

*Its time to fight
please*



'98 JAN 26 PM4:01

Matthew Dzik

909 S. McLean Blvd., #48

Elgin, Ill. 60123

Dear Mr. Stern,

Enough! It's about time the Republicans and their hatchetmen are condemned for what they are. For five years they have engaged in a malicious, relentless muckraking campaign to assassinate, one way or another, the character of Bill Clinton for their own political ends. The Republican propaganda machine has never presented a scrap of proof, yet continues to manufacture endless accusations and innuendoes in a despicable effort to manipulate the press and pollute public opinion. While President Clinton has demonstrated great character and done great service to this country while being viciously attacked, the Republicans have consistently shown that their politics are even more disgraceful than their policies.

Now is the time for every Democrat to rally to this good and great president who has fought so valiantly for America, defending him unwaveringly and disdaining the political cowardice that allowed Ronald Reagan and the Republicans to rape the truth during the Eighties and still. The media must also be responsible, reporting objectively rather than echoing the sensationalist Republican chorus of scandal where there are only self-serving accusations. And all Americans must see things in context, remembering how diligently President Clinton has tried to bring all people together and lift up the nation while the Republicans continue to wallow in the mud, wasting the countries time ,money and spirit on their political vendetta . obstructing effective government at every turn. The American people must see that the shame of America arises from the stench of Republican politics.

History will show that the scandal of the Nineties did not belong to Bill Clinton, but the dishonorable, vindictive schemers who have chosen the lowest of political roads, and to all those that allow them to go on.

*Thank you,
Matthew Dzik*

Matt Dzik
909 S. McLean #48
Elgin, IL 60123



Todd D. Stern
The White House
1600 Pennsylvania Ave., N.W.
Washington D.C. 20500





Sinai
Family Health Centers

SINAI FAMILY HEALTH CENTERS
IDEAL FAMILY HEALTH CENTER
2413 South State Street
Chicago, Illinois 60616
Tel: (312) 225-6800
Fax: (312) 225-0802

Ideal Family Health Center
2413 South State Street
Chicago, IL 60616

11/28/97

'97 DEC 3 AM 9:44

Dear Mr. Todd Stew,

Please pass a message on to President Clinton for me if you could. It is regarding the Interior Appropriations Bill. Please Veto This one Bill if any anti environmental riders are attached. I think that is a disgusting political process and it should be illegal to attach any riders to any type of legislation. That is not what our founding fathers were thinking about when they created the process. Can't President Clinton do something about ending that phenomenon!

No more Riders!

Sincerely,

Lora A. Chamberlain D.O.

LORA CHAMBERLAIN, D.O.



Sinai
Family Health Centers

11/28/97

Ideal Family Health Center
2413 South State Street
Chicago, IL 60616

'97 DEC 3 AM 9:46

Dear Mr. Todd Stern,

I would like to have you pass on a suggestion to the President if you could;

CLOSE OUR BORDERS!

We do not need any more people in the U.S.!

I do not care what kind of tradition this country is built on! We are in the middle of a dangerous population explosion and we need to protect our land, our water, our children's birthright to some space!!!

We do not have to pay for every third world nation's lack of population control, let the population pressure force them to do something about it for themselves! Of course we can help by funding International programs of family planning but **CLOSE OUR BORDERS!**

I beg your consideration of this drastic message!

LORA CHAMBERLAIN, D.O.

Sincerely,
L. Chamberlain

Seattle City Light



Gary Zarker, Superintendent
Norman B. Rice, Mayor

November 26, 1997

'97 DEC 5 PM 1:26

The President
The White House
Washington, D.C. 20500

Dear Mr. President:

As you consider the U.S. position on global climate change, I urge your support of the proposed federal Strategic Initiative for Wind Energy as outlined in the recently provided White Paper developed by the American Wind Energy Association (AWEA), of which Seattle City Light is a member.

The proposed initiative consists of ten policy steps, including a 10-year extension of the existing wind energy production tax credit; a national renewables portfolio standard; an enhanced federal wind research and development program; and policies intended to facilitate rapid growth in the global wind market.

We are writing separately in order to express our own view on the proposed renewable portfolio standard (RPS). We support an RPS that includes environmentally-responsible hydroelectricity as an eligible renewable resource. Such an approach recognizes the environmental benefits of hydroelectricity, including avoided air and water emissions from fossil-fuel generation, while providing an additional incentive for owners to mitigate the environmental impacts of their projects. If an RPS does not include hydroelectricity as an eligible resource, then we think that the approach taken in Representative Schaefer's (H.R. 655) and Senator Jeffords' (S.687) electricity restructuring bills is appropriate, whereby hydroelectricity generation is not included in the baseline against which the portfolio standard is applied.

Wind energy has enormous potential, if deployed in the U.S. and other countries around the world, to displace electric generation from polluting energy sources. AWEA estimates that the Strategic Initiative can result in the installation of 30,000 megawatts (MW) of wind generating capacity in the U.S. by the year 2010, producing 105 billion kilowatt-hours (kWh) of electricity annually, or enough electricity to meet the needs of 10 million American homes, emissions free.

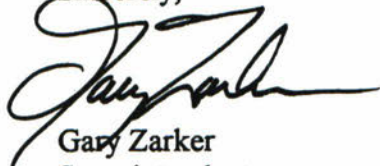
The President
November 26, 1997
Page 2

In the process of generating this amount of electricity annually, wind can provide the following added economic and environmental benefits:

- *Reduce U.S. emissions* of carbon dioxide (CO₂) by 100 million metric tons (MMT) annually. This is more than 18% of the 548 MMT by which the electric sector is projected by the energy Information Administration (EIA) to exceed 1990 carbon dioxide emission in 2010.
- *Create 150,000 new manufacturing jobs.* The World Energy Council estimates that new wind capacity worldwide will total 180,000 MW to 474,000 MW by the year 2020, which equates to \$150 billion to \$400 billion worth of business. It is vital that the U.S. make a strenuous effort to compete in this rapidly-growing field.
- Provide long-term energy price stability, and minimize reliance on imported fossil fuels.

For all of these reasons, the proposed initiative should be a component of a comprehensive climate change policy.

Sincerely,



Gary Zarker
Superintendent

cc: Dan Reicher, Department of Energy
The Honorable T.J. Glauthier, Office of Management and Budget
Katy McGinty, Council on Environmental Quality
Todd Stern, Assistant to the President and Staff Secretary
Randall Swisher, American Wind Energy Association

November 24, 1997

The Honorable Bill Clinton
The White House
1600 Pennsylvania Avenue, NW
Washington, DC 20500

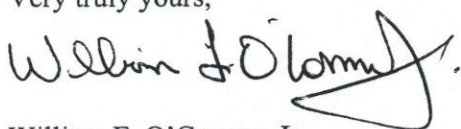
Dear Mr. President:

I am writing on behalf of the 5,800 members of the Business Council of Alabama. We want you to know how deeply concerned we are about the outcome of the conference scheduled for next week in Kyoto, Japan.

The BCA simply asks that those representing our interests use some common sense during the negotiations. Why sign on to a plan of questionable environmental value that will give businesses in other countries a competitive advantage in the marketplace?

We need your help to make sure we leave the table in Kyoto with a level playing field. Please do not sign any treaty that does not include all nations at similar levels of commitments and everyone should face the same time frame required for implementation. To do otherwise will result in economic hardship in America without any real benefit to the environment.

Very truly yours,



William F. O'Connor, Jr.
President

cc: Alabama Congressional Delegation
Governor Fob James
Jim Gray (BCA Vice President)

12/3

Todd -

Climate change letters
rec'd 12/2.



DEC - 2 1997

LORI FURBUSH

845 Blue Jay Lane
Coppell, Texas 75019

November 25, 1997

The Honorable William Clinton
President of the United States
The White House
1600 Pennsylvania Avenue
Washington, DC 20500

Dear Mr. President:

This letter is to let you know that, as an Executive Assistant for The North American Coal Corporation, I strongly oppose the United States agreeing to sign the proposed Kyoto Treaty on the subject of Global Climate Change. A global warming treaty is wrong for me and all Americans for the following reasons:

- **It will be very costly to American families such as mine.** Fuel and electricity costs will go up, and jobs at energy-intensive industries are likely to be lost.
- **It will export American jobs** to other nations who will be free to continue emitting and growing their economies while we are threatened with losing our jobs.
- **It will not improve the environment** because, by the year 2015, greenhouse gas emissions from developing countries will exceed those of the United States and other countries impacted by the treaty. Overall, global emissions will continue to grow. If global warming is real, the Kyoto Treaty is not a solution.
- **And the science of global warming is still uncertain.** I have been told that the majority of climate scientists cannot say for sure what the impact is or will be on the climate from increases in carbon dioxide. On something this important, why not wait until there is more scientific certainty as to the causes, effects, and costs of climate change before we proceed?

Mr. President, I urge you not to sign any treaty at this time that can in any way be detrimental to the United States.

Respectfully yours,



Lori A. Furbush

15 Highland St
Brattleboro, VT 05301
November 29, 1997

President Clinton
The White House
Washington DC. 20500

'97 DEC 8 AM 11:40

Dear President Clinton,

I urge you to take to the Ottawa conference
a stronger policy for the US to sign the treaty
banning antipersonnel landmines. Please
do not continue to support the exceptions—
we need a total ban in order to protect
civilians from further harm.

Sincerely,

Ann Newsom



Seattle City Light

700 Fifth Avenue
Seattle, Washington 98104-5031

'97 DEC 1 AM 9:26

Gary Zarker, Superintendent
Norman B. Rice, Mayor

Fax Cover Sheet

DATE:	November 26, 1997	TIME:	4:41 PM P.S.T.
TO:	Todd Stern Assistant to the President & Staff Secretary The White House	FROM:	Glenn Atwood Strategic Planning
FAX:	(202) 456-2461	FAX:	(206) 684-3436
PHONE:	(202) 456-1414	PHONE:	(206) 386-4594

Subject: Climate Change, Letter Regarding American Wind Energy Association Strategic Initiative

Number of pages including cover sheet: 3

MESSAGE

Seattle City Light



Gary Zarker, Superintendent
Norman B. Rice, Mayor

November 26, 1997

The President
The White House
Washington, D.C. 20500

Dear Mr. President:

As you consider the U.S. position on global climate change, I urge your support of the proposed federal Strategic Initiative for Wind Energy as outlined in the recently provided White Paper developed by the American Wind Energy Association (AWEA), of which Seattle City Light is a member.

The proposed initiative consists of ten policy steps, including a 10-year extension of the existing wind energy production tax credit; a national renewables portfolio standard; an enhanced federal wind research and development program; and policies intended to facilitate rapid growth in the global wind market.

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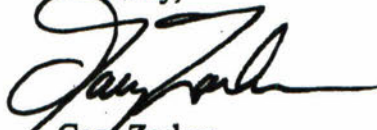
11/26/97 WED 17:43 FAX 1 206 684 3436 SEATTLE CITY LIGHT
The President
November 26, 1997
Page 2

In the process of generating this amount of electricity annually, wind can provide the following added economic and environmental benefits:

- *Reduce U.S. emissions* of carbon dioxide (CO₂) by 100 million metric tons (MMT) annually. This is more than 18% of the 548 MMT by which the electric sector is projected by the energy Information Administration (EIA) to exceed 1990 carbon dioxide emission in 2010.
- *Create 150,000 new manufacturing jobs.* The World Energy Council estimates that new wind capacity worldwide will total 180,000 MW to 474,000 MW by the year 2020, which equates to \$150 billion to \$400 billion worth of business. It is vital that the U.S. make a strenuous effort to compete in this rapidly-growing field.
- Provide long-term energy price stability, and minimize reliance on imported fossil fuels.

For all of these reasons, the proposed initiative should be a component of a comprehensive climate change policy.

Sincerely,



Gary Zarker
Superintendent

cc: Dan Reicher, Department of Energy
The Honorable T.J. Glauthier, Office of Management and Budget
Katy McGinty, Council on Environmental Quality
Todd Stern, Assistant to the President and Staff Secretary
Randall Swisher, American Wind Energy Association

American Wind Energy Association

122 C Street, NW, Fourth Floor, Washington, DC 20001 USA

(202) 383-2500 Fax (202) 383-2505

e-mail: windmail@mcimail.com Internet Address: <http://www.igc.apc.org/awea/>

November 26, 1997

The President
The White House
Washington, D.C. 20500

Dear Mr. President:

As you consider the U.S. position on global climate change, we the undersigned business, environmental, consumer and energy policy organizations, urge your support for a proposed federal Strategic Initiative for Wind Energy as outlined in the attached White Paper developed by the American Wind Energy Association (AWEA).

The proposed Initiative consists of 10 policy steps, including a 10-year extension of the existing wind energy production tax credit (PTC); a national renewables portfolio standard of 10% by the year 2010; an enhanced federal wind research and development (R&D) program; and policies intended to facilitate rapid growth in the global wind market.

Wind energy has enormous potential, if deployed in the U.S. and other countries around the world, to displace electric generation from polluting energy sources. AWEA estimates that the Strategic Initiative can result in the installation of 30,000 megawatts (MW) of wind generating capacity in the U.S. by the year 2010, producing 105 billion kilowatt-hours (kWh) of electricity annually, or **enough electricity to meet the needs of 10 million American homes -- emissions free.**

In the process of generating this amount of electricity annually, wind can provide the following added economic and environmental benefits:

Board of Directors

President
Brian O'Sullivan
Cannon Energy
Corporation

President-Elect
Karen Conover
Global Energy Concepts,
Inc.

Secretary
Randall Swisher
American Wind Energy
Association

Treasurer
David Blittersdorf
NRG Systems, Inc.

William Adams
San Geronio Farms, Inc.

Leif Andersen
Micon Wind Turbines
(US), Inc.

Bruce Bailey
AWS Scientific, Inc.

Michael Bergey
Bergey Windpower Co.,
Inc.

Robert Gates
Zond Corporation

Paul Gipe
Paul Gipe & Associates

Dean Gosselin
ESI Energy, Inc.

Harry R. Halloran
Energy Unlimited, Inc.

Edwin T.C. Ing
Attorney-at-Law

Robert Lynette
FloWind Corporation

Peter D. Mandelstam
ARCADIA
WINDPOWER, LTD.

A. Norman Terreri
Green Mountain Power
Corporation

William A. Vachon
W.A. Vachon &
Associates, Inc.

Carl J. Weinberg
Weinberg Associates

Audrey Zibelman
Northern States Power
Company

**Environmental
Policy Advisor**
Christopher Flavin
Worldwatch Institute

Printed on recycled paper

- * *Reduce U.S. emissions* of carbon dioxide (CO₂) by 100 million metric tons (MMT) annually. This is more than 18% of the 548 MMT by which the electric sector is projected by the Energy Information Administration (EIA) to exceed 1990 carbon dioxide emissions levels in 2010.
- * *Create 150,000 new manufacturing jobs.* The World Energy Council estimates that new wind capacity worldwide will total 180,000 MW to 474,000 MW by the year 2020, which equates to \$150 billion to \$400 billion worth of business. It is vital that the U.S. make a strenuous effort to compete in this rapidly-growing field.
- * Provide long term energy price stability, and minimize reliance on imported fossil fuels

For all of these reasons, the proposed Initiative should be a component of a comprehensive climate change policy.

Respectfully Yours,

AWS Scientific
 Advanced Energy Corp.
 Advanced Wind Turbines
 American Solar Energy Society
 Bergey Windpower Co.
 Cannon Energy Corp.
 Catamount Energy Corp.
 Coram Energy Group, Ltd.
 Dutch Pacific, LLC
 EPC
 ESI Energy, Inc.
 Endless Energy Corp.
 Energy Insurance Brokers
 Enron Wind Corp.
 Global Energy Concepts
 Green Mountain Power Corp.
 Hopwood, Inc.
 Interstate Renewable Energy Council
 Massachusetts PIRG
 MDZ Consulting
 Midwest Renewable Energy Association
 Minnesota Wind Energy Association
 Morton Assoc.
 Northern Alternative Energy, Inc.
 NRG Systems

Northwest Energy Coalition
PACE (People's Action for Clean Energy), Inc.
PanAero Corp.
Patrick & Henderson, Inc.
San Gorgonio Farms, Inc.
SUN DAY Campaign
Sustainable Energy & Economical Development Coalition
Synergy Power Corp.
The Wind Turbine Co.
Thomas & Betts Corp.
University of Massachusetts, Renewable Energy Research Laboratory
University of North Dakota, Energy & Environmental Research Ctr.
University of Utah, Mechanical Engineering Dept.
Vermont PIRG
W.A. Vachon & Assoc., Inc.
Waverly Light & Power
Weinberg Assoc.
Wind Power Management
Wind Turbine Industries Corp.
Windland, Inc.
Wintech International, LLC
Windward Engineering

WIND ENERGY AND CLIMATE CHANGE



**The Energy to Reduce Greenhouse Gas Emissions
and Power 10 Million Homes...**

WIND ENERGY AND CLIMATE CHANGE:

A PROPOSAL FOR A STRATEGIC INITIATIVE

Executive Summary

The United States faces a formidable challenge in seeking to reduce its greenhouse gas emissions to 1990 levels by the year 2010. Current projections indicate that it will fall far short, with emissions of carbon dioxide (CO₂) from the electric utility sector alone exceeding 1990 levels by more than half a billion metric tons.

