allied countries to have to consider whether providing logistical support will cause them to exceed their greenhouse gas emission targets, nor do we wish to create a situation where countries are forced to choose between their domestic economic growth and supporting international military operations.

any cc agreements we enter into recognize

To help avoid such a choice, the Department is working to ensure that the Protocol recognizes the unique nature of military operations. The exact form that such recognition should take is still being discussed within the Administration and with our allies. In general, however, the provision must take into account United States military emissions as well as those of other countries where our forces are based and deployed and with whom we engage in combined operations.

DRAFT

DRAFT

Likely effects of the US domestic implementation strategy on readiness and national security

To implement any climate change treaty protocol, the Administration intends to use market based mechanisms to achieve domestic reductions of greenhouse gases. Within this market-based framework, DoD is working to ensure that we will always have access to the fuel necessary to carry out the defense mission. This means that whatever market-based system is put into place,

our operations and training must not be limited by our ability to purchase fuel or by the amount of emissions that would result from its use. As he indicated in his October 22nd speech to the National Geographic Society, the President is committed to protect National Security both in the international negotiations and in developing his policy for domestic implementation.

Reducing Greenhouse Gas Emissions in DoD

DoD is the largest energy user in the federal government and because most greenhouse gas emissions in the United States result from combustion of carbon-based fuels, DoD is also the federal government's largest emitter of greenhouse gases. In Fiscal Year 1996, DoD's energy consumption was about 1.4% of the total energy use in the United States. Of the total DoD energy use, 58% was related to operations and training in military tactical and strategic systems. The remaining 42% of DoD energy use was consumed by facilities and non-tactical vehicles.

This distinction is important. Our national security concerns are focused on the first category -- operations and training. As I have already explained, the Department is seeking to preserve our ability to conduct military operations with trained and ready forces. We are not seeking special treatment for our facilities and non-tactical vehicles. We in DoD can and should reduce our emissions in these areas just as the rest of the nation will be called on to reduce emissions. To

DRAFT

especially with regard
to energy
consumed by facilities
and non-tactical vehicles

ESpecially
w/ regard to energy
consumed by
facilities &
non-tactical vehicles

DRAFT

achieve reductions in our facilities and non-tactical vehicles, DoD is improving its energy management and reducing overall energy use.

The Department of Defense believes that energy management is important for three reasons:

First, increasing energy efficiency reduces the cost of heating our facilities, lighting our workplaces, and cooling our family housing. It thus saves money, which can be applied to other priorities. Second, increasing energy efficiency reduces the fuel required by our trucks, ships and planes and thereby increases their range. Finally, energy conservation is good for the environment, reducing greenhouse gas emissions, as well as those of other pollutants. In sum, sound energy management is good business, makes operational sense, and implements climate change initiatives.

Energy Conservation

In 1992, Congress established important goals and tools for energy conservation in the Federal Government in the Energy Policy Act (EPACT), Public Law 102-486. EPACT required federal agencies to reduce their energy consumption by 20 percent per square foot by the year 2000 (compared to a 1985 baseline). Additionally, the Act required Federal agencies to undertake all conservation projects by 2005 that pay back in ten years or less. Finally, EPACT established a set of goals to undertake sensible investments in energy and water conservation projects.

In March 1994, President Clinton expanded these objectives in Executive Order 12902 - Energy Efficiency and Water Conservation at Federal Facilities - requiring a 30 percent reduction in per-square-foot energy consumption by 2005 (from the same 1985 baseline).

The Defense Department has been a leader in meeting these targets. While U.S. civilian agencies increased gross energy consumption in buildings and facilities by 13.9 percent from 1985

DRAFT

through 1996, DoD *decreased* its gross energy consumption by 22.2 percent. During that same period, DoD's total use, measured in terms of net energy consumed per square foot, fell by 15.5 percent. We place a great importance on facility energy reduction because 42 percent of DoD's energy is used in installations and non-tactical vehicles. Energy conservation makes sound business sense for the installation commander, for the Federal Government and for the Nation. Attainment of the 30 percent reduction in per square foot energy consumption by 2005, for example, would result in an annual cost avoidance of approximately \$1 billion. We are not only on the right glide path, we are ahead of it.

Energy Management Achievements

I'd like to tell you about some of the great things our people are doing to conserve energy. Let me give you a few examples that illustrate both their dedication and ingenuity and their potential to achieve even more:

- The USS Essex (LHD-2) consumed 18.3 percent less fuel by overhauling its propulsion auxiliary equipment and aggressively training its personnel in proper maintenance, operation and engineering procedures. The crews sound practices resulted in a savings of 1.2 million gallons of fuel valued at almost \$1 million.
- Last year, our national ground forces training center at Fort Irwin, California, reduced its energy usage by 4 percent, achieving a total net savings of \$425,400. This achievement is all the more significant since it has achieved this same result for four years in a row. Fort Irwin's efforts have made the installation a leader within DoD, having reduced energy consumption by 42 percent compared to the 1985 baseline. To achieve these results, Fort

DRAFT

DRAFT

Irwin installed lighting retrofits, automatic thermostats with occupant sensors, photovoltaic-powered air sampling systems and ground source heat pumps.

- The Puget Sound Naval Shipyard reduced energy consumption by 7 percent in one year by converting its industrial steam plant from coal to natural gas. It also installed a boiler plant exhaust monitoring system which automatically adjusts the burners to optimize boiler efficiency and minimize carbon dioxide production. Conversion from coal to natural gas also eliminated sulfur dioxide, a significant pollutant and contributor to acid rain, from the exhaust. Combined with savings from spot-market purchases of natural gas, the Shipyard expects to save \$2 million per year from these initiatives with an upfront investment of only \$8.5 million.

Last month, the Department of Energy presented awards for federal energy leadership. This year, as in previous ones, the department of defense won the majority of the awards.

In his recent address on climate change before the National Geographic Society, President Clinton announced a series of initiatives on the part of Federal Agencies. We believe we are leading the way, by:

- *Increasing energy efficiency in new construction.* DoD is working to increase energy efficiency in new construction by 30 percent to 50 percent by fiscal year 2000 (compared to existing facilities). This effort involves: Integrating site selection, landscaping and site development to minimize unnecessary heat gain or loss; optimizing architectural design to incorporate local natural conditions such as day-lighting, along with passive or active solar

DRAFT

DRAFT

applications; and using energy efficient equipment and renewable energy systems. The Services have already executed several projects demonstrating this comprehensive approach. The Naval Facilities Engineering Command's new office spaces in the Washington Navy Yard, for example, incorporate this total design approach. Building energy efficiency into the design added no upfront cost, but will result in annual energy savings of \$130,000 per year (compared to the conventional design originally proposed).

- *Increasing use of energy savings performance contracts (ESPCs).* Energy Savings Performance Contracts use private investment capital and expertise to accomplish energy and cost savings projects in DoD facilities. The contractor's investment is repaid from energy savings resulting from the measures performed at the installation. The energy services contractor typically operates and maintains the equipment installed under an ESPC contract, for a period up to twenty-five years, under terms negotiated with the installation commander. When the investment is repaid, all additional energy savings accrue to the Government, and the Government retains ownership. Recently, the Army Corps of Engineers, as the lead executive agent for the Department, has established two Super Regional ESPCs, together covering all fifty states, with a total investment capacity of \$1.455 billion. Installations can now issue delivery orders against these contracts. Already, the Department has twenty ESPC contracts in progress or under negotiation, with a projected investment by the contractors of nearly \$54.8 million.

Working with the private sector to improve energy efficiency in diesel and high performance turbine engines. The Department is also deeply engaged in research and development

DRAFT

partnerships with private industry to improve the efficiency of our mobility and weapons systems. The overriding issue for the DoD is reducing the logistics burden, including costs associated with fuel consumption, which will, in turn, reduce emissions of greenhouse gases. Military vehicle propulsion systems are modified commercial models, so we have a direct interest in commercial automotive products and technology. The DoD owns the largest fleet of vehicles within the federal government, the bulk of which are used by the Army. More efficient propulsion systems for a wide range of systems, from medium tactical truck, up to heavy trucks and combat vehicles, would assist the Services in their mission. Because of its central role in advancing dual use automotive technologies, the Army's National Automotive Center located at Warren, Michigan, will take the lead in establishing a consortium of engine manufacturers and research organizations, to include commercial, academic and government laboratories, with the expressed purpose of accelerating technology transfer of advanced diesel engine technologies from research to manufacturing. In concert with the Department of Energy, we have already contacted several leading engine manufacturers to begin such a partnership.

The Integrated High Performance Turbine Engine Technology (IHPTET) program, is another excellent example of the Department's investments in mission-driven technologies designed to maintain future military superiority, which also offers benefits supportive of the Department's broader environmental goals. This highly successful, three-phased program, jointly funded by DoD, NASA, and industry, is designed to develop air breathing gas turbine engine technologies with the goal of doubling propulsion system capability while providing a 40% reduction in fuel burned (through a combination of decreased specific fuel consumption and decreased engine weight). These engines can then be used by the broad spectrum of military aircraft applications. To date, IHPTET has achieved its Phase I goals of a 30% increase in engine thrust-to-weight

DRAFT

DRAFT

ratio for the turbofan/turbojet family; a 40% increase in power-to-weight ratio and 20% reduction in specific fuel consumption for the turboprop/ turboshaft family; and a 35% increase in thrust-per-unit-airflow and 30% reduction in cost for the expendable engine family; and is well on its way to achieving even more ambitious goals in FY1999.

Long term Impacts of Climate Change on National Security

The climate change treaty protocol is not addressing a theoretical issue, but one that has potentially serious implications for DoD, the United States, and the world. The IPCC, the leading scientific expert today on climate change, has concluded that man made emissions of greenhouse gases are increasing at a rapid rate and predict that as a result, by the year 2100, the global mean surface temperature will increase from 1 - 3.5°C, and average sea level will rise between 15cm and 95cm. These changes will lead to many climate induced impacts that could affect US national security interests.

Today, one billion people around the world live within 60 - 100 kilometers of coastlines with this number almost certain increase by several times within the next two decades. Thirteen of the world's 20 largest cities are located on coasts threatened by a to sea level rise. In addition, an increase in tropical cyclones and hurricanes is predicted within the coming decades, along with marked changes in rainfall patterns, with some regions experiencing more and others less.

Considered on by region, these changes have the potential to create significant political instabilities around the world by threatening food supplies, increasing the frequency and severity of floods and droughts, raising the average sea level globally, and increasing the incidence of

DRAFT

vector-borne disease. According to the 1990 Intergovernmental Panel on Climate Change (IPCC) Report, "The gravest effects of climate change may be those on human migrations as millions are uprooted by shoreline erosion, coastal flooding, and agricultural disruption".

These events would have significant consequences to future international political stability, and future US defense plans. They could pose real threats to vital US national security interests and lead to conditions similar to those in the past which resulted in US troops being deployed, either for humanitarian or peacekeeping missions, or to protect US security interests. Recent examples include the humanitarian relief effort in Somalia, and the deployment of troops to intercept refugees fleeing Haiti for the US. Inundation of Caribbean islands could create numerous Haiti-type situations, and the predicted agricultural dislocation and flooding in Africa and the Indian Subcontinent could create numerous Somalia-type situations, all occurring simultaneously.

Given the potential threats to international stability from climate induced changes, the Department of Defense fully supports the four key elements of President Clinton's framework for an International Global Climate Change (GCC) Protocol in Kyoto: to commit to the binding and realistic target of returning to 1990 greenhouse gas emission levels between 2008 and 2012; to address all greenhouse gases; to embrace flexible mechanisms for meeting these limits; and to engage both industrialized and developing countries in meeting the challenge of climate change.

SUMMARY

I want to re-emphasize that readiness and the ability to conduct military operations are our highest priority at DoD. We support President Clinton's proposed framework *and* the

DRAFT

DRAFT

preservation of military operations and readiness which we believe are compatible goals. The Department will continue to be a leader in energy conservation and efficiency, and in reducing greenhouse gas emissions. Reducing energy consumption can be both *financially and* operationally beneficial to the Department, and the Department is committed to pursue such reductions to the extent it is consistent with national security.

DRAFT

Statement By
Under Secretary for Global Affairs Timothy E. Wirth
House Committee on International Relations
November 13, 1997

Thank you for this opportunity to inform your committee about the status of the international climate change negotiations. The U.S. delegation finished its work two weeks ago at the eighth session of the Ad Hoc Group on the Berlin Mandate (AGBM) and what was to have been the last formal "pre-negotiation meeting" prior to the meeting of the Third Conference of the Parties (COP-3) in Kyoto. Because further preparatory work remains, governments will reconvene for a half day on November 30 and a half day on December 1 before COP-3 begins on the afternoon of December 1.