Wind energy is a clean, abundant U.S. resource that produces electricity with virtually no CO₂ emissions. Given strong policy support, the wind industry can ramp up production rapidly and can, through displacing emissions from coal, make a significant contribution toward helping the utility sector meet its share of the 2010 objective. The American Wind Energy Association (AWEA) estimates that U.S. installed wind capacity can reach 30,000 megawatts (MW) in 2010 (compared to just 1,700 MW today), generating 105 billion kWh annually. This is enough electricity to meet the needs of more than 10 million homes, and to displace 100 million metric tons of CO₂, or 18% of the utility sector's excess emissions.

This paper outlines a series of 10 policy steps needed to achieve the 30,000-MW goal, including in particular a 10-year extension of the existing wind energy production tax credit (PTC); a national renewables portfolio standard (RPS) of 10% by the year 2010; an enhanced federal wind research and development (R&D) program; and policies intended to facilitate rapid growth in the global wind market.

Taken together, these 10 measures constitute a proposed Strategic Wind Energy Initiative. In addition to helping the U.S. meet its greenhouse gas reduction goals, the Initiative will result in healthier air and water for millions of Americans and in the creation of tens of thousands of new jobs, as it propels the nation's wind industry to a strongly competitive position in the surging world market for wind equipment. The clean energy equipment manufacturing industry is likely to be one of the next century's largest sources of new manufacturing jobs—the World Energy Council has estimated that new wind capacity worldwide will total 180,000 MW to 474,000 MW by the year 2020, which equates to \$150 billion to \$400 billion worth of business. It is vital that the U.S. make a strenuous effort to compete in this rapidly growing field.

For all of these reasons, the proposed Initiative should be a component of a comprehensive climate change policy.

Introduction

Currently, the United States obtains approximately 85% of its energy from fossil fuels, which emit large quantities of the atmospheric heat-trapping greenhouse gas carbon dioxide (CO₂) when burned. The U.S. also derives 55% of its electricity from coal, the fossil fuel with the highest CO₂ content per unit of electricity produced. From a global perspective, the U.S., with 5% of the world's population, is responsible for 23% of world CO₂ emissions. If the U.S. is to provide leadership in dealing with the serious threat of global climate change, it must begin now to make a meaningful transition away from over-reliance on fossil fuels toward broader use of environmentally-benign energy resources.

Wind energy, which produces virtually no CO₂ emissions,¹ has been long recognized as an abundant potential source of electric power. A detailed analysis by the Department of Energy's Pacific Northwest Laboratory in 1991 estimated the energy potential of the U.S. wind resource at 10.8 trillion kilowatt-hours (kWh) annually, or more than three times total current U.S. electricity consumption.² Given this vast, virtually untapped clean energy resource, and the fact that wind power is one of the lowest-cost power generation technologies, large scale wind power development should be among the highest U.S. priorities for consideration in meeting national CO₂ reduction goals.

However, notwithstanding wind's very large potential, inherent constraints limit the amount of generation from any energy source that can be brought on stream within the near to medium term. Accelerating wind energy's contribution to our electric generation portfolio will require proactive steps.

The purpose of this paper is to examine wind energy's capability to reduce U.S. electric sector emissions of carbon dioxide by the year 2010, to set forth a Strategic Wind Energy Initiative consisting of the policies needed to realize that capability, and to summarize the value to the U.S. of moving decisively to implement those policies.

I. HOW MUCH CAN WIND ENERGY CONTRIBUTE TO REDUCING GLOBAL CLIMATE CHANGE EMISSIONS?

The United States is currently expected to fall far short of reducing CO₂ emissions to 1990 levels by the year 2010, according to projections from the Energy Information Agency (EIA). In fact, emissions in that year from the electric utility sector alone (which produces about a third of the nation's overall CO₂ emissions) are predicted to exceed those in 1990 by some 548 million metric tons (MMT).³

Every 10,000 MW of wind installed can reduce CO₂ emissions by approximately 33 MMT annually if it replaces coal-fired generating capacity, or 21 MMT if it replaces generation from the U.S. average fuel mix.⁴ **The American Wind Energy Association (AWEA) estimates that wind energy, if encouraged vigorously, could reach 30,000 megawatts (MW) of installed generating capacity in the U.S. by 2010 (compared to current capacity of 1,700 MW). If this target is achieved, wind would reduce national CO₂ emissions by 100 MMT annually, or more than 18% of the 548-MMT excess [based on displacement of coal-fired generation].⁵**

...the U.S. obtains approximately 85% of its
energy from fossil fuels

...with 5% of the world's population [the U.S. is] responsible for 23% of world CO₂ emissions.

A Cost-Effective Option

Wind technology provides an outstanding opportunity to cut carbon dioxide output at an extremely reasonable cost. Wind costs are expected to be among the lowest of generating technologies by early in the next century,⁶ when most of the new wind capacity would be installed. Wind energy is already within a cost-competitive range if its cost is examined on a true life-cycle basis over the lifetime of a typical wind plant. The levelized cost of power from a wind project is now about 4.5 cents/kWh, compared with levelized coal plant costs of about 3.9 cents/kWh.⁷

The cost of avoiding carbon dioxide emissions with wind technology is currently about \$6 per ton avoided,⁸ and will decline even further over the next decade, perhaps even to zero if wind achieves cost parity with fossil fuels, as the industry is now seeking to do. The goal for wind technology is to have wind's total costs equal to the variable cost (i.e., the fuel and O&M costs) of its fossil fuel competitors. That goal can be reached within 5-10 years if a high growth path for wind is chosen. Over recent years, wind technology has consistently beaten predictions about future cost improvements.

30,000 MW—An Achievable Goal?

To reach 30,000 MW by the year 2010, installed wind capacity would have to expand at a compound growth rate of 25% annually. This rate is achievable, but must be stimulated by policies that are steady and consistent⁹ so that investment in new production capacity can be made as needed. We know that it is achievable because:



- The global wind industry has been expanding at a similar rate or higher for the past five years. While the U.S. wind market has stagnated since 1991, the world market has accelerated swiftly enough to make wind the world's fastest-growing energy technology. Capacity additions outside the U.S. jumped by 40% in 1994, 65% in 1995, and 35% in 1996, and the pace of growth is expected to gather

momentum again in the 1999-2000 time frame.

- AWEA's detailed global market projections, which are conservative, indicate that new worldwide installations will total 30,000 MW in the next 10 years, which again suggests that the Strategic Wind Energy Initiative's goal of boosting U.S. installations by 28,300 MW over the next 13 years is ambitious, but achievable.¹⁰

- In 1991, the European Wind Energy Association set a goal for European installations of 4,000 MW by the year 2000. That target has already been achieved; recently the Association established new goals, of 8,000 MW by the year 2000 and 40,000 MW by 2010.¹¹

European domestic policies have fueled strong market growth in Europe and elsewhere¹²—the U.S. can do the same for its domestic market while also encouraging continued rapid growth in the global market.

New wind projects can start going up within one to three years after new policies or incentives encouraging wind are put in place. Wind turbines themselves are modular and are composed of factory-built components which are already mass-produced or can be mass-produced when a market develops. Industry experts compare the manufacture of wind turbines to that of trucks, and expect manufacturing capacity to ramp up rapidly to respond to market demand.

The Price of Inaction

Should the necessary policy support for wind not be forthcoming, development would lag, resulting in AWEA's "base case" projection, which forecasts cumulative installations of 7,875 MW for the U.S. by 2010. This still assumes very moderate but clear policy changes to encourage development of wind projects in the U.S. However, 7,875 MW of wind capacity makes only a small contribution to achieving CO₂ emissions reductions in 2010, a date by which substantial progress needs to be made if the U.S. ever hopes to stabilize emissions at 1990 levels. It is therefore essential to take more significant policy steps so that AWEA's "high growth" scenario, under which wind reaches 30,000 MW installed by 2010, takes place.¹³

II. WHAT POLICIES OR PROGRAMS DO WE NEED IN PLACE TO ACHIEVE THE 30,000-MW TARGET?

Cutting greenhouse gas emissions can go hand in hand with economic growth in clean energy industries—if we provide the right incentives.

For example, small investments in the form of tax incentives for wind can provide big dividends in cleaner air and economic development. A federal commitment to purchase a small, but ever-increasing, amount of renewable energy would set the example for states and businesses to do the same, and encourage the adoption of a minimum content standard for electricity generation from renewables. Assisting developing nations in their desire to purchase U.S.-made renewable energy

...domestic policies have fueled strong growth in Europe and elsewhere -- the U.S. can do the same for its domestic market

technologies will slow the rate of emissions increases worldwide while creating jobs here at home.

However, renewable energy comes in a variety of forms; there is no "one-size-fits-all" provision that can meet the needs of all renewable, or even all wind, technologies. Offered below is a series of policy options aimed at reducing domestic and international greenhouse gases through reliance on wind energy technologies. Taken together, these policies comprise a proposed Strategic Wind Energy Initiative.

Building the Domestic Market

1. A 10-year extension of the existing wind energy production tax credit (PTC).

The PTC provides an inflation-adjusted 1.5 cents/kWh credit for electricity produced from a new wind facility for the first 10 years of its existence. The purpose of the credit is to provide equitable tax treatment for wind in comparison with tax breaks provided for its fossil fuel competitors. The PTC is scheduled to expire in less than two years (i.e., plants built after June 30, 1999, will no longer qualify for the credit), but financing and permitting requirements for a typical wind plant take two to three years lead time. Therefore, investor uncertainty regarding the PTC's continued existence is already drying up financing and halting project planning, just as wind stands to assume a new and more competitive role in the domestic energy industry. The Congressional Joint Committee on Taxation has estimated that a five-year extension¹⁴ of the credit would cost \$156 million over the next 10 years.

**The Renewable Portfolio Standard concept
is already included in four major utility
restructuring proposals in Congress...**

2. A federal Renewables Portfolio Standard (RPS) of 5% by 2005 and 10% by 2010 should be included within federal electric utility restructuring legislation.

The RPS is essentially a "minimum content requirement" for electricity from renewable sources as a percentage of all electricity generated in the U.S. Generators of electric power would either have to use renewables to supply part of their generation, or buy tradable credits from the owners of renewable energy projects located anywhere in the U.S. The Tellus Institute estimates that a 10% RPS in 2010 would add approximately \$1.30 to a typical monthly household electricity bill.¹⁵ The RPS is already included in some form in four major utility restructuring proposals in Congress, and should be coupled with a System Benefits Charge (SBC) to provide funding for emerging renewable generation technologies (such as photovoltaics and small wind turbines) and with legislation requiring disclosure of electricity generation fuel sources.

3. A federal agency renewables purchase requirement, steadily increasing over time.

An Executive Order should place a minimum renewables content requirement similar to the Renewables Portfolio Standard on electricity used by federal agencies. This is an immediate action the Administration could take to demonstrate a serious commitment to reduce greenhouse gas emissions. By 2005, agencies should be required to obtain 10% of their electricity supply from nonhydro renewable

4. A Small Turbine Investment Tax Credit (STIC).

This provision would create a new 30% tax credit for business users of small wind energy equipment (no greater than 50 kW capacity). An STIC would stimulate the U.S. domestic market for small turbines, increasing equipment production volumes and reducing production costs. Currently, about 70% of U.S.-made small turbines are exported to more than 75 countries. Due to low energy prices, full expensing of business energy costs, and no applicable federal incentives, the domestic market for small wind turbines is limited to a few remote, high-value, off-grid applications. But small wind turbines have great potential to displace highly-polluting diesel systems and in even moderate wind regimes will be the least-cost option. The cost of this credit is estimated at \$4.3 million over five years.

5. A federal commitment to multi-year spending of \$60 million annually for wind technology development.

Working with the Department of Energy, the U.S. wind industry has achieved cost reductions of more than 80% over the last 16 years. During that time, industry has developed an effective working relationship with the Department that is yielding increasing dividends, but that is jeopardized annually by threats to reduce or eliminate DOE wind program funding or to gut the program through changes in authorization language.¹⁶ Increasing the wind budget from the fiscal 1998 level of \$33 million to \$60 million and seeking a multi-year authorization would strengthen the program, allowing further efforts aimed at core research activities, better technology validation, more focused turbine research, and the development of a more comprehensive testing and certification program. Experts believe the cost of wind equipment can be reduced by another 40% from current levels, which would greatly expand its potential market.



...wind could reduce national CO₂ emissions by 100 MMT annually, or more than 18% of the electric sector's 548 MMT excess. This is approximately the same weight as 220 million Volkswagon Beetles.

...joint implementation [:] a program under which firms from the developed countries can earn carbon offsets by building clean energy projects in the developing world. The U.S. should... move from its current pilot project to full-scale implementation.

6. **“Net Metering” for renewable energy systems of 1 MW or less.**

In 16 states, consumers can install small, grid-connected renewable energy systems to reduce their electricity bills using a technique called net energy metering. Under net metering, consumers feed excess electricity generated by their renewable energy systems back to the grid, in essence running their electric meter backwards. At the end of the billing period, the consumer pays for the net amount of electricity supplied by the grid at the regular retail electricity rate. The purpose of this provision is to incentivize small renewable energy installations.

7. **Establishment of renewable energy as a “must take” resource within utility power pools.**

A series of “power pools,” which aggregate the electricity from individual power plants as needed and parcel it out to demand centers over the utility transmission network, oversee electricity distribution in this country. The rules for these pools are being rewritten as the utility industry is restructured and may, intentionally or unintentionally, discriminate against intermittent power sources like solar and wind. For example, one pool has already proposed that power transactions be scheduled 24 hours in advance, something that cannot be done with wind plants, whose output varies from hour to hour. This provision would ensure intermittent resources access to the market by requiring that electricity from renewables is “taken”—or purchased—first, with the seller paid only the prevailing market price for that particular hour. The “must take” provision would be subject to some necessary limits based on the amount of power the pool is handling during any given hour and its ability to absorb the amount of intermittent power that is offered.

Selling U.S. Technologies Abroad to Achieve International Emissions Reductions

8. **A strengthened existing Export/Import Bank program to more effectively support wind development around the world.**

U.S. companies labor under a disadvantage in international markets, due to the strong and effective support many other countries provide their domestic wind turbine manufacturers. In addition to policies supporting domestic wind development, which are common throughout Western Europe, many countries provide foreign aid programs (grants or loans) that are specifically linked to the purchase of equipment from their domestic manufacturers. This so-called “tied aid” has become a key driver in the rapidly growing wind energy export markets. The U.S. has two options: (1) work to ban tied aid, which is likely to be unsuccessful; or (2) provide development assistance that is equally attractive and therefore provides a level playing field for U.S. manufacturers. AWEA believes the Export/Import Bank should be given authorization and appropriations sufficient to ensure that U.S. manufacturers are not disadvantaged and can compete effectively against growing reliance upon tied aid by some nations.

There is little or NO COST to the U.S. Treasury for this program.

9. Incentives for developing countries to pursue wind projects.

Many developing countries have little incentive to use foreign energy technologies, whether wind, solar, or advanced gas, to reduce their emissions despite the fact that the most rapid growth in CO₂ (and other) emissions is in the developing world. Two related activities could give both U.S. firms² and developing countries incentives to develop wind projects. The first is joint implementation, a program under which firms from the developed countries can earn carbon offsets by building clean energy projects in the developing world. The U.S. should endorse and push for joint implementation to move from its current pilot project status to full-scale implementation. **There is little or no cost to the U.S. Treasury for such a program**, and substantial benefits would be provided to the U.S. economy through the thousands of jobs that would be created. The second activity is the World Bank's Global Environmental Facility (GEF), which can cover the incremental cost of developing environmentally benign or beneficial projects in the developing world, such as building a wind project instead of an apparently cheaper coal project. This incentive is particularly important for countries such as China and India, which have tremendous power needs and must build energy capacity quickly at the lowest possible cost.¹⁷

10. A global resource assessment program aimed at mapping high quality wind sites.

The state of knowledge of wind resources today is comparable to the early days of the petroleum industry. Many people in those early days, including most of the later icons of the oil industry, believed oil would never replace coal and kerosene as the fuel of choice for the industrializing world. It was only after substantial exploration that the magnitude of the oil resource became understood. Similarly, little is known today about the wind resource in most countries, which means that it is virtually always underestimated and thus believed to be marginal in size. The U.S. should urge the United Nations, the World Bank, and other multilateral organizations to invest in wind resource assessment as they have in petroleum and geothermal exploration. In addition, the U.S. should agree to co-fund wind mapping activities with countries or international organizations that are willing to cost-share.

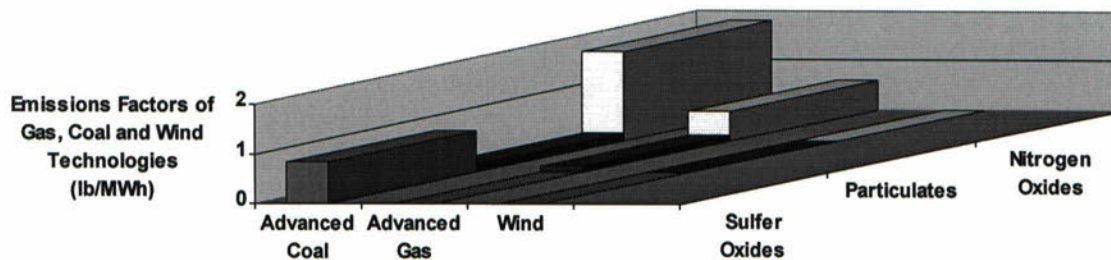
III. WHAT IS THE VALUE OF SUCH AN INITIATIVE?

A Strategic Wind Energy Initiative, while contributing to the campaign to lower U.S. greenhouse gas emissions, would provide a series of additional environmental and economic benefits. A summary of these benefits includes:

Healthier Air and Water

Because wind produces no emissions of any kind, it not only displaces carbon dioxide, but also other harmful emissions produced by fossil fuels which contribute to smog, acid rain, and airborne particulates that impair respiratory functions.

Though the combustion of natural gas produces no sulfur oxide (SO_x) emissions, gas does produce significant amounts of nitrogen oxides (NO_x) and particulates, as well as about 40% of the carbon emissions produced by coal.



According to the Environmental Protection Agency, some 90 million U.S. citizens still breathe air that is too dirty to meet existing air quality standards, even though those standards do not yet address fine particulates (perhaps the most dangerous emission to human health) or mercury emissions. Domestic air pollution kills over 50,000 persons annually—a death toll higher than that of traffic accidents, breast cancer, or AIDS.¹⁹ In addition to reducing carbon emissions, pursuing the “high growth” case goal of 30,000 MW by 2010 could reduce electric sector emissions of sulfur and nitrogen oxides in that year by some 4-6%.

The Strategic Wind Energy Initiative would also fit well within a comprehensive electric-sector strategy for reducing carbon emissions that includes wind, other renewable technologies, energy efficiency measures, and cleaner fossil fuel technologies. Such a comprehensive strategy was proposed recently by several environmental groups and the Tellus Institute, which concluded that the strategy could reduce U.S. CO₂ emissions to 27% below the 1990 level in 2010, and reduce sulfur, nitrogen, and particulate emissions by 78%, 48%, and 36%, respectively, while also reducing total electric sector costs.²⁰

Growing Economic Activity Based on Clean Energy

Increasing our domestic use of wind energy and supplying a growing share of multi-billion-dollar international wind technology markets also offers important economic benefits for the country. And since these benefits are based on clean energy, rather than fossil fuels, they do not carry concealed long-term economic costs such as environmental cleanup expenses, health care bills from air pollution and mercury deposition, and the like, which exert a hidden drag on economic growth.

This point bears repeating: a strategy that promotes renewables and wind is *synergistic*, encouraging economic growth while *reducing* damage to the environment, unlike most economic stimulation strategies that policymakers consider.

**...wind energy provides economic growth while
improving the environment...**

Positive economic impacts of the Strategic Wind Energy Initiative include:

- **Jobs associated with exports**—Projected growth in the international wind energy market offers significant export opportunities for U.S. wind turbine and component manufacturers. If U.S. manufacturers captured just one-fourth of the global wind equipment market under the “high growth” scenario through 2010, some 157,000 jobs would be supported.²¹ The clean energy equipment manufacturing industry is likely to be one of the next century’s largest sources of new manufacturing jobs. **The World Energy Council, for example, has estimated that new wind capacity worldwide will total 180,000 MW to 474,000 MW by the year 2020, which equates to \$150 billion to \$400 billion worth of business. It is vital that the U.S. make a strenuous effort to compete in this rapidly growing field.**

- **Jobs associated with use of domestic energy resources**—Net imports of natural gas have nearly tripled in the last decade, from 5% in 1987 to 13% today.²² Gas imports are expected to account for over 20% of increased U.S. gas consumption through 2010,²³ absent climate change policies that would further boost gas use.²⁴ The substitution of domestic renewable energy resources and technologies for imported fuels creates significant net increases in jobs for Americans, both direct and indirect.²⁵ For example, a study by the State of Wisconsin found that the net impact of increased use of renewables would be three times more jobs than that from conventional generation.²⁶



Wind energy is likely to be a major contributor to the clean energy equipment manufacturing industry in the next century... creating 150,000 new jobs, it could employ roughly half the residents of Alaska.

Economic stability through reduced energy price fluctuations—Fuel price increases caused by fossil fuel supply/demand imbalances and international politics take a large toll on household budgets and the national economy. The wind “fuel” is not subject to such disruptions, so it has a stabilizing effect on energy prices. In addition, price stability results from (1) greater overall resource diversity and (2) a larger number of smaller generating facilities, which reduces the probability of significant outages.

Meeting Climate Change Goals Efficiently

Reducing carbon emissions from electric generation to the level required to stabilize atmospheric carbon concentrations is most cost-effectively achieved through a combination of energy efficiency, natural gas and renewable energy—using the most cost-effective resources available from each, rather than over-relying on any one source.

To achieve carbon reductions without a significant contribution from renewables:

- the country would need to rely excessively on natural gas, which would bring with it increased imports, increased prices and vulnerability to supply disruptions; and/or
- the lives of existing nuclear plants would need to be extended, entailing operational safety risks, high operating costs and the generation of additional radioactive wastes for which no long-term storage is available.

Within a few decades, the world economy must make a transition to non-carbon-based fuels, due to the limited supply of fossil fuels and the already saturated capacity of the atmosphere to absorb their emissions without dramatically altering the earth's climate. A renewable energy infrastructure cannot be created spontaneously. It will take decades of sustained and predictable development to make the transition to a renewable energy future.

We must begin now.

IV. CONCLUSION

A Strategic Wind Energy Initiative that includes the implementation of policies aimed at encouraging the installation of 30,000 MW of wind electric generation capacity in the U.S. by the year 2010 will:

- Materially assist the U.S. in meeting its pledge to reduce carbon dioxide emissions to 1990 levels;
- Foster economic growth through increased exports of wind equipment and increased use of domestic energy resources;
- Create over 150,000 new jobs; and
- Positively impact a series of other environmental and economic problems that flow from over-reliance on fossil fuels.

For all of these reasons, the proposed Initiative should be a component of a comprehensive climate change policy.

NOTES

¹ A small amount of carbon dioxide is emitted during wind's "total fuel cycle," which includes fabrication of wind equipment and construction of wind plants. However, this amount is estimated at less than 1/100 of CO₂ emissions from coal's fuel cycle. Dr. Robert L. San Martin, *Environmental Emissions from Energy Technology Systems: The Total Fuel Cycle* (Washington, D.C.: U.S. Department of Energy, Spring 1989), p. 5.

² D. L. Elliott, L. L. Wendell, and G. L. Gower, *An Assessment of Windy Land Area and Wind Energy Potential in the Contiguous United States* (Richland, Wash.: Battelle Pacific Northwest Laboratory, 1991). Total U.S. consumption for 1996 is estimated at 3.2 trillion kWh. *Annual Energy Review 1996* (Washington, D.C.: Energy Information Administration, U.S. Department of Energy, July 1997), p. 227.

³ Personal communication, Energy Information Administration, U.S. Department of Energy, September 30, 1997. U.S. electric sector carbon emissions in 2010 are projected at 626.4 MMT, compared to 476.9 MMT in 1990. The excess is therefore 149.5 MMT of carbon. Carbon dioxide has two oxygen atoms (atomic weight 16) in addition to a single carbon atom (atomic weight 12), and so the carbon number must be multiplied by 3.667 (44/12) to arrive at the carbon dioxide equivalent. $149.5 \times 3.667 = 548.2$ MMT of CO₂.

⁴ **Displacement of Coal-Fired Generation:** Wind generation results in the emission of 7,400 metric tons of CO₂ per billion kWh generated (due to emissions during turbine fabrication and installation). Coal-fired generation results in the emission of 964,000 metric tons of CO₂ per billion kWh. Source of emissions data: Dr. Robert L. San Martin, *Environmental Emissions from Energy Technology Systems: The Total Fuel Cycle* (Washington, D.C.: U.S. Department of Energy, Spring 1989), p. 5. The benefit when wind displaces coal is therefore 964,000-7,400, or 956,600 metric tons (0.9566 MMT) per billion kWh. For 10,000 MW of wind capacity, generating at an average of .40 capacity factor, the calculation to derive displacement is: $10,000 \text{ MW (10 million kW)} \times .40 \times 8760 \text{ (hours)} = 35.04 \text{ billion kWh}$. $35.04 \times .9566 = 33.52$ MMT of CO₂ emissions displaced. (Capacity factor of .40 is an estimate for 2010 technology. See *Scenarios of U.S. Carbon Reductions* (Washington, D.C.: U.S. Department of Energy, September 25, 1997), p. 7.20). The *Scenarios* study uses slightly different, even higher numbers for replacement of coal generation with wind. We have used the San Martin study where possible, however, because it is the one available source with total fuel cycle emissions numbers for wind.)

Displacement of Average Utility Mix Generation: If wind is assumed to displace the average fuel mix instead of coal, 160 kg of carbon is displaced per 1,000 kWh (1 MWh). *Scenarios of U.S. Carbon Reductions*, p. 7.19. Multiplying by 3.67 to convert this rate to CO₂ from carbon yields a displacement of 587 kg of CO₂ per MWh, which is equal to 0.587 metric tons/MWh or 0.587 MMT per billion kWh. Displacement for 10,000 MW of wind is thus $10,000 \text{ MW (10 million kW)} \times .40 \times 8760 \times .587 = 20.6$ MMT of CO₂. We have assumed displacement of coal for the purposes of this paper based in part on the *Scenarios* report, which finds that wind displaces primarily coal in the High Efficiency/Low Carbon (HE/LC) scenario. *Scenarios*, p. 7.19. The HE/LC scenario envisions a \$50/ton charge for carbon emissions. Whether this policy approach or some other is taken, we assume that policies to limit coal-fired generation will be implemented.

⁵ See note 4, *supra*, for displacement of carbon dioxide from coal-fired generation with wind. For 30,000 MW of wind, the calculation is $30,000 \text{ MW (30 million kW)} \times .40 \times 8760 \times .9566 = 100.5$ MMT of CO₂ displaced annually.

⁶ "Wind is poised to become one of the lowest-cost sources of electrical energy," quote from Edgar DeMeo, Electric Power Research Institute, *The Los Angeles Times*, February 5, 1995, p. A1. The *Scenarios* study also projects wind's costs falling to a range of 2.5-3 cents/kWh by 2010. Pp. 7.17-7.18.

⁷ Wind cost figure is AWEA's. Coal cost source: *Energy Choices in a Competitive Era* (Alexandria, Va.: Resource Data International, Inc., for the Center for Energy and Economic Development, April 1995). These are conservative numbers—other analyses have shown no gap in the direct cost of power from wind and coal technologies. For example, an analysis by the California Energy Commission of levelized power plant costs shows the cost of wind at 4.6 cents/kWh as compared to 4.6 to 6.0 cents/kWh for coal technologies (all figures in 1993 constant dollars and assuming utility ownership). *1996 Energy Technology Status Report: Report Summary* (Sacramento, Calif.: California Energy Commission, CEC report P500-96-006, April 1997 [Draft Committee Report]), pp. 73-74. On the other hand, to directly compare the value of wind, an intermittent resource, to the value of baseload coal would require the addition of some dispatchable generation capacity to wind plant costs. We believe the very conservative direct cost comparison used in the text (given the fact that some recent wind contracts have been signed in the U.S. at a levelized cost of less than 4 cents/kWh) will be sufficient to cover the cost of dispatchable capacity.

⁸ This figure is calculated on the basis of an 0.6 cents/kWh premium for the cost of new wind generation over the cost of new coal-fired generation, and assumes that one gigawatt-hour (1 million kWh) of wind generation displaces 956.6 metric tons of CO₂ from coal-fired generation. Source of emissions data: Dr. Robert L. San Martin, *Environmental Emissions from Energy Technology Systems: The Total Fuel Cycle* (see note 1, *supra*). $0.6 \text{ cents/kWh} \times 1 \text{ million} / 956.6 = \6.27 per displaced metric ton of carbon dioxide. $\$6.27 \times 3.67 = \23 per displaced metric ton of carbon. The wind cost premium assumes continuation of the federal wind production tax credit, which has a 30-year levelized value of 0.7 cents/kWh, according to the Union of Concerned Scientists. Michael C. Brower, Michael W. Tennis, Eric W. Denzler, and Mark M. Kaplan, *Powering the Midwest: Renewable Electricity for the Economy and the Environment* (Boston, Mass.: Union of Concerned Scientists, 1993), pp. 93-94.

⁹ This point is discussed at length by R. Wiser and S. Pickle in *Financing Investments in Renewable Energy: The Role of Policy Design and Restructuring* (Berkeley, Calif.: Lawrence Berkeley National Laboratory, March 1997). A typical quote from the Executive Summary of this document: "Renewable energy policies should be designed with consideration given to the realities of power plant financing. Policies that do not provide long-term stability or that have other negative secondary impacts on investment decisions will increase financing costs and may reduce policy effectiveness. Stable and predictable policy commitments can, on the other hand, lead to a decrease in financing costs, which should result in reductions in renewable energy costs and in more effective policies."

¹⁰ "AWEA Projects 30,000 MW of Wind Capacity Installed Worldwide Over Next Decade," *Wind Energy Weekly*, Vol. 16, No. 745 (Washington, D. C.: American Wind Energy Association, April 28, 1997), p. 1. AWEA's market projections, based on information gathered from industry and government sources around the world, also indicate that "a significant event such as a fossil fuel price spike or a strong move to slow global climate change" could result in 60,000 MW of new wind generating capacity, or double the base case projection, being installed by 2006.

¹¹ *Scenarios of U.S. Carbon Reductions: Potential Impacts of Energy Technologies by 2010 and Beyond* (Washington, D.C.: U.S. Department of Energy, September 25, 1997), p. 7.19.

¹² Denmark, Germany, India, Italy, The Netherlands, Spain, and the United Kingdom have all experienced substantial growth in wind energy capacity during the past decade as a result of aggressive public policies favoring clean energy development. The case of Denmark is instructive: a country with a population about the same as that of the state of Indiana and a land area less than half Indiana's size went from 343 MW of installed wind capacity in 1990 to 972 MW today while the U.S. market, once the largest in the world, stagnated. Recently, Denmark unveiled plans to boost its onshore wind capacity to 1,500 MW by the year 2005 as part of a national program to reduce CO₂ emissions in that year to 20% below 1988 levels. To indicate the lengths the Danes have gone to to encourage clean energy development and energy efficiency, electricity in Denmark currently costs US 18 cents/kWh (7 cents for production and 11 cents added by a series of taxes to discourage consumption, pay for CO₂ reductions, etc.). Meanwhile, Danish wind developers receive a payment of 11 cents/kWh for the electricity they generate.

¹³ In the "out years" beyond 2010, the difference between the base case and high growth case continues to widen. By 2020, nearly 66,000 MW of wind capacity would be in place in the U.S. in the high growth case, generating 231 billion kWh annually and displacing 221 MMT of carbon dioxide emissions based on coal, compared to base case totals of 28,000 MW, 98 billion kWh, and 94 MMT.)