President Clinton's announcement of the U.S. target on October 22 changed the dynamic of the negotiations. His speech marked the beginning of a new initiative to undertake realistic and achievable efforts to reduce greenhouse gas emissions. In his speech, the President outlined a flexible, market-based and cost-effective approach, backed by a comprehensive domestic program to help meet the ambitious target to return greenhouse gas emissions to 1990 levels in a budget period between 2008 and 2012. This target will be followed by a reduction below 1990 levels in the five-year period thereafter, and an effort to make further reductions in the years beyond that. Unlike the EU and others' proposals, the U.S. plan takes a comprehensive view with regard to the gases to be included. We are prepared to address a broad range that includes the extremely potent greenhouse gases such as HFCs, PFCs, SF6 and all land use and forest sinks. In real terms, the U.S. commitment is the equivalent of cutting greenhouse gas emissions by 23 percent below where they would otherwise be in 2010.

A major element of the President's proposal is the call for both industrialized and developing countries to participate in meeting the challenge of climate change. While developed countries must lead, he stated that key developing nations must meaningfully participate; otherwise, the United States will not assume binding obligations. Their involvement is vital to addressing the global problem we face. These nations have an opportunity to chart a different energy future.

The President also placed great emphasis on the need to rely on a series of flexible mechanisms for achieving binding limits and lowering costs. Innovations such as emissions trading and joint implementation with credit can cut worldwide pollution and help developing countries protect their own environments without sacrificing economic growth.

Our negotiators worked with other delegates at the Bonn meeting to develop the text for a protocol or other legal instrument for consideration at COP-3 that is consistent with the U.S. proposal. Although we saw movement in some areas critical to the overall U.S. position, most important issues within the text remain bracketed and are far from agreed. These include sections on emissions trading, joint implementation, commitments by

10-04 10:00 1:00
ID- NOV 12 31
developing countries, harmonized policies and measures, multi-year emissions budgets, the treatment of carbon sinks, and the level of target reductions of greenhouse gas emissions by Annex I countries.

Reaching consensus with other negotiating Parties on these issues has been and will continue to be a difficult task: the Group of 77 countries and China worked to block the text in several areas and reintroduced text to reflect its insistence that there be no new commitments from developing countries, and to obtain new concessions from developed countries on financing and the transfer of "climate-friendly" technologies. Thus, with less than one month until the Conference of the Parties at Kyoto, much work needs to be done on many outstanding and difficult issues.

Last week, I met with Environment Ministers from the European Union "Troika." It was a constructive meeting, and I believe that our dialogue served to further understanding of our respective approaches. We have committed to undertaking intense consultations with the EU over the coming weeks.

NEW
I also went to Japan over the weekend to lead a U.S. delegation to an informal meeting at the ministerial level in Tokyo. That session provided an opportunity to meet with our EU colleagues again, as well as ministers from other Annex I and non-Annex I Parties. The session provided the first opportunity for most ministers to hear for themselves each other's concerns -- and as such was enormously helpful. We continue to find areas of common ground with our developed country partners, including on such elements as the budget period (where we agree on a five year duration) and on the long term need to involve all sources and sinks of all gases and all sectors, and to fully engage developing countries. While modalities for achieving these have not been resolved, I am confident that it will be possible to do so within the remaining time before the end of the Kyoto session.

Unfortunately, some of the key developing countries did not attend the ministerial in Tokyo (China, India and Saudi Arabia were each invited but did not come). In spite of the unencouraging turnout, we did find some flexibility from developing country attendees (including Argentina, Brazil, Indonesia, Korea, Mexico, Samoa -- representing the Alliance of Small Island States and Tanzania -- representing the entire Group of 77 and China). However, while some elements of progress could be ascertained from delegates that did participate, we cannot be certain this movement reflects a broader agreement that might emerge in Kyoto.

Initiated in January of this year, U.S. policy on climate change became fully fleshed out with President Clinton's announcement of the U.S. target last month. Kyoto marks the next step in a series of steps that will enable the United States and all nations to fulfill the Climate Convention's ultimate objective. It will not be an easy road to Kyoto, but through an intensive, comprehensive diplomatic effort, we will increase our chances for success considerably.

Statement of
The Honorable Timothy E. Wirth
Under Secretary of State for Global Affairs
before the
Senate Foreign Relations Committee
Subcommittee on International Economic Policy, Export and Trade Promotion
October 9, 1997

Mr. Chairman and Members of the Subcommittee:

Today, in addition to providing an update on our progress in the climate change negotiations, I would like to address three issues: (1) the matter of the European Union "bubble", (2) issues related to developing country participation, and (3) the various mechanisms through which we can bring appropriate technologies to developing countries to assist them in combating climate change.

Let me start with an update, in particular focusing on developments since I last appeared before this committee in June 1997.

We are rapidly approaching the end of the negotiations leading up to the third session of the Conference of the Parties, to be held in Kyoto, Japan from December 1-10, 1997. As of today, there are only 64 days left – and only about 18 of those are set aside for formal negotiations. Progress has been made, on some of the important issues, and the beginnings of an agreement are emerging. If we are successful, the agreement is likely to include critical elements of our own proposal, including:

- an emissions budget, which allows for smoothing of fluctuations in weather and economic variables and some flexibility in the timing of emissions reductions;
- a multi-gas approach, in which not only carbon dioxide but all greenhouse gases are incorporated (although there is significant opposition to including "sinks");

- international emissions trading and joint implementation, both of which increase flexibility by allowing Parties to offset emissions at home with the purchase of emissions reductions elsewhere;
- mechanisms for monitoring and verification of reductions, which insures a level playing field for all Parties; and
- action by developing countries, in addition to a target and timetable from developed countries.

I do not mean to suggest that the final text will include each of these elements in the form that we originally set forth in our U.S. proposal this past January; the negotiating process does not allow for that. But the Administration has proposed, and much of the world has begun to accept, an overall paradigm for moving forward to address this serious problem: a solution which maximizes flexibility in implementation while insuring the integrity and environmental benefits of emissions targets.

The Administration is not yet at the point of finalizing its decision regarding a target for controlling emissions. We will keep you informed as to our progress on this front. We have clearly heard the concerns raised in this committee, as well as those raised in the Senate Resolution passed early this summer. I wish to restate here: our agreement will protect American competitiveness and will be in the best interest of the American people. The President again committed himself to these goals at the White House conference on Monday, and it is a goal to which we have consistently adhered during the course of our negotiations.

However, on many aspects of our proposal, we have been clear – and the domestic consensus supports our approach. The Administration has been aggressively promoting these elements of our proposals in an intense round of bilateral and multilateral sessions. The President has made climate change an issue in his meetings with other national leaders, including in sessions on the margins of the General Assembly session of the United Nations. The Vice President and the Secretary of State have raised climate change in their own meetings. I have had a series of sessions in Europe and

Saudi Arabia, as well as with key ministers from Japan, Australia, Canada, and New Zealand, and I will continue to raise this issue in meetings in China later this month. Senior officials have been in Latin America and in Asia discussing our positions. Our hard work is beginning to pay off in an opening of peoples' minds to our perspectives; we remain hopeful that our continued efforts will create a consensus around our approach as we move to Kyoto.

Our allies in the negotiations are found in all blocs of countries: among the developed countries, we have our most extensive areas of common ground with Australia, Canada, Japan and New Zealand – each of which supports our proposals for the flexibility elements so important to achieve a lasting, successful and economically feasible agreement in Kyoto. Many countries of the former Soviet Union and of Eastern Europe support our proposals as well. However, we have reached something of an impasse with our European colleagues.

The EU "Bubble"

As you are probably all aware, the EU has chosen what many analysts consider an unrealistic and unachievable target of a fifteen percent reduction by 2010 below 1990 levels. Further complicating the negotiation, European Union member states have also insisted that they be allowed to "bubble" their emissions. This means that while emissions as a whole may be limited to a set target, each individual country may not be required to meet that limit. In fact, a significant portion of the total EU emissions reductions are anticipated to stem from the re-unification of Germany, and the removal of coal subsidies in the UK and a switch to natural gas. While we certainly applaud the shutting down of inefficient and polluting factories and of the removal of subsidies in the energy sector, it is not clear that the benefit of such actions should eliminate the need for other countries within the EU to act. Yet, under the EU proposal, some countries will not be required to reduce emissions at all – and some will be allowed to grow. For example, Portugal will be entitled to emissions increases of 40 percent above 1990 levels by 2010, Spain will be able to increase emissions by 17 percent, and France will be required only to maintain emissions at 1990 levels.

Congress has been quick to point out some of the problems inherent in this kind of "burden-sharing". I would like to share with you some of the questions we have asked on this issue:

- We have questioned how the EU proposal would relate to international emissions trading. If it is merely a proposal in which each country would be given a flat-rate, and then allowed to trade emissions on the market, we would support their approach.
- We have not been told how the EU intends to insure accountability: for example, if the European Union exceeds its target, what compliance mechanisms exist? Will each country within the EU have the same obligations as countries outside of the Union? Is each country responsible for its "share" only? How is that determined?
- What kind of examples is the EU setting for the developing world? If a 40 percent increase is allowed for some industrialized countries, then even less can be demanded from developing countries. Surely we must demand more of the industrialized country Parties in an effort to set an appropriate standard.
- How will new European Union member states be brought in? If the number of countries is enlarged through the addition of Eastern European members with low emissions, will the overall target be adjusted?

I hope this list of questions gives you an idea of the extent to which we are demanding answers in the international debate. Clarity on these questions is essential for eventual agreements in Kyoto.

Developing Countries

Let me turn to another issue of enormous concern to those on this committee and to others outside this room as well: the participation of developing countries. Let me be clear - developing countries must participate in this treaty. The rationale for developing countries to act is clear: while at present they are responsible for less than half of global emissions, over the next decades, their percentage of the total will grow, despite the fact that their per capita emissions will continue to remain far below our own. We must

address this trend of rising emissions if we are to truly make a dent in the long-term problem.

However, I believe it would be instructive to understand better another perspective on this issue – that of developing countries themselves. Let's look at some numbers.

- According to the Intergovernmental Panel on Climate Change (IPCC), approximately half a billion cases of malaria are already reported each year. However, experts believe outbreaks of malaria will increase as climate changes. Most of the deaths from malaria occur in children less than five years old – and almost all of these kids live in developing countries.
- According to the World Bank, two billion people live on less than \$2 a day, and 1.3 billion live on less than \$1 a day – and all of these are in developing countries.

It is this perspective, and these factors that developing countries consider when they call on the developed world to act first.

Many uninformed observers have suggested that there are no obligations for developing countries in the current agreement. This is not true. In fact, among other commitments, developing countries are called upon to inventory their emissions of greenhouse gases, to take policies and measures to mitigate and adapt to climate change, to cooperate in the development and transfer of technologies, and to promote and cooperate in climate change research, education and training.

Developing countries have taken action to address their FCCC commitments. Just as we are working to mitigate our emissions, developing countries have proceeded aggressively to develop programs which have reduced their own. Some of the developing country effort has been the result of successful programs mounted by AID, by the U.S. Country Studies Program, U.S. Initiative on Joint Implementation, and by bilateral and multilateral donations from other countries and international organizations. However, much of the resources and the impetus for action have come from within these

countries. As we move to another level of international commitment, it is important to understand what has been achieved to date.

A number of examples of developing country efforts are illustrative of this progress. According to the World Bank, between 1991 and 1996, fossil fuel subsidies in 14 developing countries that account for 25 percent of global carbon emissions from industrial sources declined about 45 percent – from \$60 billion to \$33 billion (for comparison, note that OECD subsidies declined by about 20.5 percent, from \$12.5 billion to \$9.9 billion). China, which accounts for approximately 12 percent of total world energy-related CO₂ emissions, has been actively reforming energy pricing, and subsidies have fallen from 37 percent in 1984 to 29 percent in 1995, while petroleum subsidies have fallen from 5 percent in 1990 to 2 percent in 1995. Furthermore, Chinese efficiency gains have also been significant; without intervention, emissions would have been nearly 155 million metric tons higher in 1990 than they were with policy actions. And, by the end of 1993, 12 percent of China's installed electrical generation capacity was produced by co-generation. Many other developing countries are also actively promoting energy efficiency. For example, in Brazil an aggressive program to use ethanol from sugar cane has replaced nearly half of the gasoline that otherwise would have been used.

What does all this tell us? Clearly, it tells us that our expectations and theirs are predicated on different assumptions. We look at them and point to the cause of the problem in the future; they look at us and point to the cause of the problem now. We look at them and worry about competitiveness; they look at us, and point to our, overwhelmingly better lifestyle and standard of living – which most of them are desperate to duplicate, but are being told is beyond their reach because of the environmental consequences. As President Clinton remarked at the White House conference on Monday, our problem with China is one of national security – it is that China might follow our emissions path, and in so doing would create a world unlivable for us all. We look to Kyoto and demand that all countries participate; developing

countries look to Kyoto and agree to take actions – but only after the industrialized world has moved first.