¹⁴ The term "five-year extension" means changing the deadline date to qualify for the credit (i.e., the date by which a wind plant must be placed in service to qualify) from June 30, 1999, to June 30, 2004. Once a wind plant has qualified, the credit applies for the first 10 years of its operation.

¹⁵ Steve Bernow, Bill Dougherty, and Max Duckworth, "Quantifying the Impacts of a National, Tradable Renewables Portfolio Standard," *The Electricity Journal* (Seattle, Wash.: May 1997). Stephen Bernow, "Analysis of Renewable Portfolio Standards" (Boston, Mass: Tellus Institute, June 1997).

¹⁶ While U.S. government wind energy R&D funding has declined over the past 15 years (even taking account of recent increases), wind R&D funding in Europe has continued to grow. U.S. R&D funding: 1983: \$43 million; FY 1998: \$30 million. European R&D funding: 1983: \$41 million; 1995: \$109 million. All figures in 1992 dollars. Source of funding data "International Wind Energy Research, Development and Demonstration: Government Funding," compilation maintained by U.S. Department of Energy. Source of inflation data: *Annual Energy Review 1996* (Washington, D.C.: Energy Information Administration, U.S. Department of Energy, July 1997), p. 367. Deflator for 1997 has been conservatively estimated at 111.0.

¹⁷ Without a financial incentive to do otherwise, China may well choose the more expedient route of relying heavily on coal power plants with potentially disastrous consequences for itself and other parts of the world. The U.S. must support expansion and replenishment of the GEF and, where appropriate, be willing to provide direct support to China and other countries to avoid a high carbon path.

¹⁸ Michael C. Brower, Michael W. Tennis, Eric W. Denzler, and Mark M. Kaplan, *Powering the Midwest* (Boston, Mass.: Union of Concerned Scientists, 1993), p. 97.

¹⁹ Curtis A. Moore, *Dying Needlessly: Sickness and Death Due to Energy-Related Air Pollution* (College Park, Md.: Renewable Energy Policy Project, Issue Brief No. 6, February 1997), p. 1.

²⁰ Alliance to Save Energy, American Council for an Energy-Efficient Economy, Natural Resources Defense Council, Tellus Institute, Union of Concerned Scientists, *Energy Innovations: A Prosperous Path to a Clean Environment* (Washington, D.C.: Alliance to Save Energy, June 1996), p. 50.

²¹ Calculation: 20,000 MW annual sales x 1/4 (U.S. share) x \$0.75 million/MW x 42 jobs/\$1 million = 157,000 jobs. An employment multiplier of 49 is used for the wind industry in Anne Polansky, Skip Laitner, and Marshall Goldberg, "Assessing the U.S. Employment Hurdles from Increased Production of U.S. Renewable Energy Technologies: Part 2: Multipliers for Export Products" (Washington, D.C.: Solar Energy Industries Association, December 1996). The multiplier is reduced here to 42, as it will decrease with increasing sales. Under AWEA's high growth case, about 21,500 MW of wind capacity would be installed worldwide during the year 2010, excluding U.S. installations.

²² Energy Information Administration, U.S. Department of Energy, *Annual Energy Review 1996* (Washington, D.C.: July 1997), pp. 8-11. *Annual Energy Outlook 1995* (Washington, D.C.:), p. 37.

²³ *Annual Energy Outlook 1995* (Washington, D.C.:), pp. 37.

²⁴ "Gas Seen Gaining Due to Green Power, Climate," *Wind Energy Weekly*, Vol. 16, No. 761 (Washington, D.C.: American Wind Energy Association, August 25, 1997), p. 2.

²⁵ Polansky et al, note 21 supra.

²⁶ *Wisconsin's Economy With Renewable Energy* (Madison, Wis.: Energy Bureau, Wisconsin Department of Administration, July 1995).

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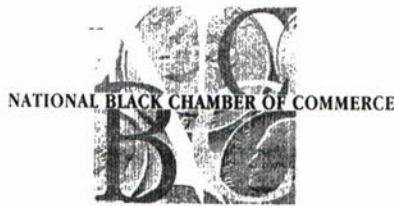
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Today's climate change
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November 24, 1997

Honorable William J. Clinton
The White House
1600 Pennsylvania Avenue, N.W.
Washington, D.C. 20500-0001

Dear Mr. President:

As you prepare to attend the global climate conference in Kyoto, I and the members of the National Black Chamber of Commerce, want to go on record opposing any drastic, legally-binding emissions reduction plan that does not require participation by developing nations. The NBCC, an organization representing over 60,000 black-owned businesses, believes that any approach that will require significant sacrifices of our businesses and negatively impact the communities in which we operate, and does not require the same of developing nations is, neither appropriate nor fair.

The global climate issue, like many issues today that pit environmental concerns against economic ones, has been portrayed as a "government vs. industry" battle. However, as you know, the impacts of the Administration's proposed mandatory reductions will be felt by all Americans. The economic ramifications on NBCC businesses and communities could be devastating. The cost of doing business will rise as we are hit with new overhead costs and rising costs for goods and services. And, the precarious urban communities in which many of our businesses are located, also will be hit hard by inflating energy costs and unemployment.

I do not want to see the economic and social progress made during your Administration eroded by a premature and, possibly, unnecessary position. If something must be done about global climate now, that action must be shared by the global community, and should be approached incrementally—allowing time to develop technologies that will help mitigate the impacts. And, special attention needs to be given to nurturing and protecting minority businesses striving to prosper and, as employers of urban residents, provide an economic safety net for at-risk communities.

Endorsing a proposal that requires developed countries to reduce emissions, only to have the reduction offset by emerging countries' industrial growth, and that threatens our economic future is not the solution to the global climate dilemma. I urge you to reconsider the proposal. There must be a better way.

Respectfully,

A handwritten signature in black ink, appearing to read "Harry C. Alford", with a long horizontal flourish extending to the right.

Harry C. Alford

UNION CARBIDE CORPORATION
39 Old Ridgebury Road, Danbury, CT. 06817-0001
Corporate Administration

FACSIMILE COVER SHEET

TOTAL PAGES
(INCLUDING COVER SHEET): 3

DATE: November 25, 1997

TO: The President of the United States

SUBJECT: Global Climate

FIRM: The White House

FROM: William H. Joyce

LOCATION: Washington, DC

SENDER'S PHONE #: 203-794-3079

FAX #: 202-456-2883

SENDER'S FAX #: 203-794-6104

CONFIRMING #: 202-456-1414

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UNION CARBIDE CORPORATION 39 OLD RIDGEBURY ROAD, DANBURY, CT 06817-0001

W. H. JOYCE
CHAIRMAN AND
CHIEF EXECUTIVE OFFICER

November 24, 1997

The President
The White House
1600 Pennsylvania Avenue, NW
Washington, DC 20500

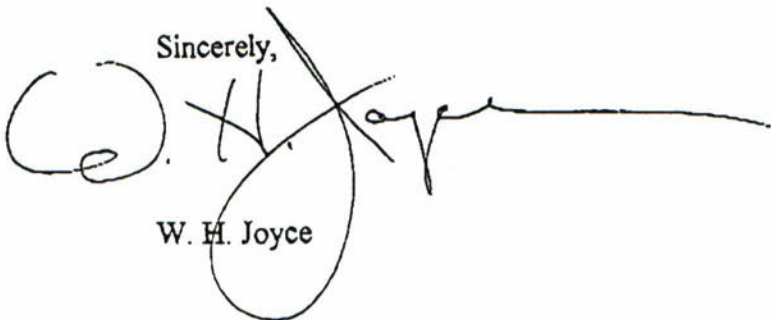
Dear Mr. President:

As the date approaches for global climate negotiations in Kyoto, I am increasingly concerned that the United States is on the verge of making a commitment to reduce greenhouse gas emissions without adequate understanding of the economic impact, driven by higher energy costs, which would necessarily follow.

The debate swirling about this issue continues to reflect considerable scientific uncertainty over the causes and implications of climate change. Additional research and understanding is clearly necessary before adopting policy solutions which may accomplish essentially nothing other than economic disruption and job loss in this country.

I urge you to focus your Administration's efforts at this stage on furthering scientific knowledge on this subject. Considering the potential for truly harmful economic consequences, it is critical that scientific consensus precede policy solutions and that any such solutions not stifle economic growth in this country.

Sincerely,

A handwritten signature in black ink, appearing to be 'W. H. Joyce', written over a large, loopy circular flourish.

W. H. Joyce

CC: see enclosed list

The President
November 24, 1997
Page 2

Attachment to W.H. Joyce letter to President Clinton, November 24, 1997

Copy recipients:

Chief of Staff to the President Erskine B. Bowles
Secretary of State Madeline K. Albright
Undersecretary of State Timothy E. Wirth
Undersecretary of State Stuart E. Eizenstat
Assistant Secretary of State Eileen B. Claussen
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Congressman Ron E. Paul
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Senator John D. Rockefeller, IV
Congressman Robert E. Wise, Jr.

ONEIDA COAL COMPANY, INC.

953 National Road, Suite 207
Wheeling, West Virginia 26003

November 24, 1997

The Honorable Bill Clinton
The White House
1600 Pennsylvania Avenue, N. W.
Washington, DC 20500

Dear Mr. President:

On behalf of Oneida Coal Company, Inc. ("Oneida") and the families of the 1,100 employees of Oneida and its affiliated companies, we write to urge you to direct the Clinton Administration's delegation to the United Nations meeting in Kyoto, Japan, to reject any Global Climate Treaty. It would be irresponsible for the Clinton Administration to negotiate a Treaty that would continue to exempt from coverage major carbon-dioxide emitting countries such as China, Mexico, Brazil, and India.

It is estimated by independent studies that adherence by the United States to the provisions of a proposed Treaty announced by your Administration on October 21 would result in a reduction of \$227 billion in the Gross Domestic Product in the year 2010 alone. This represents more resources than this Country expends on education at all levels -- federal, state and local -- in a year's time.

Additionally, adoption of a Global Climate Treaty would cost the United States the loss of 1.7 million jobs by 2010. Mr. President, if an ill-advised Treaty is executed, we can and will deliver to you, at the White House doors, the names of our employees who represent 1,100 of those jobs, if not the employees themselves in person.

The present Treaty proposal of the Clinton Administration, which reflects the radical environmental agenda of Vice President Albert Gore and EPA Administrator Carol Browner, will serve only to export American jobs without yielding any overall reductions in global greenhouse gas emissions. This course is suicidal for the American economy and indefensible in view of the scientific uncertainty on the issue of the reality of global warming.

Once again, we emphatically urge you to reject any global warming initiative, particularly one that is not truly global in scope. Our 1,100 employees and their families are watching you.

Sincerely,

ONEIDA COAL COMPANY, INC.

Joseph R. Bourgo

Joseph R. Bourgo
Vice President



ENVIRONMENTAL LAW SOCIETY

201 AUSTIN HALL
HARVARD LAW SCHOOL
CAMBRIDGE, MASS. 02138

(617) 495-3125

November 23, 1997

President Bill Clinton
White House
1600 Pennsylvania Avenue, N.W.
Washington, D.C. 20500-0001

Dear President Clinton,

We are writing to communicate our grave disappointment with your recently announced position on global climate change. Heading into Kyoto, your stated position is unacceptably weak, committing the United States to stabilization at 1990 levels only a full decade from now and to reductions below 1990 levels only after 2012. We are troubled by the fact that the emissions timetable you propose is significantly slower than that announced by your administration back in 1994 in the Climate Change Action Plan (CCAP). Under CCAP, you promised to cut greenhouse gas emissions to 1990 levels by the year 2000. In allowing this target to slide by 12 years, the new policy is a major step backwards and inexplicably fails to include any binding measures which would guarantee the same results which were promised but not delivered under CCAP.

In light of the magnitude of the potential threat posed by global warming, the current U.S. position is grossly inadequate. In your speech before the National Geographic Society on October 22, 1997, you acknowledged three key facts: 1) the existing scientific consensus that human activities are altering world climate patterns, 2) the great remaining uncertainties regarding the potential effects of climate change, and 3) the persistence of greenhouse gases in the atmosphere for 100 years or more. In light of your familiarity with this information, we fail to understand how you can deem your current proposal to be adequate. Given the tremendous uncertainties regarding the consequences of climate change as well as the threat of potential irreversibility, we cannot afford your plan to delay meaningful action for more than a decade.

The much-needed global commitment to reductions will only be possible if the United States alters its position and takes a real stand. This is true for several reasons. First, U.S. involvement in the solution is essential because of the significant role we play in causing the problem. As you have noted, we represent less than 5% of the world's population yet are responsible for more than 25% of the world's greenhouse gas emissions. Second, previous global environmental treaty-making experience indicates the importance of real U.S. commitment. For example, U.S. leadership was essential to the success of the ozone negotiations that produced the Montreal Protocol. Third, the future participation of developing countries will only be possible if developed countries make demonstrable reductions in their own emissions.

The United States can afford to strengthen its position. History has repeatedly proven that environmental compliance initially believed to be prohibitively expensive can be achieved economically through innovation. In your speech, you noted 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." You cited numerous examples in which compliance was achieved with much less cost than expected, repeatedly disproving industry expert predictions of devastating compliance costs. In the case of fossil fuels specifically, a study recently noted in the Washington Post observed that between 1973 and 1986, the national economy grew 35% with no increase in energy consumption. Because of our currently egregious levels of inefficiency, the United States is particularly well-situated to achieve significant cuts through relatively painless efficiency increases. We currently use twice as much energy as Europe and three times as much as Japan to produce the same unit of economic wealth.

In particular, we urge you to raise fuel economy standards for passenger automobiles and light trucks with a goal of reaching 40 miles per gallon for the fleets within the next ten years. This step is clearly within existing authority granted by legislation, can be taken administratively, is technologically feasible, and has proven remarkably successful in the past. Though your administration has been reluctant to take this step despite near-universal urging from environmental groups, any serious global warming plan must include requirements for higher fuel economy standards.

Additionally, we call on you to fight for legislation to be enacted by the end of your second term which would establish a national cap-and-trade program for greenhouse gas emissions. Your pledge to enact such a plan in 2008 gives us no comfort since it lacks binding authority on your successors who would need to actually enact and implement the law.

As a second-term President, surely you can find the will to take concrete steps on this issue. Furthermore, the current administration position on global warming undermines the credibility of Al Gore as a leader on environmental issues. Despite the tough rhetoric in his well-received book on the subject, his failure to act on these convictions as Vice President jeopardizes his appeal to environmental voters.

We believe a stronger response is not only merited, but essential. We entreat you to take responsible action based on what you yourself have acknowledged to be the dangers of global warming. The treaty to come out of Kyoto should commit the United States to immediate and real reductions in greenhouse gas emissions. The United States is both obliged to and able to adopt such a position.

Sincerely,

A handwritten signature in black ink, reading "Jason Waanders". The signature is fluid and cursive, with the first name "Jason" and last name "Waanders" clearly distinguishable.

Jason Waanders
President
Harvard Environmental Law Society

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11/25

TODD -

Today's climate change
letters.

 Dan



NOV 25 1997

16

November 21, 1997

The
Plastics
Industry
Trade
Association

The Honorable William J. Clinton
President of the United States
The White House
Washington, D. C. 20500

Dear Mr. President:

I write to express the views and concerns of The Society of the Plastics Industry (SPI) over the forthcoming negotiations in Kyoto, Japan on a global climate change treaty.

The U.S. plastics industry, employing over 1.3 million people and generating annual shipments of more than \$250 billion, strongly embraces the concepts of environmental stewardship and energy conservation. However, we are very concerned about the premises of some of the proposals that are to be discussed in Kyoto. As stated in SPI's recently adopted policy on global climate change, we believe that:

- Greater understanding of the science and economic impact of greenhouse gas (GHG) emissions reductions are needed before committing to legally binding international agreements;
- Actions that require GHG emissions reductions to 1990 or pre-1990 levels would be destructive to the plastics industry and its customers, as well as the U.S. economy and its competitiveness;
- For any international agreement to be effective, it must apply to developing and developed countries alike; and
- Any international agreement must include actions which support healthy economies and not damage international competitiveness.

The U.S. plastics industry produces numerous products that enhance energy efficiency while being environmentally prudent, from insulation materials for our homes to those that help make automobiles lighter and more fuel efficient. However, an international treaty that discourages the production of plastics in the U.S., as many of these treaty proposals would do, is not in the nation's best interests from either an environmental or energy conservation perspective.

Sincerely,

Larry L. Thomas
President

The Society
of the Plastics
Industry, Inc.
Suite 600K
1801 K Street, NW
Washington, DC
20006-1301
202•974•5222
fax 202•293•0309
lthomas@socplas.org

American Electric Power

American Electric Power
PO Box 700
Lancaster, OH 43130

Phone: 614 687-3087
FAX: 614-687-3043
email:

NOV 25 1997

Tuesday, November 18, 1997

The Honorable Bill Clinton
The White House
1600 Pennsylvania Ave NW
Washington DC 20500

Dear Mr. President,

I am writing you on behalf of American Electric Power to voice our opposition to a climate change treaty which could have devastating effects on the United States and its economy.

The limits on greenhouse gas emissions that are being proposed in Kyoto will limit the use of fossil fuels, especially coal, and will drive up the cost of energy, harming the competitiveness of our mining industry. In short, the treaty will affect every mine, every mining company and community in Ohio, every supplier to the mining industry, and employees and their families.

American Electric Power believes that scientists cannot tell us how much and where temperatures will increase or whether they will increase at all. Fuel and electricity costs will go up as well as the cost of other goods and services. This treaty is unfair as more than 130 nations will not be included in the limitations.

While U.S. and Ohio economic growth and job creation will be severely impacted, other nations will be free to continue emitting greenhouse gases, growing their economies and competing for U.S. jobs. Especially hard hit will be the high value jobs in energy intensive industries in Ohio like coal mining and manufacturing.

If global warming is real, the Kyoto Treaty is Not A Solution. By 2010, greenhouse gas emissions from developing countries are projected to exceed those of the U.S. and other countries impacted by the treaty. Overall, global emissions will continue to grow.

American Electric Power opposes the treaty in total and strongly recommends that the U.S. walk away from this poor agreement.

Thank you for your consideration.

Sincerely,



Hugh H. Lucas

Vice President, Mining Operations

NOV 25 1997

Town of Winnsboro

Office of The Mayor

Quay W. McMaster

Mayor



November 20, 1997

The President
The White House
1600 Pennsylvania Avenue, NW
Washington, DC 20500

Dear Mr. President:

Please do not commit the United States to a legally binding agreement to reduce greenhouse gas emissions at Kyoto, Japan next month. I am very concerned that a treaty that only binds developed countries like the U. S. to emission reductions will lead to expensive energy cutbacks and fuel shifts. These changes to the cost and availability of energy will create job loss and economic disruption. Excluding developing countries will jeopardize the United States' global competitiveness and will not reduce the levels of carbon dioxide in the earth's atmosphere.

Why rush to Kyoto when you have only just begun to engage the public in the very important dialogue that should accompany any policy that is as far-reaching as the United Nations climate change treaty? Any agreement made by the Administration must be done with full understanding of the economic, social and internationally-competitive implications, and with full consent of Congress.

Your Leadership on this issue is crucial to protect the continued environmental and economic health of the United States.

Sincerely yours,

Quay W. McMaster
Mayor

QWMcM/bsd

P. O. Box 449
Winnsboro, S.C. 29180
(803) 635-4696

NOV 25 1997



Mark W. Lappen, J.D.
President, CEO

e-mail: mark@signs.org

November 21, 1997

The President
The White House
1600 Pennsylvania Avenue, NW
Washington, DC 20500

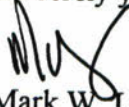
Dear Mr. President:

Please do not commit the United States to a legally binding agreement to reduce greenhouse gas emissions at Kyoto, Japan, next month. I am very concerned that a treaty that only binds developed countries like the U.S. to emission reductions will lead to expensive energy cutbacks and fuel shifts. These changes to the cost and availability of energy will create job loss and economic disruption. Excluding developing countries will jeopardize the United States' global competitiveness and will not reduce the levels of carbon dioxide in the earth's atmosphere.

Why rush to Kyoto when you have only just begun to engage the public in the very important dialogue that should accompany any policy that is as far-reaching as the United Nations climate change treaty? Any agreements made by the Administration must be done with full understanding of the economic, social, and internationally-competitive implications, and with the full consent of Congress.

Your leadership on this issue is crucial to protect the continued environmental and economic health of the United States.

Sincerely yours,



Mark W. Lappen, J.D.
President, CEO

ISA Office
707 N. St. Asaph Street
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Global Climate Coalition
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Suite 890
Washington, D.C. 20005
Tel: 202.682.9161
Fax: 202.638.1043

November 25, 1997

The Honorable Madeleine K. Albright
U.S. Secretary of State
U.S. Department of State
Washington, D.C. 20520

Dear Secretary:

On the eve of the Third Conference of Parties (COP-3) to the Framework Convention on Climate Change (FCCC), the Global Climate Coalition (GCC) wishes to express specific concerns and offer concrete recommendations that we hope will help the U.S. delegation avoid in Kyoto the mistakes that produced a flawed Berlin Mandate. Representatives of American labor and agricultural organizations share our concern.

As the Berlin Mandate was being drafted, President Clinton and Vice President Gore informed Congressman John D. Dingell in a March 31, 1995 letter that the Administration would not commit "to accept any outcome or agree to any process that adversely affects the United States and its industrial competitiveness." Nevertheless, the U.S. delegation, headed by Under Secretary Wirth, agreed to a process which exempted developing countries from "any new commitments." In a 95-0 vote two years later approving S. Res. 98, the Senate made unambiguously clear its opinion that the Berlin Mandate contained a critical flaw. Earlier this month, Under Secretary Wirth acknowledged as much to the House International Relations Committee when he said that the Berlin Mandate was done "hurriedly" and without sufficient care. And he is correct. The Berlin Mandate was ultimately negotiated in the early hours of the morning of the final day by very few countries, including the delegations of the United States and China. A similar negotiation must not occur in Kyoto.

Moreover, the Berlin Mandate process is flawed by an act of omission as well. The mandate, like the President's letter, called for an analysis and an assessment of proposals for greenhouse gas emissions limitations. It specified that the process be conducted "as a matter of urgency" and be completed "as early as possible in 1997." No such analysis has been done. As a result, there will be presented to COP-3 only a Chairman's text of a possible new legal instrument, unaccompanied by either an analysis or assessment of any kind.



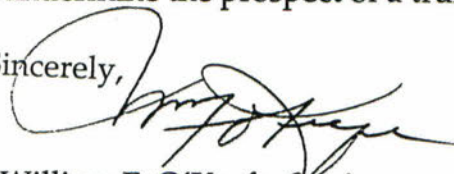
Letter to the Honorable Madeleine K. Albright
November 25, 1997
Page 2

The Chairman's negotiating text (dated November 7, 1997) emerged from the October session in Bonn. However, it contains numerous brackets and footnotes, thus indicating a lack of anything approaching consensus. In addition to such questions as to whether there should be targets and timetables for Annex I Parties only and whether the agreement will be truly global like the Convention, the Parties have not achieved consensus on so fundamental an issue as the form of an agreement. A myriad of other critical substantive and procedural issues remain undecided and an indicative list is attached for your consideration.

All of this demonstrates one simple truth. The Berlin Mandate process has barely reached the point it should have in its first six months; namely the identification of proposals that deserve analysis and assessment. We note with appreciation that the State Department periodically consulted business, industry and others during these negotiations. However, the failure to act on that counsel has left us deeply concerned that Kyoto negotiations could produce a flawed or partial agreement that accepts some decisions as final without knowing whether the provisions are realistic or their consequences acceptable to Congress and the American public.

Looking back, it is clear that COP-1 should have taught the Parties to avoid the mistake of hurried, non-transparent decisions. We fear that COP-3 seems more likely to repeat the mistakes of history than to learn from them. We hope that our fears are misplaced but there is no objective evidence to believe that they are. Climate change is a long-term issue that should be addressed as such. It is far better to make the right decision in Kyoto than be driven by arbitrary deadlines and a crisis philosophy. Near-term targets and timetables will fail because of the economic consequences of trying to achieve them and that outcome will further undermine the prospect of a truly global approach.

Sincerely,



William F. O'Keefe, Chairman

cc: The Honorable Stuart E. Eizenstat, Undersecretary of State for Economic,
Business and Agricultural Affairs
Ms. Kathleen A. McGinty, Chair, Council on Environmental Quality
Mr. Gene Sperling, Assistant to President; Director, National Economic Council
Mr. Todd D. Stern, Assistant to the President; Staff Secretary, Executive
Office of the President
Chairman of Senate Observers
Chairman of House Observers

**Attachment to November 25, 1997 Letter
to Secretary of State Madeleine Albright**

The Global Climate Coalition and representatives of American labor and agriculture groups are concerned that Parties to the Framework Convention on Climate Change have failed to agree to the following substantive and procedural issues as the Parties prepare to meet in Kyoto, Japan:

- Whether to adopt a protocol or amend the Framework Convention;
- Whether to spend significant time on finalizing rules of procedure, which call for consensus rather than voting in order to avoid the U.S. being out-voted by developing countries and others;
- Whether targets and timetables should be legally binding or voluntary;
- Whether to include all greenhouse gases (not covered by the Montreal Protocol) in setting new commitments, or just some gases;
- Whether sinks should be included in the establishment of qualified emission limitation and reduction objectives;
- Whether a flat or differentiated target will be used;
- On single or multiple targets, as well as whether there should be one or more budget periods;
- On the appropriateness of letting some regional economic organizations, such as the European Union, use a bubble so some EU states can grow in emissions while others reduce emissions;
- On the competence of such an organization to enforce such a bubble by timely and effective means that ensures that their target will be achieved;
- Whether to include an international emissions trading scheme;
- Whether such a scheme can be equitable and workable and provide the flexibility promised by the Administration if it is not global, but rather is limited to trading among Annex I Parties;
- On the conditions to be imposed on an emissions trading scheme;
- Whether to include global joint implementation or limit joint implementation to Annex I Parties and whether joint implementation projects will include provisions for credit;
- On the inclusion of banking and borrowing without unreasonable conditions;
- On the exact role that policies and measures should play in the agreement;
- Whether particular policies and measures should be referenced as guidelines or in prescriptive terms;
- Whether all Parties would be mandated to adopt all or most of this list and whether there should be a process to coordinate or harmonize their use;
- On the inclusion in the agreement for an "opt in" article for non-Annex I Parties, to include new and recent entrants to the OECD, to assume new commitments;

- On the extent and nature of efforts to advance and expand the commitments of Article 4.1 of the Convention that are applicable to all Parties, including the U.S.;
- On the nature and extent of new and additional financial resources from Annex I countries to developing countries;
- On the nature and extent of requirements for the transfer to developing countries of new technologies and know-how that are under private patents;
- On the fate of any compensation or development fund proposed by the G-77, plus China;
- On the establishment of a development fund as proposed by the G-77, plus China;
- On a proposal by Brazil which is not part of the Chairman's text and has never really been considered in the Berlin Mandate process;
- Whether entry-into-force provisions include adequate provision for ensuring that all major greenhouse gas emitting countries are Parties before any new legal instrument becomes binding on the United States;
- On the nature and adequacy of compliance provisions;
- On the role of the Convention Secretariat and the powers and duties of the COP for such an agreement;
- On the adoption of Amendments to the Convention regarding the status of Turkey and the adoption of protocols to the Convention;
- On the extent and nature of annual and periodic review requirements and how these costs will be paid;
- Whether a Party will be permitted reservations to the agreement, unlike the Convention;
- On the inclusion of a national security clause that will not result in greater emission reductions for domestic users of energy;
- On the definitions and the preamble;
- Whether any legal instrument will include meaningful commitments for developing country Parties, recognizing that Article 16 (entitled "Evolution") of the U.S. proposal of last January and June (which did not meet the requirements of S. Res. 98) is absent from the Chairman's text;
- On the extent to which any legal instrument will defer to future COP decisionmakers important details, including criteria, guidelines, rules and methodologies, and other matters after entry-into-force of the instrument as to the Parties to the Convention;
- Whether decisions made after Kyoto will be, in fact, binding on all Parties to that instrument or, like the Berlin Mandate decision, be regarded as not binding but adhered to by the U.S. and not necessarily by all Parties; and
- Whether there will be a new negotiating mandate with or without a completion date and with or without a no new commitment exemption for developing countries.



Capital Office
1875 Connecticut Ave., N.W.
Washington, DC 20009
(202) 387-3500
Fax: 202-234-6049

To: Interested Parties

From: Michael Oppenheimer, Annie Petsonk, Joseph Goffman, Dan Dudek

Date: November 25, 1997

As you prepare for the upcoming Third Conference to the Parties to the Framework Convention on Climate Change to be held in Kyoto, Japan next week, we hope that you find useful the attached set of issue briefs on major issues to be resolved at Kyoto.

If you have any questions about these or would like to discuss them further, please do not hesitate to contact us at our D.C. office (202) 387-3500 or New York office (212) 505-2100. From 8:00 p.m. Kyoto time on December 1st through December 11th, Annie Petsonk, Joseph Goffman and Dan Dudek can be reached at the Hotel Gimmond, telephone: (81-75) 221-4111. After December 2nd, EDF's Executive Director, Fred Krupp, and Michael Oppenheimer can be reached at the Hearton Hotel, telephone (81-75) 222-1300.

Thank you.

National Headquarters

257 Park Avenue South
New York, NY 10010
(212) 505-2100

5655 College Ave.
Oakland, CA 94618
(510) 658-8008

1405 Arapahoe Ave.
Boulder, CO 80302
(303) 440-4901

128 East Hargett St.
Raleigh, NC 27601
(919) 821-7793

1800 Guadalupe
Austin, TX 78701
(512) 478-5161



Building An Effective Kyoto Protocol

November, 1997

- 1. Building a Durable Kyoto Protocol: Defining the Goal, Charting The Path**
- 2. Failure at Kyoto: A Narrow Time Window For Reductions, A Steep Price For Delay**
- 3. Building an Effective Kyoto Protocol: Three Gases vs. Six**
- 4. Answering the Competitiveness Conundrum: Market Mechanisms and the Kyoto Protocol**
- 5. Incentives for Early Reductions: Charting The Path To Emissions Targets**
- 6. Building an Effective Kyoto Protocol: Participation By Economies In Transition**
- 7. Building A Durable Kyoto Protocol: Participation of Developing Nations**
- 8. Financing Greenhouse-Friendly Development Under the Kyoto Protocol**
- 9. Building an Effective Kyoto Protocol: Conserving Forests That Take Up Greenhouse Gases**
- 10. Building a Successful Kyoto Protocol: Integrity, Compliance, Enforcement**

* * * * *

November 25, 1997

Building a Durable Kyoto Protocol: Defining The Goal, Charting The Path

Building a Kyoto Protocol that meets the objective of the Framework Convention on Climate Change to limit warming requires addressing both the total amount of warming and the rate at which that warming occurs. The ultimate amount of future warming will be determined by the level at which atmospheric concentrations (i.e. amounts) of greenhouse gases, such as carbon dioxide, are stabilized. The rate at which the world warms will be determined by the length of time taken to stabilize atmospheric concentrations.

The objective of the UN Framework Convention on Climate Change is to stabilize atmospheric concentrations of greenhouse gases at levels that prevent dangerous interference with the climate system. An acceptable concentration and time frame for stabilization should be determined by the consequences to humans and ecosystems that follow from the climate changes that accompany a particular choice.

Long term global warming of greater than approximately 1 degree Celsius above current levels may not have occurred in the ten thousand year experience of human civilization. Adjustment to rates of warming greater than 1 degree Celsius per century would be increasingly difficult for terrestrial ecosystems. We consider a rate of warming of 1 degree Celsius over the coming century and an ultimate warming of slightly more than one degree as a prudent preliminary long term target for global warming policy. This target can be achieved if stringent limitations are applied to overall emissions of all greenhouse gases, including stabilizing carbon dioxide concentrations at 450ppm within one century. In contrast, current scientific understanding indicates that the long term concentration target of 550 ppm proposed informally by the United States and formally by the European Union entails unacceptable risks to human societies and natural ecosystems.

The Kyoto Protocol should be designed to allow the world to retain the option of achieving the 450ppm objective while scientific understanding of the consequences of climate change advances. Many different choices of emissions limitation objectives in the early years, including the proposals of each of the major Parties, are consistent with achieving the long term objective. However, different choices for a first step determine the required stringency, and therefore the likelihood of attainment, of the subsequent steps that will need to be taken to meet the 450ppm goal.