Historically, the bonds of the developing country alliances are difficult to break, notwithstanding the often great differences within the group. We can empathize with the needs for small island states, which face potential eradication through sea level-rise, to insist on aggressive targets. We can conclude that grouping all developing countries together is a mistake – and we can suggest that poor countries which emit next to nothing should have different obligations than do the wealthier countries with a significant share of the global total.

We can accommodate the concerns of developing countries that differences between levels of development are real by providing flexibility in the obligations we insist they take on. Many developing countries accept that eventually they will have to assume greater responsibility for dealing with climate change – but suggest the appropriate time for such action would be once they have passed a certain threshold of economic development.

We can also address the concerns developing countries have set forth regarding the imbalance in our expectations – that they be called upon to set targets before we have demonstrated our own good faith. This is best accomplished by fully funding our own programs and by aggressively seeking to develop the technologies that will be needed for global reductions.

We can continue to promote active developed and developing country cooperation through our ongoing bilateral and multilateral assistance programs. Evidence of success in these efforts is beginning to emerge in many developing countries with the development of renewable energy technologies, the removal of subsidies, the improvements in efficiencies and the implementation of climate action plans. We can demonstrate with our own commitments that we value these environmental efforts, and that the United States will stand by countries which invest in the long term and the global well-being.

Ultimately it is actions themselves that will determine international success in addressing the climate change problem – not the instrument which codifies the obligations, or the process through which the actions may be generated. Real emissions reductions, in all countries in the world, at the least possible costs are our goals. Others may also exist – and we need to take advantage of them all.

I am not proposing that we step back from our view; that both developed and developing countries must act to avoid continued and potentially calamitous global warming. Rather, I am saying we must determine what we ask of developing countries with a realistic and fair appreciation of how they see the world as well. The level and timing of each country's commitments must be commensurate with its national abilities and level of development. Balance and fairness must be maintained. And any package to which we agree in Kyoto will insure this is done.

Our developing country proposal has three parts:

- (1) It calls for continuing to advance the implementation of commitments: essentially defining the specifics of what that means, and including calling on them to increase energy efficiency, to emphasize market oriented pricing, to increase the use of renewables, to improve their transport sector – and in general to take actions to address climate change that are justified economically in their own right.
- (2) It creates a new category of countries (Annex B): in which developing countries would voluntarily take on legally binding emissions limitation or reductions commitments; and
- (3) It proposes that the Parties ultimately agree on provisions so that all Parties (including developing countries) have quantitative greenhouse gas emissions obligations, and so that there is a mechanism for automatic application of progressive obligations to Parties based on agreed criteria.

While we may be willing to be flexible on the procedures through which each of these elements is made part of the Kyoto package, we remain absolutely convinced on the substance. Developing countries must be clearly and integrally a part of next steps in

order for the U.S. to consider becoming a Party. The United States will not assume binding obligations until developing countries make adequate commitments in terms of their own obligations.

Developing the Infrastructure

Let me turn finally to the broader question of how we intend to develop mechanisms to bring appropriate technologies to developing countries to assist them in combating climate change. We all recognize that unless remedial action is taken, developing country emissions are expected to rise as part of their economic development. In my view – and I believe in the view of most of the members of this committee – it will be critical to find ways to work with developing countries to reduce emissions. This must be a priority regardless of the approach we take through the Convention or any subsequent legal instrument.

What does this mean? It means we must build the next 100 gigawatts of power generating capacity to be cleaner and more efficient. It means we must fully fund the Global Environment Facility. It means we must seek to continue our efforts to develop initiatives to promote environmental export credits and initiatives. It means we must rationalize our lending through the multilateral development banks and our bilateral assistance programs to cover environmental concerns. And, it means we must endeavor to continue our efforts to develop and implement the new technologies of the future.

Let us briefly consider two of the largest developing country emitters: China and India. Even after more than a decade of extremely strong economic growth, China is still a seriously underdeveloped country. On a per capita basis, China's GDP is about \$620. Over 100 million Chinese still have no electricity. Seeking to remedy its domestic energy scarcity, China's five year plan calls for the addition of 70 gigawatts of electricity generating capacity before the year 2001. That means China will have to add one 1,000 megawatt electric plant every month for the next four years. Under current policies, most of that will come from coal – which currently accounts for about 75% of China's electricity. Yet there is a substantial opportunity to help China make more use of gas and renewable energy with profitable opportunities for U.S. businesses.

India is in similar straits. CO2 emissions increased by 40 percent between 1986 and 1995, with domestic coal fueling industrialization. Currently, India is even lower in per capita emissions than China – nearly five times below the world average of four tons a person, and approximately 1/20th of the level in the United States. Like China, India is also installing enormous quantities of new energy generating capacity – plans call for the installation of 62 gigawatts by 2002. Inefficiencies and poor technology mar their current infrastructure; currently in India, up to 40 percent of the electricity generated is lost in transmission and distribution. Here too, there are profitable opportunities for U.S. businesses.

We must seek ways to encourage these countries to build a more climate-friendly energy infrastructure. Fortunately, opportunities to move in a more sustainable direction are available. For example, we can work with the international financial institutions (including the World Bank and the regional development banks) and require them to look more closely at the implications of power plant financing. This might require moving away from some of the current solutions which have been seen by the international financial institutions as least cost because damages from climate change may not have been factored into earlier cost calculations. We would welcome a more extensive dialogue with Congress on ways to improve energy lending strategies in these arenas.

Many of the actions we want developing countries to take will be good for the global environment, but will cost money up-front. We must increase the funding available for the Global Environment Facility, which seeks to provide part of the costs to meet the incremental global environmental benefits the planet so urgently requires.

We need to look at ways to bring our private sector into the dialogue as well. Commercial energy suppliers are seeking power generation opportunities in developing countries. To maximize these opportunities, we will need mechanisms that provide “emissions credits” for such investments by firms and/or developed countries. We need other export financing agencies to adopt standards like Ex-Im Bank’s set of emission guidelines for the projects it supports, while offering financial incentives for U.S. exporters and foreign buyers who chose renewable energy and low emission technology

options to meet their power generation needs. These measures such as Ex-Im Bank's need to be complemented by a global recognition and acceptance of strong environmental criteria. Once our firms demonstrate that new, fuel-efficient technologies and renewable energy sources are commercially viable, we can expect that countries in the developing world will quickly adopt that technology. We should also look to ways to encourage research and development into energy-efficiency and renewable energy both by our private sector and through government funding and research. The development of long-term alternatives will be critical in the path to a sustainable future. Congress has been in the forefront of promoting private sector investment; we would welcome a continued dialogue on how to advance our environmental goals through such mechanisms.

It is clear that these actions must be taken. However, it is equally clear that none of these important steps can be taken by the Administration acting alone. Each will need congressional support. The Senate's attention to the climate issue has brought into focus the importance of the problem, and the need to involve all countries in the solution. In this light, we must now work together to find that solution. I look forward to doing just that.

I would be pleased to answer any questions from the committee. Thank you.



Under Secretary for Global Affairs Timothy E. Wirth
Statement before the Subcommittee on International Economic Policy,
Export and Trade Promotion of the Senate Committee on Foreign Relations
Washington, DC, June 19, 1997

Good morning, Mr. Chairman. I am pleased to join you this morning to discuss the importance of climate change and to outline the United States negotiating position as we move toward December's multi-national conference in Kyoto.

Climate change is probably the most important environmental challenge facing the world. The ecological, human, economic and political consequences are of enormous importance for the mid-term and for the long-term - and each of us needs to understand them. We look forward to active and frequent consultations with this Committee and with the other members of Congress as we seek to reach an agreement and as we set up the needed long-term process.

The Science

I want to begin with the science - because scientists were the ones who drew our attention to climate change in the first place, and because we continue to base our policies on the best evidence and the most rigorous scientific analysis available.

Let me highlight some of the key scientific issues on which there is a global consensus:

- ☐ Human activities have significantly increased the atmospheric concentrations of greenhouse gases over the last century.
- ☐ Global average temperatures have already increased by about one half to one degree Fahrenheit.
- ☐ The balance of evidence suggests a discernible human influence on global climate.
- ☐ Projections of the future change, based on complex climate models and on our best understanding of the physics of the climate system, suggest an increase of another 2 to 6 ½ degrees Fahrenheit by 2100, with an average greater than any seen in the last 10,000 years.
- ☐ Sea levels are projected to rise an additional 1 ½ feet by 2100, from expansion of the oceans due to global warming, and from a melting of glaciers and ice sheets.
- ☐ Climate change is likely to have wide-ranging and mostly adverse effects on human health, with direct and indirect effects leading to increased mortality.
- ☐ Coastal populations and infrastructure are vulnerable: a 20 inch rise in sea levels would put about 100 million people at risk each year from storm surges, with significant costs.
- ☐ Natural and managed ecosystems are at risk as ideal ranges shift with the climate. The location of forest and agricultural zones will change significantly.
- ☐ Future unexpected changes in the climate are not included in the models. These surprises may have impacts of global magnitude such as fundamental changes in global ocean circulation or ecosystem behavior.

These are the conclusions of the Intergovernmental Panel on Climate Change -- an international body of more than 2500 scientists, expert in all aspects of climate change, including the physical sciences, the social sciences and the economics. U.S. government experts have endorsed their work, as have the academic communities in the United States and around the world.

An excellent summary of the science and the impacts that could occur as a result of global climatic disruption was presented yesterday on behalf of nearly 2500 leading American scientists and I would like to include their statement for the record.

We do not yet have all the answers with respect to the science. We cannot yet say with certainty what the local effects of climate change will be. But, with better scientific data, the picture is becoming clearer.

For instance, in the United States, twenty inches of sea level rise would inundate 9,000 square miles of U.S. coastal land, with great loss of property and infrastructure. Rising temperatures could double the number of heat-related deaths. We now know that the ten warmest years since records began all occurred since 1980. Some of the most recent data shows that four of the five hottest years have occurred since 1990. With CO2 concentrations doubled in the atmosphere, heat waves like the one that killed around 500 people in Chicago two summers ago would be four to six times as likely to occur.

While we acknowledge uncertainties about where, how fast and when climate change will occur, and while we continue to press for research that will help us to answer these important questions, the basic fact remains that we are having a discernible impact on our climate.

Our policy is based on the current scientific consensus and on the need to achieve the most cost-effective emissions reductions possible. Our policy has three simple and straightforward objectives which are outlined in detail in a framework proposal we submitted to the climate convention in January. The proposal was shared with this Committee and was distributed widely with the public. The three objectives are as follows:

1. We are seeking to establish a legally binding emissions target for developed countries which is verifiable, credible and realistic.
2. We are seeking an agreement in Kyoto that maximizes the flexibility for each country to meet this legally binding target, including through the use of market mechanisms.
3. Third, we recognize the importance of involving all countries in the agreement - and to this end we have incorporated extensive language into our proposal that calls for developing countries to act.

Let me go through each of these in greater detail.

The Target: It is clear that the Framework Convention on Climate Change has not proven adequate to the task of reducing global emissions. We anticipate that only two countries will meet the Convention's non-binding aim of lowering emissions to 1990 levels by the year 2000. We ourselves will miss the aim by about 10%.

We believe a binding legal obligation to act will result in the passage of domestic laws - in all countries - that compel action. In order to build in some flexibility, our proposal calls for the targets to be multi-year in nature. Without this sort of legal obligation, countries will continue to pay only lip-service to their efforts to solve this problem. The past shows this is not enough.

Flexibility: Solving the problem of climate change is a long-term proposition that will require enormous effort over a sustained period. It is therefore vital that we achieve emissions reductions as cost-effectively as possible. Our approach to climate change seeks to do this. We have recommended that each country be given the maximum flexibility to meet its legal obligation. And we have rejected common, harmonized policies and measures recommended by some countries. We have also learned from the successes of the past, and are, wherever possible focusing our efforts on the use of market mechanisms to reduce costs.

One of the most innovative of these is the introduction of "emissions trading" into the lexicon of international agreements. The concept has been successfully used to reduce costs (as much as tenfold) in meeting the standards set for power plant emissions of sulfur dioxide. A similar program has also been successfully implemented in the Montreal

Protocol on Substances that Deplete the Ozone Layer. In the climate context, we envision that Parties would be allowed to trade their emissions - seeking to reduce them where it is most cost-effective to do so. While we are still engaged in working through some of the details of how to implement this proposal, it is clear that such a program could significantly reduce the costs; some studies suggest by up to one-half.