(over...)

Building a Durable Kyoto Protocol: Defining The Goal, Charting The Path, cont'd.

Greater emissions reductions involving more countries and gases, and beginning earlier, create additional room for flexibility in choices later on, and make eventual attainment of the goal more likely than if small reductions involving fewer gases are implemented by fewer countries starting late. Considering the following list of characteristics, it is clear that the proposals of each of the major Parties need to be improved. Strictly from an atmospheric point of view, characteristics of a protocol that leave a wider range of options open in later years, and increase the chances that the long term target will be achieved, include:

1. Stringent emissions limitation obligations leading to reductions below 1990 levels.
2. Early start for emissions reductions, with reductions beginning not later than 2005.
3. Comprehensiveness in gases covered.
4. Inclusiveness in country coverage, i.e. strong incentives for early participation by all nations, including economies in transition and developing countries.
5. Equivalent treatment of protection and enhancement of accountable sinks of gases (e.g., reforestation and forest protection projects).

From an economic and policy point of view, characteristics that enhance the likelihood of success by spurring innovation, reducing costs, and providing Parties with a wider range of options include:

1. Emissions limitation obligations set in terms of legally binding multi-year budgets for carbon-equivalent units (CEUs) for all gases and sources, expressed in comparable terms.
2. Emissions trading and saving of CEUs among nations with budgets.
3. Voluntary joint implementation for credit between budget and non-budget nations.
4. Mechanisms to credit project-based reductions achieved before obligations begin.
5. Availability of a broad menu of compliance options, rather than a centralized or limited range of choices.

Finally, a credible Protocol must invite the participation of sovereign nations, whose participation will be more likely if each nation knows that it will be participating in a regularized system where new obligations are established on a regular and collective basis; and where compliance will be rewarded and non-compliance penalized. The Protocol should therefore include:

1. Rigorous procedures for reporting, accounting, and certification of emissions reductions, and recording of emissions transactions, with all transactions "vintaged," i.e., identified by nation of origin and year of origin.
2. Independent third-party review of reporting, accounting, and emissions limitation performance, with sanctions for fraud in the reviews.
3. Penalties for non-compliance with reporting, accounting, and emissions limitation obligations.
4. Mechanisms by which any Party can raise an issue of non-compliance with reporting, accounting, and emissions limitation obligations.
5. Regular reviews of performance and establishment of successive emissions budgets in light of scientific developments.



November 21, 1997

Failure at Kyoto: A Narrow Time Window For Reductions, And A Steep Price For Delay

Reaching agreement on an effective greenhouse gas Protocol by December 10th seems a daunting prospect. Some have argued that perhaps the nations should simply postpone their efforts. *The costs of delay, however, would be quite steep, in both environmental and economic terms.*

- The world is now in a greenhouse time window. New infrastructure investment is projected to lead to dramatic increases in greenhouse gas (GHG) emissions from many countries. Without action very soon to reduce emissions, it will become vastly more difficult to turn the "supertanker" of emissions from the rocky shores of rapid warming.
- Given the realities of world and national political calendars, failure to reach agreement at Kyoto would likely set negotiations back by 4-5 years - crucial years for the time window.
- Long-lived GHGs are piling up in the atmosphere. Their increasing concentrations are expected to increase the rates of warming. Stabilizing concentrations of GHGs in the atmosphere will require reductions in global GHG emissions.
- Leading ecologists have warned that warming at rates more rapid than one degree Centigrade over the next century could bring about interference with the climate system that is likely to be "dangerous" to ecosystems, including the forests that assure flood control and shelter watersheds critical to much of the world's drinking water supplies.
- A rate of warming of one degree C. over the next century corresponds approximately to an atmospheric concentration at stabilization of 450 parts per million (ppm) of carbon dioxide, accompanied by comparable restrictions on the other five principal trace gases. To prevent dangerous interference with the climate system, it is essential to keep open the option to limit concentrations to 450 ppm while more scientific knowledge develops about the impacts of rates of warming over time.
 - ◆ In this narrow time window, options exist for reducing emissions on paths that keep the 450 ppm option open (see graph below). Soon, however, the window will close, and it will no longer be feasible to reduce emissions on these paths. *When the time window closes, the opportunity to limit warming to one degree will be lost - forever.*
 - ◆ A first emissions budget starting in 2008 is within the time window, *provided that nations adopt strong incentives for early reductions before 2008.*

The following graph shows the narrow greenhouse time window. The graph demonstrates that a five-year delay in the start of legally binding targets will exact a steep price, because it will delay emissions reductions relative to business as usual, and therefore require steeper reductions later in order to keep open the option of stabilizing CO₂ concentrations at 450 ppm. Beginning reductions from business as usual no later than 2005 - which is possible if legally binding targets that begin in 2008 are paired with incentives for early reductions - would require, in the future, global emissions declines as steep as 2.0% per year in order to keep open the option of stabilizing concentrations at 450 ppm. Delaying action five years could require emissions declines as steep as 2.5% per year in order to keep the 450 ppm option - a 20% increase in the rate of reductions needed, and a significantly more daunting prospect in economic terms.

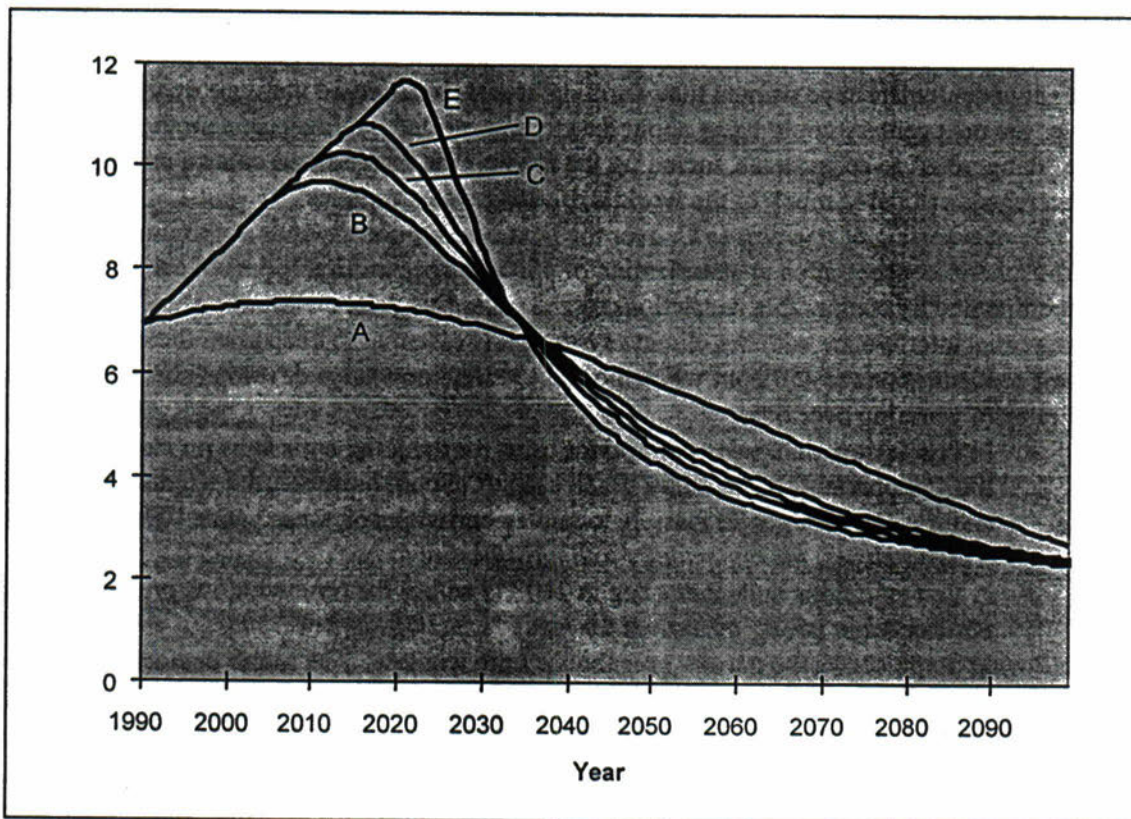
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The Greenhouse Time Window: Global CO₂ Emissions Leading to Stabilization at 450 ppm

The graph below shows five different emissions paths leading to stabilization at 450 ppm in 2100. The graph shows various emissions paths departing from "Business as Usual" ("BaU"):

- The smoothest ("A") curve is the "S" path identified by the IPCC for reaching 450, and implies reductions below BaU beginning in 1990.
- The next ("B") curve is the curve drawn by Wigley, Richels and Edmonds (WRE), and implies that reductions from BaU are delayed until 2005.
- The "C", "D" and "E" curves show emissions paths that delay reductions below BaU until 2010, 2015, and 2020, respectively.

The curves demonstrate the consequences of delay by showing the steepness of the reductions required in subsequent years to meet the desired concentration. Steeper, more accelerated reductions are required, and must be undertaken sooner, precisely because initial action has been delayed. Economically, by creating a more gradual path for emissions reductions over time, early reductions avoid the need for costly, precipitous changes in energy and infrastructure. Failure to achieve early reductions forecloses the gradual paths, leaving only the paths that require unrealizably steep reductions in GHG emissions.



- A - Reductions begin 1990. Gradual reductions, at steepest a 2% annual decline by 2080.
B - Reductions delayed until 2005. Steepest decline of 2%/year beginning not later than 2035.
C - Reductions delayed until 2010. Steepest decline of 2.5%/year beginning not later than 2030.
D - Reductions delayed until 2015 - decline of 3.0%/year beginning not later than 2028.
E - Reductions delayed until 2020 - decline of nearly 5%/year beginning not later than 2025.

November 25, 1997

Building an Effective Kyoto Protocol: Three Gases vs. Six

Earth's climate benefits from a natural greenhouse effect, in which water vapor, carbon dioxide, and other naturally emitted trace gases trap heat that would otherwise radiate into space. The gases are essential to life on Earth, for without their warming effect, Earth's average temperature would be a frosty zero degrees Fahrenheit. A limited number of human-generated greenhouse gases (GHGs), however, are known to enhance this warming effect. Emissions of these gases are on the increase. Warming from GHGs emitted today will affect Earth's climate for centuries. The different gases come from a range of human activities. Their warming effect has been assessed carefully by the scientists of the Intergovernmental Panel on Climate Change (IPCC).

- CO₂. The principal human contribution to global warming comes from *carbon dioxide* (CO₂), produced from burning coal, oil, and natural gas to produce electricity, drive cars, fly airplanes, and grow food. Industrial activities, including manufacturing, also rely on fossil fuels, and therefore emit CO₂. Each ton of CO₂ emitted to the atmosphere typically survives there for 100 years, continually warming the earth. Growing trees and the undisturbed forest soil they live in take up and store CO₂. Forests are therefore sometimes called greenhouse gas "reservoirs," and the process of CO₂ absorption by growing forests is called a "sink." In contrast, cutting and burning forests, or letting soils degenerate, is a source of CO₂ to the atmosphere. Scientists refer to the warming power of one ton of CO₂ in the atmosphere for 100 years as a "global warming potential" of 1 (one). Despite the larger global warming potential of the other gases listed below, so much CO₂ is emitted that it is expected to cause two-thirds to three-quarters of future warming.
- Methane (CH₄). Methane, or "natural gas," is a fossil fuel. When burned, it releases CO₂, although less than coal or oil do per unit of heat. Methane is a greenhouse gas. While its atmospheric lifetime is shorter than CO₂, overall, it is 24 times more powerful a global warmer per ton emitted. Methane is emitted from leaky gas pipelines, landfills, coal mines, rice paddies, and cattle.
- Nitrous Oxide (N₂O). Nitrous oxide exerts 300 times more powerful a global warming effect than CO₂ per ton emitted. Like methane, nitrous oxide is emitted from a mix of agricultural and other activities - from the application of certain nitrogen-containing fertilizers to farm fields, and from the use of adipic acid, a feedstock chemical in nylon production.
- Hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF₆). These chemicals are used as alternatives to ozone-depleting chlorofluorocarbons, and in the manufacture of semiconductors, and some are released from the production of aluminum. Their power as global warmers is, on a ton-for-ton basis, as much as 20,000 times that of carbon dioxide, and their emissions are growing rapidly.

Failure to include any particular class of greenhouse gases in the controls to be established by the Kyoto Protocol could encourage economic activity to shift to those unregulated areas, exacerbating the global warming problem. For example, natural gas can yield more energy
(over...)

Building an Effective Kyoto Protocol: Three Gases vs. Six, cont'd.

per unit of greenhouse gas emitted than can other fossil fuels like coal and oil. So some electric utilities may choose to reduce greenhouse gas emissions by switching from those fuels to natural gas. Including methane in the greenhouse gas emissions controls would provide those utilities with an incentive also to offset or prevent methane leaks from natural gas pipelines. If methane is not included in greenhouse gas emissions controls, however, the shift from coal to natural gas could mean that increased methane emissions from leaking natural gas pipelines negate some of the benefit of reducing CO₂ from coal. In addition, leaving any or set of gases out of a target means that the target overstates its effectiveness in tackling the greenhouse problem, since the target does not cover gases whose contribution to warming will increase.

- The U.S. proposes stabilizing emissions of all six gases at 1990 levels from 2008-2012. Excluding HFCs, PFCs, and SF₆ from its target would enable the U.S. to characterize its proposal as a 5% reduction in CO₂/methane/N₂O, even though the atmosphere would bear the brunt of the increase in the other three gases.
- Similarly, the proposals of both the European Union and Japan exclude HFCs, PFCs, and SF₆. Analyses indicate that when the warming effect of those gases is taken into account, the EU's proposal to reduce emissions 15% from 1990 levels by 2010 shrinks to around an 8-12% reduction, and Japan's proposal to reduce 5% from 1990 levels by 2008-2012 actually amounts to an increase of about 2%.

November 24, 1997

Answering the Competitiveness Conundrum: Market Mechanisms and the Kyoto Protocol

Building a Kyoto Protocol that will invite sovereign nations to join together to meet the objective of the Framework Convention on Climate Change requires that the Protocol answer those nations' concerns about limiting the costs of mitigation and preserving national competitiveness. Fortunately, market mechanisms are available that provide nations and private sector companies with the flexibility to obtain emissions reductions at lowest cost, while spurring the innovation and competition that will be needed to technologies and processes that reduce both emissions and costs. From an economic and policy point of view, the essential elements that enhance the likelihood of success by spurring innovation, reducing costs, inviting the broad participation of nations, and providing Parties with a wider range of options, are:

1. Emissions limitation obligations set in terms of legally binding multi-year budgets for carbon-equivalent units (CEUs) for all gases and sources, expressed in comparable terms.
2. Emissions trading and saving of CEUs among nations with budgets.
3. Voluntary joint implementation with credit between budget and non-budget nations.
4. Mechanisms to credit project-based reductions achieved before obligations begin.
5. Availability of a broad menu of compliance options, including investments in incentives to protect existing forests, plant trees, and re-forest degraded lands, rather than a centralized or limited range of choices.

Experience with analogous tools in various countries, including the emissions trading program established in the United States to control acid rain, has been that properly designed market-based approaches can reduce emissions ahead of schedule and at far lower cost than conventional command-and-control regulation.

For example, the acid rain control program established under the U.S. Clean Air Act imposes a nation-wide cap on sulfur dioxide (SO₂) emissions from electric utilities. Under the Act, utilities that do better than their cap can earn emissions credits by over-complying. They can save the credits, "spend" them to meet future compliance requirements, or sell them to others who find it more difficult to comply. The SO₂ trading program is currently 30% *ahead* of schedule in reducing emissions, and emissions allowances are available for purchase on the national market at *one-fifth the cost* initially expected. A lively, transparent market in SO₂ allowances, unencumbered by mechanisms that interfere with the ability of the emissions marketplace to spur innovation and grind down cost, has encouraged broad participation, and has demonstrated the power of these tools to answer the competitiveness and cost questions that nations face at Kyoto.

The Protocol should also penalize those who fail to comply with their emissions budget obligations, including the transparent accounting, reporting, and monitoring requirements. These penalties not only ensure the system's integrity, but also ensure that those who comply with their obligations will not be placed at a competitive disadvantage relative to those who do not.



November 15, 1997

Incentives for Early Reductions: Charting The Path To Emissions Targets

The early reduction of greenhouse gas emissions is critical from both an environmental and an economic perspective. Environmentally, as IPCC Chairman Emeritus Bert Bolin reported to SBSTA on October 24, 1997, early reductions are "of major importance" in the long term because they are what begins to turn the "supertanker" of emissions away from the rocky shores of rapid warming. They are also critical, as the attached graphs demonstrate, in keeping open the option for limiting atmospheric concentrations and consequent warming while more scientific knowledge develops about the impacts of rates of warming over time.