Another piece of our strategy on flexibility is joint implementation. Through joint implementation, countries are allowed to undertake emissions reductions projects in developing countries and count these reductions against their own emissions. We believe that joint implementation holds enormous potential to reduce global greenhouse gas emissions in a cost-effective manner. Joint implementation would also produce other benefits such as encouraging technological innovation, promoting the use of cutting-edge U.S. energy technologies, and protecting forests and other critical habitat around the world.

The U.S. has extensive experience with successful joint implementation projects. Recently, our approach on joint implementation received a major boost when President Clinton received the endorsement of the Dominican Republic and the seven Central American nations to endorse our concept of joint implementation for credit. This is a good example of our commitment to pushing through flexible mechanisms to implement new commitments under the Climate Change Protocol.

Developing Countries: We recognize the importance of including developing countries in this agreement. Their participation is critical to achieving any kind of a lasting success in combating the threat of climate change. For that reason, the participation of developing countries has been a central piece of our own negotiating strategy. We must seek a level playing field in which all countries that contribute to the problem contribute to its solution.

Developed countries, including the former Soviet Union and the countries of Eastern Europe, contribute about 60% of global emissions today, and developing countries account for about 40%. What do these numbers tell us? First, that the developed countries have historically contributed the greatest amount to the current heightened concentrations; we have fouled the nest. But the developing countries are rapidly growing, as are their emissions. The United States, with 5% of the world's population, is the largest greenhouse gas emitter, with more than 20% of the world's emissions. But China is not far behind, and is expected to pass us sometime in the first quarter of the 21st Century, although on a per capita basis, its emissions are projected to be less than one fifth of our own even then.

There is a clear concern about the potential impacts on our international competitiveness. Let me assure you that developing countries are part of our negotiating strategy and they must join us in order to insure that no country suffers significant competitive disadvantage.

We are all in this together, with different histories but with the same future. We pull a heavier oar at the beginning; over time, we all must pull together. Our policy has to be calibrated to reflect this reality. We cannot expect to solve the global problem unless all countries -- developed and developing -- participate in the solution. To this end, we have proposed three separate elements for developing countries in our proposal for Kyoto:

1. We call on developing countries to continue to elaborate on their commitments in the Convention - including by providing information on emissions on an annual basis (the same as for developed countries), and by taking "no regrets measures" (actions which may be valuable in their own right, and which also mitigate climate change). We also call for a regular review of the actions developing countries are taking (again, using a review process similar to that established to assess our own actions).
2. We call on the newly developed countries (such as Mexico and Korea) to take on binding legal obligations to reduce emissions, recognizing that while the targets they adopt may not be the same as our own, such commitments will codify their new status, and differentiate them from the lesser developed countries. We are now working with potential members of this group to seek their agreement on such a step.

While by no means an easy task, we believe that in Kyoto, we can find some language to insure that countries in this category will take on commitments that correspond to their more developed status.

3. We call for the negotiation of a new legal instrument which will include legally binding obligations for all countries - including all developing countries - as a next step in the path toward the ultimate stabilization of greenhouse gas concentrations in the atmosphere at a level that is not dangerous. This step, too, faces significant difficulty in the negotiations leading toward Kyoto.

Finally, I want to take this opportunity to note that one of the most important potential incentives with regard to additional developing country participation-- the Global Environmental Facility -- would be seriously undermined if Congress does not fully fund the U.S. contribution to this program. I hope you will support our request of \$100 million for the GEF for this year.

Let me close this morning by briefly reviewing for you the negotiating process between now and December 1 - when we meet in Kyoto for the third session of the Conference of the Parties to the Convention.

We have two more one-week officials-level negotiating sessions - the first in late July in Bonn, and the second in late October, also in Germany. During these two weeks we will be examining and negotiating the extensive text, which is a compilation of all the material submitted by all countries. This is an extremely divergent and broad document reflecting many interests around the world and it must be moved toward some consensus.

At one end of the spectrum, reflecting their strong commitment to making an aggressive statement, the European Union has proposed that developed countries reduce emissions by 15 % below 1990 levels by the year 2010. The Organization of Small Island States has proposed a 20% reduction by the year 2005.

At the other end, reflecting their concerns with the potential impacts of various emission reduction proposals (particularly on reductions in the consumption of fossil fuel), OPEC countries have introduced a proposal that they be compensated for any economic cost they might incur as a result of treaty requirements.

Other countries have introduced recommendations that they be allocated an individualized, different target. This commitment to so-called "differentiation" is not yet defined, but is used by many countries as a first step toward finding their own way of joining the negotiating process.

As we examine these proposals, and develop our own negotiation strategy, we will continue to be guided by our own principles of feasibility and economic opportunity. We are, as you know, doing extensive economic modeling, and we have not yet completed the process. We expect the modeling will soon be completed and available to all interested parties.

I think it is useful as we think about the economic impacts of reducing greenhouse gas emissions that we remember over 2,300 economists, including eight Nobel Laureates, have endorsed a statement which in part states:

"... As economists, we believe that global climate change carries with it significant environmental, economic, social, and geopolitical risks, and that preventive steps are justified...For the United States in particular, sound economic analysis shows that there are policy options that would slow climate change without harming American living standards, and these measures may in fact improve U.S. productivity in the longer run."

I would ask that the economists' statement also be included in the record.

Finally, I should note that we understand that Kyoto is but one more step on the long road toward stabilizing the atmospheric concentrations of carbon and other greenhouse forcing gases. The long-term goal is stabilization of concentrations of greenhouse gases in the atmosphere at an acceptable level. This is a task that must begin now but which will require a sustained effort over the next decades.

Kyoto is a first step, but a very important one. The message that we send, by what we do, is enormously important. We believe we can succeed by:

- developing new technologies, and thus improving the way we fuel our economy, transport ourselves, and process materials
- using flexible economic instruments and market mechanisms
- bringing in developing countries as full partners
- fulfilling the obligations of our leadership role

And throughout this process, we can continue to promote economic development and improve the standard of living for the American people, while we protect the environment.

It is important, in Kyoto, that we set up a system that will work -- one that will allow us to reduce our emissions at the lowest possible cost so that we can achieve the maximum protection of the environment. And it is also important that we send a clear signal to governments and industries so they can make significant investments in the new technologies that will be required if we are to achieve our ultimate goal. And finally, although those of us in the developed world must take the lead, everyone must participate in moving toward the solution.

I look forward to working closely with you and your colleagues on this most challenging and complex of environmental issues.

Thank you very much and I will be happy to answer any questions you may have.

(##)



Return to the Department of State Home Page. This is an official U.S.-Government source for information on the WWW. Inclusion of non-U.S. Government links does not imply endorsement of contents.



Conference on Climate Change, Evolving Technologies, U.S. Business, and the World Economy in the 21st Century

Opening Remarks of the Honorable Timothy E. Wirth, Under Secretary of State for Global Affairs, Department of State, Washington, D.C., June 18, 1996

Good morning and thank you all for coming.

On behalf of Secretary Christopher, Undersecretary Spero and the rest of the Department, I want to welcome you here today for this important and exciting conference where we will explore the intersection of good economic and good environmental policy.

As all of you know, the Clinton Administration has placed economic issues, technology issues, trade liberalization and American competitiveness at the top of its strategic priorities. Simultaneously, we have attempted to integrate the environment our economic and social policy, both domestic and foreign. This kind of integration is symbolic of the ideas put forward by the World Business Council for Sustainable Development -- the idea of eco-efficiency. Eco-efficiency is about integration -- linking economics, environment and equity. And it is a promising platform from which to build.

In this country and around the world, there are countless examples which demonstrate that the public and private sectors can work together to achieve simultaneous economic and environmental progress. Tremendous strides have been made in developing more efficient means of generating power and transporting people. Ingenious new systems of production, Pollyanna, or to suggest that the hard work is done and that we can now relax.

I cite them because these successes are important, very important:

- ☐ they prove that partnerships between the public and private sectors, between science and government, can work;
- ☐ they prove that public dollars, wisely invested, can bring a significant return;
- ☐ they demonstrate that there is a great deal of money to be made from technological innovation and the need for a clean environment;
- ☐ and they form the foundation for the resolve and determination that must be summoned to face today's challenges.

Among the foremost of these challenges is how to take sensible steps to guard against potentially costly impacts associated with global climate change. This is an issue that has been with us for some time, first postulated more than 100 years ago and taken up through serious scientific investigation about 25 years back.

An enormous amount of research has been done and the workings of the global climate system are now broadly understood. Late last year the international body of scientists assembled to investigate this issue, the Intergovernmental Panel on Climate Change, issued its second assessment report and more strongly than ever before underscored the seriousness with which the world's leading experts view the issue of global climate change and humankind's role in it.

In the weeks and months ahead, we will be engaging in important negotiations that will help guide public and private actions to control greenhouse gas emissions in the post-2000 period. These negotiations will no doubt be the subject of intense discussion and debate. Today, however, we want to explore and try to define broad common ground. This conference is aimed at identifying opportunities for developing, demonstrating and deploying goods and services that serve our economic and environmental interests. We want to help highlight the notion and the reality that far-sighted, creative and aggressive businesses can do well while doing right.

This is a major theme emerging in the State Department. Secretary Christopher is preparing the Department to take on the challenges of the post-Cold War -- economic and environmental alike.

Undersecretary Spero will be talking about the Department's America Desk and our efforts to work with the private sector to strengthen America's economy at home, by enhancing opportunities abroad. Similarly, in his extraordinary speech on

American diplomatic leadership in international environmental affairs this April, Secretary Christopher made the critical linkage we are exploring here today.

"We are committed," he said at that time, "to helping U.S. companies expand their already commanding share of a \$400 billion market for environmental technologies."

That is what today's meeting is all about. It is not about revisiting stale arguments or engaging in debates about the science of global climate change. It is not even about the critical negotiations that will continue next month over what the international community will do together to address this challenge. Rather, recognizing that this is a problem that must be addressed, and can be addressed, we want to explore that territory where there is complete consensus: where opportunities exist for reducing emissions and enhancing efficiencies, American industry should be at the forefront.

We look forward to working with you on this important challenge. We need your input and ideas and we welcome your suggestions about how we can do a better job of working with you to capitalize on the market opportunities that are opening up all over the world.

Thank you again for coming.

[end of document]



[Return to Environmental Issues](#)

This is an [official U.S. Government source](#) for information on the WWW.



Timothy E. Wirth, Under Secretary for Global Affairs
Testimony before the Energy and Natural Resources Committee
U.S. Senate, September 17, 1996
Washington, DC

Good morning, Mr. Chairman. I am pleased to rejoin your company this morning to describe the Clinton Administration's efforts to address the far-reaching challenge of global climate change. As you know, the parties to the Framework Convention on Climate Change, agreed upon and ratified by the Senate in 1992, recently held the second major meeting -- or Conference of the Parties -- in Geneva. As requested in your letter of invitation, I would like to discuss the rationale for the position articulated by the United States in Geneva and to answer any questions that members of the Committee have.

The United States had four primary objectives for the Geneva meeting: 1) we wanted to put our shoulder behind the outstanding and unparalleled science that has been developed by the world's best scientists through the Intergovernmental Panel on Climate Change; 2) we wanted to shift the negotiations toward strategies that will achieve environmental results in an economically sensible manner -- so we rejected unrealistic proposals by some countries, and proposed that future commitments be realistic, verifiable and binding; 3) we wanted to ensure that national and international flexibility were preserved, allowing for the use of the most innovative and cost-effective mechanisms here and abroad, such as joint implementation and international emissions trading; and 4) we wanted to make sure that all nations, including developing nations, are involved in these negotiations and next steps that will be reached through them.

I want to begin, Mr. Chairman, with the issue of science -- for it is scientific research, and broad consensus among the world's leading experts, that form the foundation for our concern and proposed strategies on this issue. As you know, this Committee has a long history of engagement with scientific experts involved in this issue -- and I remember well a long series of hearings between 1987 and 1992 that I had the privilege of working on from your side of the dais during my term in the Senate, under the leadership of then Chairman Johnston.

One of the most memorable of those hearings occurred right here in this room in June of 1988. You will recall that that was the day that a brave and pioneering NASA scientist named Jim Hansen -- a leading authority on climate change -- told this Committee and the world that he believed that the scientific evidence was ever more apparent that global climatic changes were occurring outside the range of natural variability and that he believed global warming was underway. That was a bold assertion at that time and there were few scientists at that time who were willing to go as far as Dr. Hansen.

Almost a decade later, Mr. Chairman, a great deal of scientific progress has been made. At the behest of the Bush Administration, the international community set about to establish an inclusive international scientific body to answer questions about global climate change. Accordingly, the Intergovernmental Panel on Climate Change (IPCC) was established as a partnership of the World Meteorological Organization and the United Nations Environment Program. Over the past five years, the IPCC has emerged as the world's preeminent scientific and technical body concerned with the threat of global climate change. The IPCC involves more than 2000 scientists from more than 100 countries and uses recognized standards of peer-review in its scientific method.