Economically, by creating a more gradual path for emissions reductions over time, early reductions avoid the need for costly, precipitous changes in energy and infrastructure. The challenge is to create incentives for early reductions prior to the start of the first legally binding target/budget period. One way of creating powerful incentives for early reductions is to provide national, and, where appropriate, international, assurance that early reductions will be awarded the same treatment as reductions that occur during a legally binding budget period. This applies to: (1) early reductions through actions at home; (2) early reductions through international cooperation among nations with legally binding emissions budget commitments; and (3) early reductions through international cooperation between nations with and without legally binding emissions budget commitments.

The next two pages identify the accounting rules that can enable nations to establish credible, environmentally and economically effective early reduction crediting programs, including programs that provide incentives for investments at home, abroad, in technologies and processes, and in forest protection and planting.

(over...)

Incentives for Early Reductions, cont'd.

1. Early Reductions Through Action At Home. As a matter of sovereign domestic policy, nations may recognize and award credit for emissions reductions at home prior to the start of a legally binding budget. To provide assurance to the international community that the reductions, which otherwise will not be subject to international scrutiny, are credible, any nation awarding such credits would subtract the credits from its first budget. Nations do not need international approval - they can start this early reduction incentive program right away.

- This early reductions program can achieve significant environmental and economic benefits. For example, if, prior to the start of a legally binding budget period, a company in a nation with a binding emissions budget commitment reduces its GHG emissions by 50,000 tons of carbon-equivalent from an agreed baseline, the nation could, as a matter of its sovereign domestic policy, award that company a 50,000-ton credit that the company could save and use during the budget period. To provide international assurance that the nation will not exceed its future emissions budget if the company emits the entire 50,000 tons, the nation would subtract the 50,000 tons from its first budget.
- Overall, the environment is better off because the 50,000 tons of early reductions are eliminated from the atmosphere. In addition, the availability of these early reduction credits provides a powerful economic incentive for early action, because it rewards those who act early, and negates any advantage of delay. Early reducers gain flexibility by earning credits that they can save or sell in the future.

2. Early Reductions Earned Through International Cooperation Between Nations With Legally Binding Budgets. There are strong environmental and economic benefits for providing early reduction credit for emissions reductions earned through pre-budget projects undertaken cooperatively by budget nations. (By definition, all such reductions must be determined on a project basis, since no budget exists.) These benefits obtain regardless whether a nation's actual emissions are projected to be above or below its future budget level. While this early crediting does not affect cumulative atmospheric loading, it does provide strong incentives to lessen emissions early, when large concentrations of greenhouse gases mean faster warming. It also provides incentives for industrialized nations to invest sooner in revitalizing technology, capital stock and infrastructure in other budget nations, particularly economies in transition.

(a) Early Projects. If an investor in a budget nation undertakes an emissions reduction project in a host budget nation prior to the start of the first budget, the project reduces emissions from a project baseline, and is reported and verified to the international community, then, with the prior voluntary agreement of the two nations, all or part of the project's emissions reductions earned prior to the start of legally binding budgets could be held by the investor and later added to the investor nation's budget. Any remainder could be added to the host nation's budget.

(b) Reduction "Stream" From Early Projects. Some early reduction projects might continue to yield reductions during the legally binding budget period. In that case, after the budget period starts, the host country would simply track and report the emissions reductions that flow from the project. If by mutual agreement the host country wished to transfer some or all of those reductions to the investor, then, as an accounting matter, the host country would simply subtract from its budget any reductions that the investor country, through the transfer, wished to

Incentives for Early Reductions, cont'd.

add to its budget. This accounting convention follows the accounting procedures that would be used for projects that start during a budget period. (The same "budget-add, budget-subtract" procedure would apply to transactions of budget tons, including forward and during-budget sales, regardless whether the selling nation's actual emissions were above or below budgeted levels.)

3. Early Reductions Earned Through International Cooperation Between Budget and Non-Budget Nations. With the prior agreement of the two nations, an investor in a budget nation might invest in an emissions reduction activity in a non-budget nation prior to the start of a legally binding budget. In that case, provided the activity yielded emissions savings, as measured against a project baseline, additional to what otherwise would have occurred, then, with the prior agreement of the two nations, the emissions reductions earned could be held by the investor and added to the investor nation's legally binding budget. Alternatively, the two nations could share in the early credit. The host nation could sell its share of the early credits, or save them for its own use in the event that it someday adopted a legally binding budget. Such early crediting would provide a powerful incentive for investments in greenhouse-friendly technologies and services during the infrastructure boom in rapidly developing nations.

Forests. Properly verified forest protection or afforestation projects, whether early or during a budget, and whether at home or abroad, should be creditable, provided the projects' success is reliably quantifiable on an annualized basis, and includes accounting for exogenous factors such as leakage. Domestic projects in budget nations that add to the forest baseline would be added to the national budget; where there is no forest baseline, any sale or use of such credits by a budget nation/investor would require a debit from the national budget. Credits earned through cooperative early forest projects in countries without budgets and awarded to budget nations/investors should be recognized as additions to the budget of the investor nation.

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November 21, 1997

Building an Effective Kyoto Protocol: Participation By Economies In Transition

To be effective in global terms, it is essential that the Kyoto Protocol engage all industrialized nations, including economies in transition, in the adoption and implementation of credible, environmentally adequate legally binding targets to limit and reduce greenhouse gas emissions. As part of that engagement, it is essential that the economic revitalization that is beginning in Russia, Poland, and other economies in transition proceed with vitality, and proceed in the context of an international system that provides incentives for new investment in the greenhouse-friendliest technologies possible.

At the same time, to a great extent, the effectiveness of a Kyoto Protocol will depend on its environmental credibility. Therefore, the approach to emissions reduction crediting for all nations, including the economies in transition, not only must provide credible accounting for emissions transactions at both national and international levels, but also must preserve incentives for greenhouse-friendly investment in all industrialized nations. Given that a Kyoto Protocol likely will require industrialized nations to limit their emissions to 1990 emissions or below, and given that the emissions of economies in transition have fallen below 1990 levels, some nations have challenged the terms under which economies in transition should be permitted to engage in emissions transactions. Nations with economies in transition, by contrast, believe that they should not be discriminated against relative to other nations, particularly when any so-called emissions "windfall" has been the result of painful economic restructuring.

A simple set of rules can bridge the gap in the dispute, delivering environmental performance, environmental credibility, and fairness. These rules all follow from the premise that the credibility of emissions transactions depends solely, vitally, on the existence of a baseline from which emissions reductions can be measured. In the case of countries with emissions budgets, their legally binding budget target provides the baseline. In the case of transactions with nations that have not adopted budgets, or whose budget periods have not yet begun, transactions must demonstrate that they flow from projects that have reduced emissions below the baseline of what would have otherwise occurred. The resulting rules are:

- Transactions in early reductions from a baseline. In all cases, prior to the beginning of the first budget, crediting should be available for cooperative early reduction projects that demonstrably reduce emissions below the baseline of what otherwise would have occurred.
- Sales of budget tons, during or before the start of the budget period. All nations with emissions budgets should be allowed, without discrimination, to transact carbon-equivalent units (CEUs) from their national emissions budgets during and prior to the start of the budget period. All such sales of CEUs must be reported internationally as deductions from the sellers' national budgets. Of course, failure to meet budget levels will subject, without discrimination, non-performing nations to the Protocol-specified consequences, including suspension of sales of CEUs.
- Pre-budget "windfall." No nation should be allowed to transact any pre-budget difference between actual emissions and 1990 levels.

Inclusion of these simple rules in the Protocol will ensure that strong incentives for greenhouse-friendly investment will foster revitalization in economies in transition while maintaining the Protocol's environmental integrity and credibility.

November 21, 1997

Building a Durable Climate Change Protocol: Participation of Developing Nations

Participation of all nations in greenhouse gas emissions reduction will be essential if nations are to achieve the Framework Convention objective of preventing dangerous anthropogenic interference with the climate system. Developing nations, however, face many competing demands as they search for the resources to enable their sustainable development. From the perspective of atmospheric science, while developing nations do not need to begin participating at precisely the same time as industrialized nations, it will be impossible to meet the Convention's objective if either group waits indefinitely; and the longer either group waits, the more difficult it will be to meet the Convention's objective. From an economics and policy perspective, the longer that either group waits, the more expensive it will be for all.

The greatest challenge nations will face at Kyoto, and the greatest opportunity they can seize, is to develop a structure that invites the earliest possible participation of developing nations. An agreement that leads with a strong commitment by industrialized nations, and incorporates the following elements, can meet the challenge and the opportunity of Kyoto:

1. Joint implementation for credit, starting as soon as possible. Joint implementation, undertaken voluntarily, can provide developing countries with improved technologies and enhanced protection of forest resources, reduce emissions at lower cost, and enable developing countries to begin to build carbon-equivalent unit (CEU) reserves for their future use.

- The earlier that for-credit joint implementation begins, the sooner developing nations can, on a voluntary basis, participate in the technology and resource transfers that it can provide.
- Credible accounting systems for technology and forest-based projects, as well as a mechanism by which any Party can challenge the accounting and reporting of such projects, provide the integrity backstop for effective joint implementation.

2. "Growth" budgets for nations that voluntarily adopt emissions budgets early. Nations undertaking project-based joint implementation will face relatively high transactions costs. They can reduce those costs, and therefore encourage more investment in their emissions reduction opportunities, if they voluntarily adopt emissions budgets.

- Developing nations that adopt budgets early should receive growth budgets - initial budgets above historic emissions levels.
- Growth budgets should be set in terms of an overall cap, as with budgets for industrialized nations. Fluctuating budgets, such as those based on per capita emissions, should be avoided, since, because the CEU totals for such budgets would not be readily calculable, they would hamper nations' participation in an international emissions trading market.

3. Participation of all major emitting nations in emissions budgets within a definite time window. It is vital that all major emitting nations begin to participate in emissions budgets during the narrow time window that exists for keeping open the long-term concentration options of preventing dangerous interference with the climate system.

November 21, 1997

Financing Greenhouse-Friendly Development Under the Kyoto Protocol

To be effective in global terms, it is essential that the Kyoto Protocol provide mechanisms, over time, that engage the participation of developing nations in activities that foster economic growth and sustainable development while limiting and reducing greenhouse gas emissions. While industrialized nations should take the lead in reducing emissions, since they have contributed most to the global warming problem to date, emissions from developing nations are projected to overtake those from industrialized nations in the relatively near future, and after that, it will be impossible to limit warming and stabilize atmospheric concentrations of greenhouse gases without the participation of the developing world.

At Kyoto, what will industrialized nations offer developing nations in the way of incentives to invite the participation of the latter group in emissions reduction activities? Can the Kyoto Protocol be designed so as to foster clean development? Several proposals have been offered that link industrialized country compliance with investment in cleaner growth in developing countries. Together, many of these options provide an important menu of credible, effective options and incentives. Limiting the options to only one of these proposals, however, risks sacrificing the advantages that group of proposals together can provide.

Options currently on the table include joint implementation for credit, and a range of proposals for carbon investment funds. These potentially are useful if structured so as to preserve the integrity of the compliance mechanisms in the Kyoto Protocol. In fact, if the Protocol is properly designed, it will spur the creative development of more such options. *What is essential, however, is that the Kyoto Protocol recognize only those options that have at their core the common elements that ensure integrity in the context of compliance with the Kyoto Protocol.* Therefore, the Protocol should accept only those linked compliance-funding mechanisms that:

- Proceed from the core Kyoto Protocol structure of emissions budgets, expressed in carbon-equivalent units (CEUs), with comprehensive coverage of all greenhouse gases, and equivalent treatment of protection and enhancement of accountable sinks (e.g., reforestation and forest protection projects).
- Utilize common reporting stated in carbon-equivalent units (CEUs).
- Identify CEUs by country and year of origin ("vintaging").
- Only engage in CEU transactions that are processed through the double-entry book-keeping system upon which the integrity of the Protocol will be premised.
 - Under that system, every emissions transaction must be recorded by deducting the CEUs sold from the seller nation's budget and adding the CEUs purchased to the buyer nation's budget, and the balance in every nation's budget account must be calculated ("true-up") at the end of each year.
 - Where the trade reflects an emissions reduction investment in a project, reporting must include the year in which the CEUs were earned.

November 21, 1997

Building an Effective Kyoto Protocol: Conserving Forests That Take Up Greenhouse Gases

The principal human contribution to global warming comes from carbon dioxide (CO₂), produced from burning fossil fuels. Cutting forests, burning wood, and letting soils degenerate, all release CO₂ to the atmosphere. Each ton of CO₂ released to the atmosphere, whether from burning fossil fuels or cutting down forests, typically survives in the atmosphere for 100 years.

But forest ecosystems take up carbon dioxide during photosynthesis, and the undisturbed forest soils they live in store large amounts of CO₂. (Forests are therefore called greenhouse gas (GHG) "reservoirs," and the process of CO₂ absorption by growing forests is called a "sink.") Because forests and forest soils possess a tremendous capacity to absorb atmospheric CO₂ and provide a natural, long-term carbon reservoir, it is critical that a Kyoto Protocol provide powerful incentives to protect existing forests, plant trees, and re-forest degraded lands. In constructing these incentives, three questions arise:

1. Forest baselines. How can national greenhouse budgets be developed that take account of the entire baseline forest conditions in a nation, as well as changes to that baseline over time?

- When sufficient scientific data are available, GHG emissions budgeting will be most effective if national budgets are adopted for net greenhouse gas emissions, i.e., the national budget is set in terms of gross emissions minus removals by sinks.
- However, in many nations, there are significant uncertainties about the amount of land that is covered in forest and the amount of carbon that this forest takes up.
- The Intergovernmental Panel on Climate Change (IPCC) should be asked to prepare a report that would provide the foundation for the adoption, by the end of the present decade, of consistent, transparent, and comparable methodologies for measuring and reporting emissions and removals from land-use change and forests.
- Future budgets should be established in terms of net emissions.

2. Forest project crediting. In an emissions budget and trading system, should nations be eligible to receive credit for particular forest projects? If so, how should credit be awarded?

- Properly verified forest conservation or afforestation projects, whether undertaken during a budget period or commenced prior to a budget period, and whether at home or abroad, provide a significant potential for carbon storage, and should be creditable, even in the absence of national forest baselines, provided the projects' success is reliably and regularly quantified, and includes credible accounting.
- Domestic projects in budget nations that add to the forest baseline would be added to the national budget.
- Where there is no forest baseline, any sale or use of such credits by a budget nation/investor would require a debit from the national budget.
- Credits from cooperative early forest projects in countries without budgets and awarded to budget nations should be recognized as additions to the latter countries' budgets.

3. Crediting for conserving existing forests. How can an agreement be designed that provides incentives for protecting existing mature forests, whose soils store vast amounts of carbon?

- Projects that demonstrate that they will take up more carbon than would otherwise have occurred, should be eligible for crediting. When such projects conserve existing forests, they will need to take care that the pressure to displace the project's potential wood supplies is not simply shifted to another supply source.

November 21, 1997

Building a Successful Kyoto Protocol: Integrity, Compliance, Enforcement

Enforcing compliance among sovereign nations is the fundamental challenge of any international treaty. Essential to the success of a Kyoto Protocol will be mechanisms that invite - and enforce - compliance with emissions accounting and performance obligations. Fortunately, the use of market-based approaches can add incentives to the Kyoto Protocol compliance tool-kit.

Monitoring, Reporting and Accounting. Regular, transparent reporting and accounting for emissions of all gases, from all sources, and uptake by all sinks, is the heart of any successful international agreement to reduce greenhouse gas emissions (GHG).