In December of last year, the IPCC finalized its Second Assessment Report -- representing the most recent, authoritative and comprehensive scientific analysis we have available to us on this issue. The second assessment was the result of years of effort, extensive peer review and exhaustive analysis and consultation. The most important of the IPCC's scientific findings are as follows:

- ☐ The chemical composition of the atmosphere is being altered by anthropogenic emissions of greenhouse gases.
- ☐ The continued buildup of these gases will enhance the natural greenhouse effect and cause the

global climate to change.

- Based on these facts and additional underlying science, the second assessment reported that "the balance of evidence suggests that there is a discernible human influence on global climate."

This last finding represents the first time that a consensus has emerged among leading climate scientists that the world's changing climatic conditions are more than the natural variability of weather. In short, the IPCC's results have further underscored the compelling nature of scientific understanding of this issue.

Nonetheless, uncertainty remains. The scientific community cannot yet tell us precisely how much, when or at what rate the Earth's climate will respond to greenhouse gas buildup. However, making the best possible estimate based on what is known about the complex climate system, the scientific community believes that current emissions trends (resulting over the next several decades in the effective doubling from pre-industrial concentrations of carbon dioxide in the atmosphere) will lead to global temperatures which, on average, are 2 to 6.5 degrees Fahrenheit warmer than today, increasing at a rate greater than any known for the past 10,000 years.

Based on these estimates, the best scientific evidence indicates that human-induced climate change, if allowed to continue unabated, could have profound consequences for the economy and the quality of life of future generations:

Human health is at risk from projected increases in the spread of diseases like malaria, yellow fever and cholera;

Food security is threatened in certain regions of the world;

Water resources are expected to be increasingly stressed, with substantial economic, social and environmental costs in regions that are already water-limited, and perhaps even political costs where there is already conflict over limited resources.

Coastal areas -- where a large percentage of the global population lives -- are at risk from sea level rise.

In our opinion, the IPCC has clearly demonstrated to policymakers that further action must be taken to address this challenge. We are not swayed by and strongly object to recent allegations about the integrity of the IPCC's conclusions. These allegations were raised not by the scientists involved in the IPCC, not by participating governments, but rather by naysayers and special interests bent on belittling, attacking and obfuscating climate change science. It is our strong belief that the IPCC's finding meet the highest standards of scientific integrity. This is the best science we have and it is the responsibility of policy makers to consider the panel's findings and respond with corresponding thoughtfulness.

Unhappily, while the established international scientific process is working well, the international policy process has not been as successful. While an important first step, there a number of shortcomings in the Framework Convention on Climate Change (FCCC). Perhaps most important, the current Convention structure has not achieved its primary aims; few nations in either the developed or developing world have been fully successful in meeting their objective of reducing greenhouse gas emissions. We have to do better.

Last year, at the first Conference of the Parties in Berlin, treaty participants agreed to launch a new round of negotiations aimed at defining steps that would be taken after the year 2000. The so-called "Berlin Mandate" defined the broad terms by which next steps under the Convention would be negotiated. The Berlin Mandate directed the negotiations toward 1) defining emissions limitations objectives for Annex I nations in the post-2000 period; and 2) advancing implementation of commitments by developing nations.

In Berlin, as today, it was our belief that the final consensus reflects our belief that this is a global problem requiring global solutions: all countries must work together to do more to guard against harmful climate changes. While the Berlin agreement specifies that there will be no new commitments for developing country Parties, it calls for advancing the implementation of the existing treaty commitments

agreed to by developing countries and allows for negotiations on new commitments to begin as soon as work under the Berlin agreement is complete. Under the existing treaty, developing countries are required to adopt policies and measures to reduce greenhouse gas emissions. We are working now to develop specific proposals for advancing implementation of these existing commitments by the developing countries.

Over the past year, the United States has been engaged at home and abroad in serious analysis of the successes and failures of the current Convention structure in preparation for the negotiations that have been underway since Berlin. Based on these extensive efforts, the United States articulated in Geneva a proposed structure for next steps that we think should form the basis for negotiations over the next 16 months. We call this a "framework"; it has yet to be fleshed out with specific numbers and we have work to do to further develop several issues associated with this approach. In the months ahead, our ongoing analysis and assessment will allow us to more precisely articulate the specific contents that the United States could support.

Now, before discussing the elements of our proposal, let me touch on the underlying rationale for the approach we recommended in Geneva. The new U.S. approach is based most fundamentally on a desire to ensure that the negotiations focus on outcomes that are real and achievable. We believe that sound policies pursued in the near term will allow us to avoid the prospect of truly draconian and economically disruptive policies in the future. The old adage, so appropriate to much of public policy applies here: an ounce of prevention is worth a pound of cure -- the cost of action in the medium-term is less than the cost of inaction in the long-term.

Second, our approach was formulated on the premise that prospective solutions must be flexible and cost-effective. We do not view favorably a cookie cutter approach to the actions nations might take, and we certainly will not accept proposals that are offered for competitive advantage, not environmental progress.

And third, our approach is based on the belief that the agreement being negotiated should lay the foundation for continuing progress by all nations in the future. The United States is immovable in its belief that international cooperation on this challenge remains critical to any effective response and that all nations -- developed and developing -- will have to become more ambitious in contributing to the solution to this challenge as we move forward.

Based on these principles -- environmental protection, economic prosperity, flexibility, fairness and comprehensiveness -- the United States recommended in Geneva that future negotiations focus on an agreement that sets a realistic, verifiable and binding medium-term emissions target. We believe that the medium-term target must be met through maximum flexibility in the selection of implementation measures, including the use of measures such as reliable joint implementation and trading mechanisms.

The proposal we made in Geneva represents a departure from the treaty's current approach, which has relied on non-binding "aims" for emissions reductions in the year 2000. Unfortunately, this approach is not working -- few nations in either the developed or developing world have been fully successful in meeting their commitments under articles 4.1 and 4.2 of the Convention. In our view, continued use of non-binding targets that are not met would make a mockery of the treaty process. It leaves the impression that rhetoric is what counts rather than real emission reductions -- an outcome that is both unacceptable and counterproductive.

Similarly, we think that the current treaty needs to be strengthened through consideration of certain long-term objectives. Our view is that it will be necessary to continue working toward a longer-term concentration goal (e.g. for the next 50-100 years), as set out in the Convention's objective, recognizing that scientific understanding and technology will improve over time. Working toward such a goal would better establish the long-term, global nature of the problem.

Taken together, we believe that the U.S. recommendations related to binding medium-term targets and a longer-term concentration goal will help ensure that the international community focuses on more sensible emissions reduction goals (knowing that the goal must be met), and on the need for all nations to contribute to the solution over the long-term. In addition, these two ideas are critical prerequisites to

enabling important and cost-effective joint implementation and international emissions trading opportunities, which we believe are essential. Finally, in response to consultations with key stakeholders, these efforts are intended to make it clear over the long-term where we are going and therefore to help guide corporate planning and investments.

Having defined in broad terms the basic components or "framework" of an agreement we could support, as outlined in Geneva, I want to mention what we did not say and what we will not support.

First and foremost, we have not come to any conclusions about a specific target or set timetable for emissions reductions. We have established a comprehensive interagency process, led by the Department of Commerce, to undertake the necessary economic analysis that will be required to determine an approach that the United States believes is realistic and achievable. We believe strongly that this analysis and assessment is a necessary prerequisite to identifying a target that is realistic, achievable and consistent with the national interest and national prosperity.

Second, we did not in any way repudiate the growing number of successful voluntary programs that U.S. industry has launched to reduce emissions. Unfortunately, there has been some misunderstanding regarding the distinction between non-binding emissions reduction targets and voluntary programs. Our belief that the non-binding emissions reduction aim has not worked internationally in no way diminishes our enthusiasm for the outstanding voluntary programs that U.S. industry, state and local governments, schools and churches has embarked upon nationally to reduce emissions. Voluntary programs have played a central role in the Administration's Climate Change Action Plan, have helped us to reduce emissions significantly -- simultaneously saving millions of dollars in avoided energy costs -- and we expect them to continue to play an important role far into the future.

At Geneva, we rejected certain proposals for targets that have been proposed by other countries or groups of countries. Our preliminary analysis before Geneva made clear that many of these proposals were neither realistic nor achievable -- either because they would compromise other important principles, such as the need for flexibility in time and place of implementation (in the case of proposals for binding policies and measures), or because they involve timeframes and objectives that are not consistent with national and international prosperity (for example, in the case of the proposal by the Alliance of Small Island States calling for a 20 percent reduction in the year 2005).

We also rejected in Geneva proposals by some nations that the negotiations move toward consideration of some ambitious mandatory, internationally coordinated policies and measures. We believe that the significant differences in national circumstances suggest that few, if any individual measures are likely to be applicable to all countries.

The framework proposed by the United States won remarkable support in Geneva. Based on our presentation, we were able to obtain broad acceptance for the U.S. framework in the Ministerial Declaration that was issued at the meeting's end -- a testament not only to the soundness of our proposals, but also to the expectations the international community has for U.S. leadership in the most important and difficult tasks facing the world. Our job in the months ahead is to search for agreement on next steps that will produce results that are consistent with our environmental and economic aspirations.

This, leads me to the final area I want to touch upon -- the ambitious calendar that exists for the next year and a half, and the need for extensive public discussion and consultation on these matters in the months ahead.

The Administration's plans for engaging the public, industry and non-governmental experts included a major workshop on analysis and assessment where presentations were made by more than 50 experts from inside and outside of government about technical issues associated with our emissions trends and capability to reduce emissions in the next century. We have also engaged in a broad series of roundtable discussions with industry and non-governmental organizations to scope out common ground and identify key issues. In June, the State Department hosted a major conference on the market opportunities that are emerging as nations begin to tackle the challenge of reducing greenhouse gas emissions. There are a range of technologies and business interests that American firms are superbly positioned to take advantage of as nations all over the world seek to enhance efficiency and deploy new technology in

service of economic and environmental goals.

To advance our preliminary work and follow-up on the framework outlined in Geneva, the Administration has established an unprecedented and comprehensive interagency process, under the direction of the Department of Commerce and including DOE, EPA, CEA, and all other appropriate agencies and Administration representatives. When the process is completed, this team will have created an analytic "toolbox" capable of assessing the economic effects of a broad range of climate change policies, in terms of growth, employment, sectoral and industry effectiveness, competitiveness and other issues. In addition, as preparation for the negotiations ahead, we are considering approaches to a number of the elements of the framework we proposed in Geneva, such as options for advancing the commitments of developing countries and similar issues that will be discussed in the months ahead.

As always, we will work closely with the Congress, industry and the public at large. We have already begun some of this work, through these hearings and in a wide variety of meetings over the past several months. Together, I believe we can ensure that the United States plays a lead role in fashioning an agreement next year that is comprehensive, flexible, fair and certain. In this way, we hope to outline an agreement that will help prepare our country and the world -- environmentally and economically -- for the 21st century.

[end of document]



[Return to the DOSFAN Home Page.](#)

This is an official U.S. Government source for information on the World Wide Web. Inclusion of non-U.S. Government links does not imply endorsement of contents.

F. JAMES SENSENBRENNER, Jr., Wisconsin, CHAIRMAN

SHERWOOD L. BOEHLERT, New York
 HARRIS W. FAWELL, Illinois
 CONSTANCE A. MORELLA, Maryland
 T. WELDON, Pennsylvania
 ROMRABACHER, California
 BEN SCHIFF, New Mexico
 BARTON, Texas
 KEN CALVERT, California
 ROSCOE G. BARTLETT, Maryland
 VERNON J. EHLERS, Michigan
 DAVE WELDON, Florida
 MATT SALMON, Arizona
 THOMAS M. DAVIS, Virginia
 GIL GUTKNECHT, Minnesota
 MARK FOLEY, Florida
 THOMAS W. SWING, Illinois
 CHARLES W. "CHIP" PICKERING, Mississippi
 CHRIS CANNON, Utah
 KEVIN BRADY, Texas
 MERRILL COOK, Utah
 PHIL ENGLISH, Pennsylvania
 GEORGE R. NETHERCUTT, Jr., Washington
 TOM A. COBURN, Oklahoma
 PETE GESSIANS, Texas

U.S. HOUSE OF REPRESENTATIVES COMMITTEE ON SCIENCE

SUITE 2320 RAYBURN HOUSE OFFICE BUILDING
 WASHINGTON, DC 20515-6301

(202) 225-6371

TTY: (202) 226-4410

<http://www.house.gov/science/welcome.htm>

November 8, 1997

GEORGE E. BROWN, Jr., California
 Ranking Minority Member

RALPH M. HALL, Texas
 BART GORDON, Tennessee
 JAMES A. TRAFICANT, Jr., Ohio
 TIM ROEMER, Indiana
 ROBERT E. (BUD) CRAMER, Jr., Alabama
 JAMES A. BARNES, Michigan
 PAUL MCHALE, Pennsylvania
 EDDIE BERNICE JOHNSON, Texas
 ALCEE L. HASTINGS, Florida
 LYNN N. RIVERS, Michigan
 ZOE LOPGREN, California
 MICHAEL F. DOYLE, Pennsylvania
 SHEILA JACKSON LEE, Texas
 BILL LUTHER, Minnesota
 WALTER H. CAPP, California
 DEBBIE STABENOW, Michigan
 BOB ETHERIDGE, North Carolina
 RICK LAMPSON, Texas
 DARLENE HODLEY, Oregon
 ELLEN O. TAUSCHER, California

The Honorable Madeleine K. Albright
 Secretary of State
 U.S. Department of State
 2201 C Street, NW
 Washington, DC 20520

Dear Secretary Albright:

As you know, on October 29, 1997 House Speaker Newt Gingrich appointed me to lead the Bipartisan House Observer Delegation to the Third Session of the Conference of the Parties to the United Nations Framework Convention on Climate Change (COP-3) beginning December 1 in Kyoto, Japan. In making this announcement, the Speaker said:

"There are three key issues of concern that must be resolved before America commits to signing onto any specific action coming out of Kyoto. First, is the science sound? Second, will the proposed solution work? And third, is the treaty fair to the United States? There are a tremendous number of questions on all three issues that have yet to be resolved."

I share the Speaker's concerns, and to better understand some of these substantive and procedural matters that directly relate to these issues, I would appreciate your reply to the enclosed questions by November 24, 1997. I also request that you please provide a copy of your response to each Member of the Bipartisan House Observer Delegation.

Thank you for your assistance.

Sincerely,


 F. JAMES SENSENBRENNER, JR.
 Chairman

Enclosure

Enclosure: Questions Submitted by Science Committee Chairman F. James Sensenbrenner, Jr.
November 8, 1997

Uncertainties in Emissions Estimates

1. Appendix C of the October 1997 Energy Information Administration (EIA) publication *Emissions of Greenhouse Gases in the United States 1996* addresses uncertainties in emissions estimates. For example, page 105 of the document states the following:

"In general, estimates of carbon dioxide emissions are more reliable than estimates for other gases. Although this report does not explicitly calculate uncertainty ranges, it is likely that the estimate of carbon dioxide emissions is accurate to within 10 percent. . ."

"Estimates of methane emissions are much more uncertain. The level of precision is probably on the order of 30 to 50 percent."

"Nitrous oxide emissions estimates are by far the most unreliable."

- 1.1 What are the implications of such large uncertainties in emissions estimates for legally-binding quantified emissions limitation and reduction objectives (QELROs), and specifically for President Clinton's proposal to return U.S. emissions to 1990 levels between 2008 and 2012?

- 1.2 How are such emissions uncertainties to be addressed by the proposed Kyoto Protocol?

Greenhouse Gas Sinks

2. Greenhouse gas sinks are referenced in subparagraph II.2(a) of the Berlin Mandate in regards to QELROs. In addition, the October 22, 1997 White House "Background Information" document concerning President Clinton's climate change proposal states that "Emissions accounting will include all greenhouse gas sources and sinks (including reforestation)." It is my understanding, however, that the October *Ad Hoc* Group on the Berlin Mandate (AGBM) session in Bonn did not begin consideration of this important issue until the very end, and that the AGBM will further address the issue in Kyoto on November 30 and December 1 just prior to the start of COP-3.

- 2.1. Please explain the importance of sinks to President Clinton's greenhouse gas emission targets for the period 2008-2012 and the period thereafter.

- 2.2. Please also explain why consideration of sinks was not raised by the U.S. and other Parties until this late stage.

3. It is my understanding that the Group of 77 (G-77) and China, opposes the accounting for sinks in setting and achieving any proposed flat rate or differentiated emissions target.

- 3.1. Is my understanding correct, and if so, what is the basis of this opposition?

- 3.2. Please explain the importance of sinks to President Clinton's greenhouse gas emission targets for the period 2008-2012 and the period thereafter.

Enclosure—Questions Submitted by Science Committee Chairman F. James Sensenbrenner, Jr.
November 8, 1997

Page 2

- 3.3. What Annex I countries, if any, also oppose such accounting for sinks, and what is the basis for their opposition?
4. At the October AGBM meeting in Bonn, I understand that a questionnaire regarding sinks was distributed to the Parties for early reply this month. Please provide a copy of the U.S. response to that questionnaire.

Meaningful Participation by Key Developing Nations

5. I understand that on two occasions at the October AGBM meeting in Bonn, the U.S. delegation sought to include in the AGBM Chairman's text the "fundamental provision" proposed last January by the U.S. (but omitted by the AGBM Chairman) on future commitments by developing countries, and that the AGBM Chairman reiterated his opposition to the U.S. proposal both times. The AGBM Chairman's revised protocol draft (document FCCC/AGBM/1997/CRP.1/REV.1) of Articles 5 (Emissions Trading), 6 (Joint Implementation), and 10 ("Opt-In") contains footnotes calling for the deletion of these Articles. In addition, the G-77 and China, in regards to proposals to advance implementation of Article 4.1 of the Convention by all Parties (not just developing countries) continues to resist, through brackets contained in document FCCC/AGBM/CRP.1/REV.1, any proposals aimed at advancing commitments under the Convention for developing countries. The G-77 and China also seek provisions requiring new and additional financial contributions from Annex I Parties to developing countries.
- 5.1. In light of these AGBM process results to date, what evidence exists going into Kyoto that "key developing nations" will meet President Clinton's October 22, 1997 requirement that "key developing nations meaningfully participate in this effort"?
- 5.2. What "key developing nations" must "meaningful participate" to meet President Clinton's requirement?
- 5.3. What is President Clinton's definition of "meaningful" participation?
- 5.4. By what date must "key developing nations meaningfully participate in this effort" to meet President Clinton's requirement?
6. On October 22, 1997 President said that "The United States will not assume binding obligations unless key developing nations meaningfully participate in this effort." Will that judgment be made: (1) by the President refusing to agree to the adoption of a protocol in Kyoto; (2) by the President refusing to sign or initial such a document at some future date in his Presidency; (3) by the President refusing to submit such a document to the Senate for ratification; or (4) will it be deferred for a future President to decide?

Enclosure—Questions Submitted by Science Committee Chairman F. James Sensenbrenner, Jr.
November 8, 1997
Page 3

7. In the section of the October 22, 1997 White House "Background Information" document concerning President Clinton's climate change proposal titled "THE PRESIDENT'S THREE-STAGE PLAN ON CLIMATE CHANGE", it is stated: "By insisting that the United States will not adopt binding obligations without developing country participation and by emphasizing the importance of an international trading system and joint implementation, we take advantage of low-cost reduction possibilities wherever they occur — either here or abroad."
- 7.1 If any one or two or all of the factors (i.e., developing country participation, international trading system, joint implementation) cited in the above quote fail to materialize in any Kyoto Protocol or other legal instrument, or are curtailed significantly to Annex I countries only, do you agree that these "advantages" would be lost or, at best, minimized?
- 7.2 Does the word "international" in the above quote include both Annex I and developing countries, or only Annex I countries?

Kyoto Protocol/Amendment

8. It is my understanding that on October 31 in Bonn, AGBM Chairman Ambassador Raúl Estrada-Oyuela said that he will prepare both a protocol text and an amendment (to the UN United Nations Framework Convention on Climate Change) text for Kyoto. Article 17 of the Convention, regarding protocols, is silent on the procedures for the adoption of a protocol, and the first two meetings of the Conference of the Parties have not been able to adopt Rules of Procedure that address this issue. On the other hand, Article 15.3 of the Convention provides that "[t]he Parties shall make every effort to reach agreement on any proposed amendment to the Convention by consensus," but allows "as a last resort" the adoption of an amendment "by a three-fourths majority vote of the Parties present and voting at the meeting."
- 8.1 If COP-3 at Kyoto fails to agree on Rules of Procedure that include procedures for the adoption of a protocol, must a protocol be adopted by consensus?
- 8.2 It is also my understanding that on October 30, AGBM Chairman Estrada made a ruling that he, as Chairman, could unilaterally decide what constitutes a "consensus" on an issue even if a number of countries disagree on that issue. What constitutes "consensus" in UN practice, and does the U.S. believe that the Chair of any such UN body has the unilateral right to determine if consensus exists?
- 8.3 Does the U.S. favor or at least not object to the use of the Convention amendment process to forge an agreement at Kyoto even if the result might be an agreement that the U.S. could not support, and if so, what is the rationale?

Enclosure—Questions Submitted by Science Committee Chairman F. James Sensenbrenner, Jr.
November 8, 1997
Page 4

Military Operations

9. It is my understanding that on October 31, 1997 in Bonn, the U.S. raised for the first time the need to examine and discuss in Kyoto the important issue of "how" the Parties "can protect world peace while preserving our planet through" the addition to the agreement of "some kind of national security or national emergency provision." Page 117 of the October 1997 Energy Information Administration publication *Emissions of Greenhouse Gases in the United States 1996* states that "Domestic military energy consumption is incorporated into U.S. energy statistics; however, energy consumption for overseas operations is a more complex issue."
- 9.1. Please explain the U.S. objective with respect to emissions from military operations. Is it (a) to exclude from the Protocol's coverage emissions from all military operations, whether domestic or overseas; or (b) to include all such emissions for inventory purposes and then seek a waiver for all or part of them?
- 9.2. In the case of a waiver for all or part of military operations' emissions that might cause the U.S. to exceed a specific emissions target, would the U.S. be excused from meeting that specific emissions target or would the U.S. be required to offset such military operations' emissions through additional reductions to domestic emissions?

Consistency of the U.S. Position

10. The U.S. Submission of October 21, 1996 and its Non-Paper of December 1996 opposed differentiation among Annex I Parties, supported banking and borrowing, and opposed inflexible, internationally harmonized, mandated, or coordinated policies and measures. I understand that the U.S. has also opposed the European Union "bubble" approach to meeting emission obligations. While President Clinton's October 22 remarks did not specifically mention these past positions, it is also my understanding that the U.S. delegation has continued to advocate them in Bonn. Can we assume that the U.S. will not change or modify its position on each of these in Kyoto, including in any closed door meetings with some or all of the Parties, and if not, why not?



THE CHAIRMAN

EXECUTIVE OFFICE OF THE PRESIDENT
COUNCIL OF ECONOMIC ADVISERS
WASHINGTON, D.C. 20500

Statement before the House Commerce Subcommittee on Energy and Power

Dr. Janet Yellen

Chair, Council of Economic Advisers

Tuesday, July 15, 1997

Good afternoon, Mr. Chairman and members of the Subcommittee. I appreciate the opportunity to discuss with you today the economics of global climate change.

Introduction

In his speech to the United Nations Special Session on Environment and Development in June, President Clinton emphasized that the risks posed by global climate change are real and that sensible preventive steps are justified. This assessment accords with the views of the more than 2300 economists, including 8 Nobel laureates, who signed a statement supporting measures to reduce the threat of climate change. The economists endorsed the conclusions from last year's report by the Intergovernmental Panel on Climate Change (IPCC), which said that governments should take steps to reduce the threat of damage from global warming, and went on to argue that market-based policies can slow climate change without harming the American economy.

At this time the Administration has not settled on a particular set of new policies to reduce greenhouse gas emissions. Instead, the President indicated in his U.N. speech that he intends to engage in a discussion with all interested parties about the problems posed by

greenhouse gas accumulations and the costs and benefits of corrective action. To this end, the President will hold a White House conference on climate change later this year, and Members of his Cabinet and other senior Administration officials will meet with Members of Congress, scientific and economic experts, environmentalists, local government officials, and business and labor leaders on a regular basis over the next several months to discuss issues related to climate change. This process is intended to inform the Administration's decision-making process, which will culminate in a U.S. policy position in the international negotiations in Kyoto in December of this year.

An important step in this -- and any -- policy process is determining the impact it will have on the American economy. President Clinton's top priority, since his first days in office, has been revitalizing the U.S. economy, creating jobs and investing in people and technology to enhance long-term growth. And, we have made tremendous progress. The President is not going to jeopardize that progress. Any policy he ultimately endorses on climate change will be informed by his commitment to sustaining a healthy and robust economy.

In my testimony today, I would like to describe some of the principal lessons that emerge from the voluminous literature, much of it relatively recent, on the economic impacts of policies to address global climate change.

Underlying Uncertainties

Before I begin my discussion of the economic literature, I would like first to acknowledge the uncertainties associated with estimating both the costs and benefits of reducing greenhouse gas emissions. To provide some perspective: as you all know, it is difficult to gauge exactly what impact the balanced budget agreement will have on the U.S. economy's growth rate, levels of employment, interest rates and consumption over the next five years. But with global climate change, it is orders of magnitude more difficult to gauge the effects on the economy: we are concerned with not just the next five years and not just the American economy, but, rather, we are dealing with economic and physical processes that operate globally and over decades, if not centuries.

Although a great many scientists believe that global climate change is already underway, the more serious potential damages associated with increasing concentrations of greenhouse gases are not predicted to occur for decades. This means that the benefits of climate protection are very difficult to quantify. And, while the potential costs of reducing greenhouse gas emissions may be more immediate, they too, as I will discuss below, are difficult to predict with any certainty. Many unanswered questions exist about the biophysical systems, potential thresholds, and economic impacts. In short, if anybody tells you that he or she has the definitive answer as to the costs and benefits of particular climate change policies, I would suggest that you raise your collective eyebrows.

Lessons from the Economic Literature

Let me now turn to the economic literature and try to summarize what I think we know so far about this difficult topic. Most economists have not addressed the benefits of climate protection, but rather have focused on the costs associated with alternative paths for reducing greenhouse gas emissions. The economic literature includes estimates using many different models to evaluate numerous alternative emission reduction strategies. In fact, because there are so many different models, economists initially faced difficulties in comparing results: they could not sort out the extent to which differences in results stemmed from differences in models and assumptions versus differences in baseline emission paths and policies. To solve this problem, thereby enabling meaningful comparisons, many economists have calibrated the various models by performing a standardized simulation. Specifically, they have assessed the consequences of stabilizing greenhouse gas emissions at 1990 levels by 2010 or 2020.

Within the Administration, a staff level working group -- the Interagency Analysis Team (IAT) -- has attempted to estimate some of the economic implications of climate change policies. They took the emissions scenario most often used in academic literature -- that is, stabilizing emissions at 1990 levels by 2010 -- as the starting point for their own analysis. I would emphasize that this scenario is not Administration policy; instead, it was picked to make comparisons with other models easier. The staff group employed 3 different models -- the DRI model, the Second Generation Model (SGM) and Markal-Macro model, all commonly available in the public sphere. In running these models, the staff adopted a common baseline and, to the maximum extent possible, similar economic assumptions. This modeling effort produced some

useful lessons, but as we found from the peer reviewers' comments, it also suffered from some serious shortcomings. Both the lessons and the shortcomings point to one clear conclusion: the effort to develop a model or set of models that can give us a definitive answer as to the economic impacts of a given climate change policy is futile. Rather, we are left with a set of parameters and relationships that influence estimates of the impacts. In my view, it is more productive to employ a broad set of economic tools to analyze policy options than to seek to develop a single definitive model.

I understand that a draft of the staff analysis was given to the Subcommittee this morning, along with the reviewers' comments. I would be happy to answer any questions you may have about this modeling effort.

The Lessons. Modeling efforts both inside and outside the Administration clearly indicate that economic analysis can do no more than estimate a range of potential impacts from particular policies and highlight how outcomes depend on underlying assumptions about how the economy works and the ways in which policy is implemented. However, the economics literature on climate change does point to several important lessons:

How the economy works. First, the magnitude of the costs of reducing greenhouse gas emissions in the various models depends crucially on a number of key assumptions about how the economy works. For instance:

- If firms in the economy can shift from high-carbon to low-carbon energy sources quickly, the costs of climate protection will be lower.
- If the economy has significant opportunities, even now, to employ energy-saving technology at low costs, the costs of climate protection will be lower.
- If technological change occurs at a rapid rate, or is highly responsive to increases in the price of carbon emissions, the costs of climate protection will be reduced.
- If the Federal Reserve pursues a monetary policy oriented toward keeping the economy at full employment, transitional output costs will be lower.

In short, the greater the substitution possibilities and the faster the economy can adapt, the lower the costs.

How the plan is implemented. Second, costs depend critically on how emission reduction policies are implemented. It boils down to this: if we do it dumb, it could cost a lot, but if we do it smart, it will cost much less and indeed could produce net benefits in the long run. The over 2300 signatories of the economists' statement argued that any global climate change policy should be rely on market-based mechanisms. Such mechanisms allow for flexibility in both the timing and location of emission reductions, thereby minimizing the costs to the U.S. economy. The economists concluded that "there are policy options that would slow climate change without harming American living standards, and these measures may in fact improve U.S. productivity in the longer run."

- The speed at which emissions reductions are required can have large effects on the estimated costs. It is important to allow sufficient lead-time for orderly investment in new equipment and technology. Alternatively, if emission reduction requirements are too far off in the future, the incentives to adopt energy efficient technologies are weakened because people may not view the policy as credible.
- A “cap and trade” system in which emission permits are issued and then traded among firms can substantially reduce the cost of meeting an emissions target by creating incentives for emissions to be reduced by those firms and in those activities where costs are lowest.
- International emission permit trading substantially lowers costs by applying the same cost-minimizing principle globally.
- So-called “banking” and “borrowing” of permits increases flexibility and lowers costs by allowing firms to change the timing of their emission reductions.
- Joint implementation, whereby US firms would receive credit for undertaking emission reductions in countries with low abatement costs, would also lower the domestic burden.

An additional aspect of implementation that profoundly affects the costs of reducing emissions concerns “revenue recycling.” In many model simulations, emissions are reduced by using various market mechanisms. For many of these scenarios, the Federal government realizes an increase in revenues. Economic growth can receive a

long-term boost if these revenues are used to reduce distortionary taxes that diminish the incentives to invest, save or work, or if the revenues are channeled into deficit reduction, thereby lowering interest rates and boosting investment. In fact, in some models and scenarios, emissions reduction generates a net economic benefit when the revenues are recycled in a growth-promoting fashion.

Which countries participate. The third lesson that emerges from a study of the economics of climate protection is that developing, as well as developed, countries must be part of the process. While developed countries are responsible for most of the greenhouse gas currently in the atmosphere, developing countries are starting to catch up. By 2040, the largest fraction of emissions is estimated to come from developing countries. Thus, any comprehensive plan to deal with this global problem must include a mechanism to bring developing countries into the process.

The timetable for the inclusion of developing countries is also important. The sooner that developing countries face incentives to move away from carbon intensive energy sources, the less likely it is that they will become dependent on those types of fuels to spur their economic growth. In short, global problems require global solutions. We must find the technologies and solutions to lead the way.

Conclusion

Let me conclude. Policies to promote economic growth, create jobs, and improve the living standards and opportunities of all Americans have been and always will remain the top priority of the President and his Administration. In his remarks to the Business Roundtable on global climate change, the President said “[l]et’s find a way to preserve the environment, to meet our international responsibilities, to meet our responsibilities to our children, and grow the economy at the same time.”

Some of the key economic lessons we have learned that will help us achieve the President’s goal include:

- Inherent uncertainty dictates that models should be expected to generate only a range of economic impacts, not definitive answers.
- Key assumptions about how the economy works directly influence the estimated costs of climate protection.
- Implementation of any policy needs to be market-based and flexible over time and space to achieve the lowest cost reductions.
- All nations, both developed and developing, need to participate.

Thank you. I would be happy to answer any questions you may have.

TOM BULEY, VIRGINIA, CHAIRMAN

W.J. "BILLY" TAUZIN, LOUISIANA
 MICHAEL G. OXLEY, OHIO
 MICHAEL BLURAKIS, FLORIDA
 DAN SCHAEFER, COLORADO
 DAN BARTON, TEXAS
 JIMMIE HASTERT, ILLINOIS
 JIMMY H. SMITH, MICHIGAN
 STEPHEN L. YOUNG, FLORIDA
 JAMES M. COX, NEW YORK
 PAUL E. GILLMOR, OHIO
 SCOTT L. KLUG, WISCONSIN
 JAMES C. GREENWOOD, PENNSYLVANIA
 MICHAEL D. CRAPO, IDAHO
 CHRISTOPHER COX, CALIFORNIA
 NATHAN DEAL, GEORGIA
 STEVE LARGENT, OKLAHOMA
 RICHARD BURR, NORTH CAROLINA
 BRIAN P. SILBRAY, CALIFORNIA
 ED WHITFIELD, KENTUCKY
 GREG GANSKE, IOWA
 CHARLIE NORWOOD, GEORGIA
 RICK WHITE, WASHINGTON
 TOM COBURN, OKLAHOMA
 RICK LAZIO, NEW YORK
 BARBARA CUBIN, WYOMING
 JAMES E. ROGAN, CALIFORNIA
 JOHN SHIMKUS, ILLINOIS

JOHN D. DINGELL, MICHIGAN
 HENRY A. WAXMAN, CALIFORNIA
 EDWARD J. MARKEY, MASSACHUSETTS
 RALPH M. HALL, TEXAS
 RICK BOUCHER, VIRGINIA
 THOMAS J. MANTON, NEW YORK
 EDOLPHUS TOWNS, NEW YORK
 FRANK PALLONE, JR., NEW JERSEY
 SHERROD BROWN, OHIO
 BART GORDON, TENNESSEE
 ELIZABETH FURSE, OREGON
 PETER DEUTSCH, FLORIDA
 BOBBY L. RUSH, ILLINOIS
 ANNA G. ESHOO, CALIFORNIA
 RON KLUM, PENNSYLVANIA
 BART STUPAK, MICHIGAN
 ELIJAH L. ENGEL, NEW YORK
 THOMAS C. SAWYER, OHIO
 ALBERT R. WYNN, MARYLAND
 GENE GREEN, TEXAS
 KAREN MCCARTHY, MISSOURI
 TED STRICKLAND, OHIO
 DIANA DEGETTE, COLORADO

JAMES E. DERDERIAN, CHIEF OF STAFF

U.S. House of Representatives
 Committee on Commerce

Room 2125, Rayburn House Office Building
 Washington, DC 20515-6115

August 22, 1997

The Honorable Janet Yellen
 Chair
 Council of Economic Advisors
 Old Executive Office Building
 Washington, D.C. 20502

Dear Ms. Yellen:

On July 15, 1997, you presented the Administration's views on the economic and environment impact of the proposed international global climate change agreement before the Energy and Power Subcommittee. On behalf of the members of the Subcommittee, I thank you for your informative testimony. The hearing was indeed enlightening.

With the conclusion of the eighth meeting of the Ad Hoc Group on the Berlin Mandate, I see significant benefit to a round of follow-up questions to clarify, for the record, some of the issues that were raised during your testimony and the question and answer session that followed.

Attached is a list of questions for you to answer on behalf of the Administration. I ask that you work with the other relevant departments and agencies in developing responses and providing the relevant documentation where requested. Your responses will be entered into the record in the same manner as your original testimony. Your responses would be appreciated on or before September 22, 1997. If you have any questions, please call Cathy Van Way at (202) 225-2927.

Thank you for your continued attention and assistance to the matter.

Sincerely,


 Dan Schaefer
 Chairman

Energy and Power Subcommittee

Attachment

SUBCOMMITTEE ON ENERGY AND POWER
HEARING ON GLOBAL CLIMATE CHANGE
FOLLOW-UP QUESTIONS

Interagency Analytical Team Report

1. Please identify each member of the Interagency Analytical Team (IAT) from the date of its inception to the present time, any other participants inside or outside the Administration, and specify their responsibilities.
2. When was the IAT formed and what were the IAT's instructions? Please provide any documentation regarding the formation of the IAT and its mission, responsibilities, membership or assignments.
3. Please indicate the total costs of the IAT's efforts and the share paid annually by each Department or Agency that was involved and please identify the source of the funds within each Department or Agency.
4. Is the IAT still in existence? If so, what are its current responsibilities?
5. Please provide a copy of all drafts of the IAT report in addition to the May 16 and 30, 1997 drafts, both earlier and later.
6. Please explain how the peer reviewers were selected? What instructions were those peer reviewers given? Please provide copies of any correspondence or instructions that were sent to the peer reviewers.
7. If the IAT effort is in fact a "failed" project as indicated in Administration testimony at the Subcommittee hearing how will the Administration determine the appropriate level of future international climate change commitments for Kyoto and later?
8. As late as last May when Dr. Ehrlich and others in the Administration held briefings on the then draft analysis and assessment there was no hint that the Administration considered this effort a failure and the models to be unreliable. What occurred since May that caused the Administration to apparently reach a different conclusion from that of Dr. Ehrlich?
9. The IAT draft analysis referred to three scenarios which resulted in costs of future climate commitments of approximately \$200, \$100 or \$50 per ton carbon tax equivalent. Has the Administration concluded that a \$200 per ton carbon tax equivalent cost will not harm the U.S. economy, jobs, and global competitiveness? Has the Administration concluded that a \$100 per ton carbon tax equivalent cost will not harm the U.S. economy, jobs, and global competitiveness? Has the Administration concluded that a \$50 per ton carbon tax equivalent cost will not harm the U.S. economy, jobs, and global competitiveness. Please provide the basis for any of the above conclusions. If the Administration does not support any of the above costs, what analysis or other information does the Administration intend to rely on to support a different amount?

10. Is the paper prepared by the IAT both an analysis and assessment? How does it relate to the "analysis and assessment" referred to in Paragraph 4 of the Berlin Mandate? Has the Ad Hoc Group on the Berlin Mandate provided an analysis and assessment as required by the Berlin Mandate?
11. The IAT draft states that the central policy modeled for the analysis "is aimed at reducing carbon and other greenhouse gas emissions by stabilizing them at 1990 levels" and that policy would be "announced in 2000 and its restrictions are phased in over a ten year period, so that the policy would take full effect in 2010." Reports in the media after the Denver Summit that President Clinton attended also referenced this date of 2010. In light of EIA's projection of emissions 22% above 1990 levels by 2010, is the Administration considering a target and timetable that calls for stabilization at 1990 levels by 2010?
12. The Administration frequently cites the 2000 economists who say they support controlling greenhouse gases. Their statement supports as the mechanism either carbon taxes or emission permits. In the past, the Administration has said it opposes the use of taxes. Is that still the Administration's position?
13. The IAT draft explains that these emission reductions to achieve stabilization would be through "issuing tradable permits at the earliest point of energy production or when imported into the U.S." and that the permits "are initially auctioned in a way that is revenue neutral: i.e., all revenues generated would be recycled through the economy." Would these revenues be deposited in the treasury as miscellaneous receipts under the Economy Acts? Would they then have to be recycled through changes in the tax laws or by appropriation? How would they be recycled?
14. Does the Administration believe that permit auctions are the equivalent of a new tax? If not, please explain.
15. The IAT draft states that "among fuels, demand for coal bears the brunt of greenhouse gas stabilization." What is the impact on the U.S. economy as a whole and on the relevant coal regions of this policy towards coal? What will be the job impact? Is the Administration adopting an anti-coal policy? How is this policy consistent with President's Clinton 1995 reply to Mr. Dingell that the U.S. will not agree to any protocol that harms our economy and jobs or our competitiveness?

Kyoto Agreement

16. How long after December 1997 does the Administration think it will take to obtain Senate advice and consent of any Kyoto agreement, to ratify that agreement, and to enact implementing legislation?
17. Which Agency or Department would be responsible for implementing the provisions of any agreement reached in Kyoto, including provision relating to joint implementation, emissions trading, and advancing Article 4.1?

18. What consideration has been given or plans made regarding passage of legislation necessary to implement any agreement reached in Kyoto?

U.S. Draft Protocol

19. Article 17.4 of the Framework Convention on Climate Change (FCCC) specifies that only "Parties to the Convention may be Parties to a protocol." However, there is no assurance that all or even a majority of the 167 Parties to the FCCC will deposit instruments of ratification, acceptance, approval or accession to any protocol adopted by the Parties by consensus or otherwise in Kyoto. What assurances does the U.S. now have that most, if not all, developing country Parties to the FCCC will become Parties to a Kyoto protocol? Why is it in the U.S. interest to agree, without such assurances, to a protocol that proposes to set legally binding post-2000 targets and timetables for Annex I Parties only and also imposes on the U.S. new and legally binding commitments to advance implementation of Article 4.1. of the FCCC, such as those prescribed in paragraph 1, 2, 3, and 4 of Article 5 of the U.S. draft protocol?
20. In a July 18, 1994 letter to the then House Committee on Energy and Commerce, [the State Department] said:
- We agree that there are substantial commitments beyond 2000 for all parties to the Framework Convention under Article 4. Article 4.1 (applicable to both developed and developing countries) contains commitments that are not limited by any specific timetable.
- a) Is there any evidence to date that the U.S. is not abiding by these Article 4.1 commitments? If there is none, why should the U.S. voluntarily agree to reaffirm, as required by Article 5.1 of the June draft, to what the U.S. already agreed to when it ratified the FCCC in 1992?
- b) Is the U.S. asserting that other Annex I Parties are not abiding by such commitments? If so, please identify those Parties.
21. Paragraph 2 of Article 5 of the U.S. draft Protocol mandates each Party to "strengthen its legal and institutional framework to advance implementation" of Article 4.1 commitments. What "framework" does the Administration have in mind? Does this suggest a new Federal or international agency or program? Would this be done through new legislation? If not, how would it be achieved in the U.S.?
22. Article 5.3 requires that each Party take "measures to facilitate investment in climate-friendly technologies." What "measures" does the Administration contemplate? How would they be implemented in the U.S.? What are their regulatory and budgetary implementations?
23. Article 16 of the draft provides that the Parties "shall adopt, by [2005], binding provisions so that all Parties have quantitative greenhouse gas emissions obligations and so that there

is a mechanism for automatic application of progressive greenhouse gas emissions obligations to Parties, based upon agreed criteria."

- a) Does this mean that there could be a second protocol or another legal instrument by [2005] which is only 7 years after the December meeting in Kyoto?
 - b) Do the words "all Parties" in this Article mean that only the "Parties" to the U.S. draft protocol would be required to "adopt" by 2005 such an instrument? Unless developing country Parties to the FCCC, such as China, India and Brazil, become Parties to the Kyoto instrument (as proposed by the U.S.) prior to [2005], how does this Article address the issue of greenhouse gas emission growth by all non-Annex I Parties?
 - c) Could such a new instrument adopted by [2005] impose new and additional obligations on the U.S. beyond those proposed to be adopted in Kyoto? Why is that possibility a good result for the U.S. economy, trade, and competitiveness?
 - d) What "mechanism for automatic application of progressive greenhouse gas emissions obligations" does the Administration contemplate by this proposal? What are its implications for the U.S., including its sovereignty?
24. Article 16.1 of the Convention provides that "annexes shall be restricted to lists, forms, and any other material of a descriptive nature that is of a scientific, technical, procedural or administrative character." The U.S. draft protocol states, that it may not be "appropriate" to adopt the Article 16.1 Convention example. Please explain why. Does the U.S. support annexes that would be substantive and mandatory?
25. Article 9 of the U.S. draft provides that Parties "shall cooperate" in establishing a "long-term goal" regarding concentrations of gases. Article 10 calls for meetings at "regular intervals" to, among other things, "periodically review the adequacy" of the Protocol and Article 8 calls for periodic review of the Protocol and guidelines "in light of evolving scientific knowledge related to climate change." Article 2 already suggests a minimum of two budget periods. Article 16 tells the Parties to adopt "binding provisions" by [2005] for progressive "obligations." Does the State Department contemplate over the next several decades a continuing process of meetings of both the Protocol and Convention Parties annually and a series of IPCC assessments, special reports, and technical papers, leading to a series of protocols or other legal instruments that are likely to have significant economic impacts on the Parties and their people? Why is there a need for such frequent meetings and reviews?
26. The Global Climate Coalition sent a letter to the Department of State on February 14, 1997 raising a number of questions about the January 17, 1997 version of the U.S. draft protocol, particularly in regards to trading. The Administration has not yet responded to those questions. Please respond to them as part of your reply to this inquiry.

EU Bubble

27. The EU proposal made recently in Denver was developed last March as an EU "negotiating position for the ongoing negotiations on the Berlin Mandate" and it includes burden-sharing of a 10% reduction among EU members of the "overall emission reduction objective by the Community as a whole". This appears to be a form of differentiation, a concept the U.S. is not supporting. The existing FCCC bubble applicable to the EU presumably only covers policies and measures and, when adopted, it only covered the 12 Parties that were members of the EU in 1992. Does the U.S. understand that the EU is seeking, by its submissions and discussion with the U.S. delegation, to extend a form of the FCCC bubble to a protocol and another legal instrument that may be adopted in Kyoto, to expand the bubble to cover any target and timetable or financial obligations and not just policies and measures, and to expand the bubble to include all present and future members of the EU, such as countries from Central and Eastern Europe? Why is such an expanded bubble in the economic and competitive interests of the U.S.?
28. What is the potential impact of such an expanded EU bubble on the U.S. proposal for international emissions trading? Would it ensure that the EU would get the benefit of any emissions deficit derived from such Central and Eastern European Members and deprive the U.S., Japan, Australia and Canada of that deficit? Would the U.S. then have to rely primarily on Russia's emissions deficit in order to derive any of the benefits of trading?
29. Article 22.3 of the FCCC requires that regional economic integration organizations must declare the "extent of their competence" with regard to obligations under the FCCC. Does the U.S. believe that the EU has the competence to carry out legally binding targets and timetables and to enforce any differentiated targets for its members if they fail to achieve them?
30. The State Department's September 9, 1996 reply to the Committee stated that the U.S. did not agree to an "EU Bubble in Berlin" and that the U.S. delegation "successfully opposed including language in the Berlin Mandate which might have suggested that any country or group of countries could "bubble" in the post-2000 period." The reply then said:

Clearly, the question of "bubbling" with respect to post-2000 commitments is complex, and one that will be closely scrutinized and carefully considered as negotiations progress. The Administration has consistently and continuously consulted with Congress, as well as with U.S. industry and U.S. NGOs, on all aspects of the negotiations concerning post-2000 commitments and will continue to do so.

The Administration has not yet held meaningful discussions with this Committee on the issue of the EU bubbling to "meet and target and timetables," its implications for the U.S., its merits, or its complexities. Given the fact that negotiations are just approaching a conclusion in Bonn and Kyoto, when do you plan to consult us on this aspect of the negotiations?

31. Since 1992, the composition of the only "regional economic integration organization," namely the EU, has grown from 12 to 15 members and several other countries want to expand it further. Under what circumstances would the U.S. agree to an EU bubble that is or could be expanded?

EU Amendment to Convention

32. The EU has proposed an amendment to the Convention to provide for a vote to adopt all future protocols by three-fourths if all efforts at consensus are exhausted. The proposed amendment would appear to have a retroactive effect for Kyoto.
- a) Under this proposal, is it possible that three-fourths of the FCCC Parties could vote to "adopt" any Protocol that imposed new obligations for Annex I and/or non-Annex I Parties and then decide not to deposit an instrument of ratification, etc.?
 - b) Does the U.S. support such an amendment to the Convention?
 - c) Has the U.S. position changed from its June 19, 1996 response to this Committee in regards to any of these matters? Would the Administration agree to a resolution of one of these matters, namely voting on a protocol, without a resolution of the financial and budget matters for both the Convention and all future protocols?

Emissions Trading

33. Does the Administration intend that any international emission trading program would apply in the same way and to the same extent to public and private entities internationally and in the U.S.? For example, would it apply to local governments and to defense or other agencies of each Party and to the emissions of such entities? What will be the impact on the U.S. Defense Department of an international, or, for the matter, a domestic, emissions trading program?
34. Greenhouse gases not covered by the Montreal Protocol are not pollutants within the meaning of the Clean Air Act and are not subject to the command and control provisions of the Act or other environmental laws. It is our understanding that although the U.S. has cited (in a September 9th reply to this Committee) authority to implement the Climate Change Action Plan with voluntary measures, the U.S. draft protocol, because it may call for mandatory measures, could not be given full effect in the U.S. without the enactment of new legislation by Congress. Do you share that understanding? Is the Administration considering a domestic emission trading legislative program patterned on the 1990 Clean Air Act?

General

35. I understand that the Administration has recently established the White House Climate Change Task Force, a Deputies Group and an Assistant Secretaries group. Please explain the role and purpose of each in regards to the development of the Administration's position and policies for the international negotiations for a protocol or another legal instrument in 1997 and for the development of implementing legislation in the U.S. Please identify the members of each group. Please provide any documents regarding the formation of these groups, their membership, mission, tasks, and/or assignments.
36. Please provide a table of all contracts, cooperative agreements, grants, and interagency agreements and any extensions thereof (hereinafter referred to as "agreements") entered into with any individual, agency, or public or private entity (foreign or domestic) by or through any federal Department or Agency, including the Departments of State, Commerce and Energy, and the Environmental Protection Agency, for the period beginning July 1, 1994 to the present that relates to, or includes, (directly or indirectly) climate change matters or issues of any kind. These should include matters relating to (a) domestic or international emission trading, including economic and other analysis of such trading, the administration and verification of such trading in the U.S. and elsewhere, (b) public outreach, general and specific public education, grass roots, community outreach, workshops, (c) transportation efficiency, alternative fuels, transportation generally, utilities, impact on pollutants like ozone and particulate matter, and (d) any legal analysis of these matters and of the Convention or of any statutes concerning climate change or trading. Each table should identify the date of the agreement, the agreement recipient, the amount of Federal funds, the term, including extensions, a brief description, the product and whether it is publicly available, and the status. Please include with each table the applicable "Statement of Work", including any revision thereof, for each such agreement.