- To ensure compliance accountability, the reporting needs to be stated by GHG emissions/uptake as well as carbon-equivalent units (CEUs).
- To ensure accurate accounting, the Kyoto Protocol should provide that any Annex I Party not in compliance with its reporting obligations is assumed to have emissions a specified level (e.g., 20%) over budget and must buy its way back into compliance; any other Party not in compliance with its reporting obligations is prohibited from engaging in emissions transactions, including joint implementation.
- A Kyoto agreement that allows emissions reductions to be traded will need to require reporting/accounting of all transactions, identified by country and year of origin.
- **The heart of the Kyoto Protocol's accounting system is rigorous reporting. Every emissions transaction must be recorded by deducting the CEUs sold from the seller nation's budget and adding the CEUs purchased to the buyer nation's budget. This double-entry book-keeping ensures that there are no off-budget transactions. Every transaction, whether joint implementation or emissions trading, must be entered in each nation's budget account books**
 - Where a trade reflects the transfer of an increment of a nation's emissions budget, the nation and budget year from which the CEUs were sold must be entered on the budget books of both the seller and the purchaser.
 - Where the trade reflects a specific emissions reduction investment and not just the transfer of an increment of a nation's emissions budget, reporting should include the year in which the CEUs were earned.
 - In either case, this identification, often called "vintaging," allows the Protocol to reduce, by rule, the credit value of CEUs transferred by nations that have exceeded their budgets. This rule enables the market to provide feedback to each nation, delivering a powerful incentive for nations to improve their environmental performance. With such a rule, CEUs from high-performing nations will be able to command higher market prices, and will also earn better ratings from the private, non-governmental carbon quality "rating" services that are likely to develop.
- Equally critical is a required annual "true-up" or balancing of the emissions budget books. True-up reveals a nation's compliance or non-compliance with emissions budget obligations.
- Only by requiring vintaged reporting of all emissions, uptake, and transactions by all nations, with annual "true-up" of emissions budget accounts, can the Kyoto agreement deliver credible environmental results.

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Strong Compliance And Enforcement Mechanisms. Market-based approaches provide opportunities for, and demand, compliance mechanisms that use the “stuff” of emissions transactions to generate powerful incentives for nations to meet their emissions obligations. Five simple rules provide the compliance structure that can make the Protocol a success.

1. End-of-budget penalty for emissions over-budget. Any emissions over-budget should be deducted automatically from the next budget, with a penalty. For example, if a nation exceeds its budget by 1 million tons of carbon-equivalent, and a penalty of 20% were included in the Kyoto Protocol, then 1,200,000 million tons would be deducted from its next budget. Failure to include this mechanism will simply invite unlimited “borrowing” from future.
2. In-budget automatic credit reduction for emissions over-budget. To deliver a similar compliance incentive that begins to “bite” during a budget period, the Protocol should automatically reduce the credit value of CEUs from nations whose emissions are in excess of their budget amounts during a budget period.
3. Ban on export of credits from non-reporting nations. The primary backstop for these compliance mechanisms is a rule ban the export of emissions reductions from any nation whose compliance with reporting requirements has been called into question. This export ban, however, is not sufficient by itself to enforce in-budget compliance - it needs to be supplemented with the automatic credit reduction (Rule #2 above).
4. Third-party auditing, with consequences for fraud. The secondary backstop is that the Protocol should require all Protocol Parties to adopt legislation for certifying independent emissions auditors; for conditioning emissions transactions upon the completion of independent audits; and for criminalizing fraud in the reporting, accounting, auditing, and transacting of CEUs as well as in the conduct of expert reviews under Article 9 of the Kyoto Protocol. Without this provision, there is no guarantee of the independence of auditors and expert reviewers.
5. Menu of compliance alternatives. The Protocol should invite the development of a range of mechanisms by which nations can bring themselves back into compliance with their environmental obligations. For example, nations should have the choice of stepping up their emissions activities at home, increasing their investment in emissions-reducing technology transfer and related projects abroad, or procuring offsetting credits from the international market, including from funds that pool investments in offset projects that produce verified emissions reductions. The Protocol should prohibit mechanisms that would undermine the obligations (e.g., the Protocol should not allow nations to print and sell new paper CEUs.)

Including these compliance tools in the Kyoto Protocol, and ensuring that any Party may raise a challenge and obtain review of another Party’s implementation under these rules, will help assure those who reduce emissions to realize the value of their investments, while punishing those who fail to comply.

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Samuel L. Maury
President

Patricia Hanahan Engman
Executive Director

October 24, 1997

The Honorable William J. Clinton
President
The White House
Washington, DC 20502

Dear Mr. President:

On behalf of The Business Roundtable, I would like to express concern with regard to your October 22 Climate Change Proposal. First, I have to say that we are disappointed that you intend to commit the U.S. to binding targets and timetables at Kyoto. We have long held the view that such commitments are premature. On the other hand, we feel your Proposal contains several positive elements. We are pleased that the initial stages of the program focus on voluntary measures and on the development of existing and new technologies to reduce greenhouse gas emissions. Voluntary measures should include all significant sources of emissions and not just industry. We are also gratified to see that you agree that less developed countries must be included in a worldwide emissions reduction program, and not just the developed world. Without their inclusion in a system that is enforceable, no program can possibly succeed. It is essential that the program does not result in a competitive disparity which would lead to the migration of jobs and investment from the developed world to the less developed world.

While we recognize that you find the science behind the global climate theory convincing, we are less persuaded. We believe that it is important that emphasis be placed on refining and developing that science to the point where we truly know the extent of the problem and its timing and impact.

Similarly, a great deal is unknown about the economic impact of an emissions reduction program. Before the United States makes binding commitments to reduce its emissions by a certain date, we must have a firm grasp of the economic sacrifices that our society will be required to make.

For this reason we oppose the binding targets and timetables included in your Proposal. We see no need for these targets or timetables until it is clear they are required by the science and by the long term concentration goal which your Proposal says will be set in

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the future. We note that the first ten years of the Program involves priming the pump through such programs as R & D, tax incentives, incentives for early action and industry consultation followed by a review and evaluation in preparation for the permit trading system. We therefore see no need for the Senate to ratify a global climate treaty until your Administration makes clear how it would implement its program of compulsory reductions to meet these targets and timetables. The Senate should not be asked to commit the nation to a compulsory program of emissions reductions without a clear explanation of the measures that are to be taken to implement it.

While we disagree on certain aspects of your Proposal, The Business Roundtable stands ready to work with you on this important issue in the months and years ahead.

Very truly yours,

Robert N. Burt

Robert N. Burt
Chairman, The Business Roundtable Environment Task Force
Chairman and CEO, FMC Corporation

cc: The Honorable Albert Gore, Jr.
The Honorable Robert E. Rubin
The Honorable Federico F. Pena
The Honorable William M. Daley
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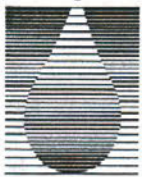
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Florida Petroleum Council

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A Division of the American Petroleum Institute

December 1, 1997

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The White House
1600 Pennsylvania Avenue, NW
Washington, DC 20500

Dear Mr. President:

As your delegation embarks on negotiations in Kyoto, Japan this week, I trust your representatives will carefully consider all options prior to any treaty agreement on global climate change.

The United States has a great deal at risk in these discussions, and we hope you will consider these important points:

- The costs of a treaty could be enormous to the U.S. economy and American consumers.
- There are many scientific uncertainties about the issue yet to be resolved.
- Voluntary programs called for in the Rio treaty should be continued and caution should be used in this approach.

Given the importance of this issue and the implications of it for all Americans, I hope you will consider these points and the issues raised in the attached editorial from this weekend's *Florida Times Union*.

Sincerely,

Doug Shelby

DS/sa

cc: Florida Congressional Delegation

12/9

Todd -

Climate change letters
rec'd 12/9.

ENVIRONMENT

The Kyoto caper

So, off we go to Kyoto, ready like St. George to slay the dragon of global warming.

Lacking science to support the theory that global warming is occurring, that it is caused by humans, or that the overall effect would be harmful, the radical environmentalists tell us that we can't take a chance on it happening and therefore must take drastic action to stave it off immediately.

Why the same logic does not apply to the threat of the Earth being hit by a giant meteor is not readily apparent.

Business and industry already are acting to limit emissions that conceivably could contribute to global warming. They don't have to be told by politicians what is the prudent thing to do.

What they object to is excessive taxes and regulation that would drive up the cost of electricity, gasoline and other energy sources, and throw millions out of work, without a clear benefit.

Contrast one scientist's calm observations with the media hysteria.

Richard Lindzen, MIT professor of meteorology and a scientific adviser to the United Nations Intergovernmental Panel on Climate Change, has been quoted as saying, "The record continues to show nothing that can be credibly distinguished from the normal fluctuations in climate."

He also said the weather has not been unusual and that the El Nino is a natural phenomenon with no demonstrated relation to global warming.

Lindzen said of the proposed treaty to be discussed in Kyoto, "One thing is certain: whatever they agree to, it will

have little qualitative effect on the world's climate."

It might also be noted that on page 203 of the report by the IPCC, widely reported as the scientific "proof" of global warming, it says, "The Little Ice Age came to an end only in the 19th century. Thus, some of the global warming since 1850 could be a recovery from the Little Ice Age rather than a direct result of human activities."

On page 254 it said, "Thus, it is not possible at this time to attribute all, or even a large part, of the observed global-mean warming to enhanced greenhouse effect on the basis of the observational data currently available."

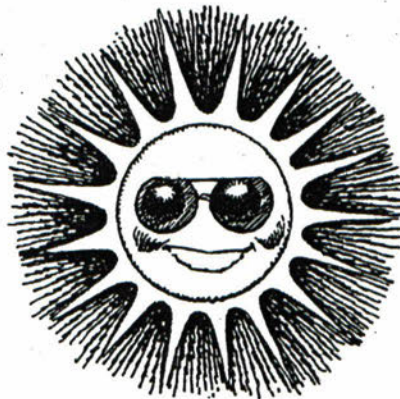
While the science is highly speculative, the economic impact is more certain. For example, it has been calculated by

DRI/McGraw Hill that reducing greenhouse gas emissions to their 1990 levels by 2010 would cost the United States 5 million jobs over a decade.

One of the humorous aspects is a news report that Vice President Al Gore was wavering on attending the event.

Mr. Global Warming can't decide whether it is politically expedient to go. Pending a definitive reading of the tea leaves by Gallup and others, he is not certain whether bad will from the economic havoc might overcome the goodwill from the warm and fuzzy treaty when votes are counted in 2000.

By all outward signs, this "environmental" issue is driven by politics. Lowering the living standards of millions of people in order to avoid an unproven threat and fulfill some political agendas would be a tragic blunder.





DEC 9 1997

The Dexter Corporation

One Elm Street
Windsor Locks
Connecticut 06096-2334
TEL (860) 292-7675

December 4, 1997

The President
The White House
Washington, D.C. 20500-0049

Re: Global Climate Change Treaty

Dear Mr. President,

I am writing on behalf of The Dexter Corporation to suggest an approach to the reduction of greenhouse gases that will avoid the adverse economic consequences of the Administration's current proposals.

Rather than hurriedly endorsing targets which may prove ineffective and cause great damage to the U.S. economy, the U.S. should foster a multi-national commitment to voluntary emission reduction measures spurred by incentives for environmentally beneficial economic growth.

The focus of emissions reduction strategies should be to adopt clean technology globally, and not to limit growth in the U.S. and other countries where clean technologies are already in use. By exporting U.S. environmental technology to lesser-developed countries, we can greatly reduce greenhouse gas emissions at the same time as we spur economic growth.

Binding reduction targets, on the other hand, will result in severe economic dislocation and inefficient government administration of emissions trading and similar complex programs. Experience with the Clean Air Act has shown a need to continually revise our legislative approach as our understanding of the technical and practical complexities of controlling air pollution has grown. A multi-national treaty with binding targets will not be easily renegotiated if experience shows that a change in approach would be wiser.

In addition, targets will have a significant adverse effect on the environment if they are not equally binding on LDC's. LDC's have the highest growth rates for greenhouse gases and the highest output of greenhouse gas per unit of gross domestic product. Establishing targets for developed countries while exempting LDC's will shut down technically-advanced industry in the U.S., while encouraging further growth of dirty, low-technology industry in LDC's.

Page 2

In conclusion, limiting growth in countries which are already using clean technology, while allowing unrestricted growth in countries which have made little or no effort to protect the environment, is a recipe for economic and environmental disaster. Instead, the U.S. and other developed countries should use our technology to address global environmental challenges and spur growth at the same time.

In addition, government should partner with business through incentives and other voluntary programs rather than imposing "command and control" regulations. Mandatory regulation on a subject as complex and dynamic as climate change will fundamentally damage free markets and will be much less effective than an incentive-based approach which taps into the creative energy of U.S. industry.

Your leadership on this issue can move U.S. policy away from complicated targets, which will harm both the global environment and the U.S. economy, and towards environmentally pro-active incentives, which will reduce greenhouse gases while supporting economic growth.

Thank you for your attention in this matter.

Yours very truly,

A handwritten signature in black ink, appearing to read "John B. Blatz", with a long horizontal flourish extending to the right.

John B. Blatz
Corporate Director, Environmental Affairs

JBB:sfp

cc: K. G. Walker
Chairman and Chief Executive Officer

DEC 9 1997



Windy Sitton ★ Mayor

December 3, 1997

The President
The White House
Washington DC 20500

Dear Mr. President:

As Mayor of the City of Lubbock, Texas, I am expressing our **opposition to the proposed Kyoto Treaty**. The science behind global warming theories is uncertain at best. What is certain is the lopsided competitive disadvantage the communities of the United States will face in a treaty that ignores greenhouse gas emissions of developing nations, and adversely affects every American.

- The cost of driving to work and school will increase.
- The price for transporting goods will increase.
- Sales of American goods in the world marketplace will decrease due to increased prices related to higher costs of energy, including production and transportation.
- Decreased demand for higher priced goods will result in loss of American jobs.
- Developing nations will not be affected by the treaty, and will benefit from an artificially derived competitive advantage as they contribute disproportionate amounts of pollutants.
- The cost of living for American families will increase due to increased costs of gasoline, transportation, consumer products and energy for home heating and cooling.

As a community, the City of Lubbock values the environment and participates in a great variety of pollution prevention programs. However, we are opposed to the Kyoto treaty because it is based on uncertain science, reduces the competitiveness of American cities in the world marketplace and places an unfair economic burden on American citizens.

Sincerely,

Windy Sitton, Mayor
City of Lubbock

DD/df
mayor:pres.doc

DEC 9 1997

Coca-Cola Bottling Company
of Indiana, Inc.

Anthony K. Stroinski
President & Chief Operating Officer

December 4, 1997

The Honorable William Clinton
President of the United States
The White House
Washington, D.C. 20500

Dear Mr. President:

I am writing to express my grave concern over the upcoming international negotiations related to the global climate. As you are aware, the United States will soon participate in treaty negotiations in Kyoto, Japan which will determine how developing and developed nations will respond to the call to reduce so-called green house gas emissions to 1990 levels.

The welfare of the people in our state would best be served if the global climate agreement being negotiated by your administration reflects the spirit as well as the policies of the U.S. Senate Resolution 98 which called for an agreement that does no serious harm to this nation's economy and applies any emission mandated to both industrially developed and developing nations. The Senate's unanimous approval of this resolution expressed views that are widely held here in Indiana and across the nation. Both business and labor organizations agree that severe restrictions on the economy that could result from an unwise agreement would have major negative impacts on the nation's economy, including substantial increases in the cost of living and in the loss of jobs.

A study by WEFA, a well-known economics consulting firm, found that to reduce emissions in the year 2010 to 1990 levels, as some have proposed, would require a carbon tax of \$200 per metric ton, or its equivalent. Such a tax would raise the typical consumer's utility bills from \$900 to \$1,100 a year and the price of gasoline by 50 cents a gallon-in today's dollars. WEFA also forecast a slowing in wage growth and loss of nearly two million jobs. A study by another well-known economics consulting firm Data Resources, Inc. found that electric bills would go up 94 percent and gasoline prices by 43 percent by the year 2020. Moreover, the firm forecasts that the proposed treaty could cost at least 1.7 million American jobs by the year 2020. The economic impacts would be felt directly in Indiana. The WEFA study shows that the agreement would cause our state to lose over 75,000 jobs, including 25,000 manufacturing jobs. Real personal income in Indiana would decline by 13 percent and the price of housing, medical care, food and energy would all rise.

Coca-Cola Bottling Company
Indianapolis, In

Anthony K. Stroinski

President & Chief Operating Officer

Mr. President, if and when science confirms that the world is facing a major environmental calamity from global warming, appropriate, measured actions should be taken. As scientists work to remove the considerable uncertainties about climate change that still remain, careful attention must also be given to the severe financial burden the agreement could impose on the American people. Moreover, any necessary burdens should be distributed equitable by all nations.

Please, Mr. President, do not accept any legal binding agreement on the global climate issue which forces any unnecessary reduction of the use of fossil fuel energy in America.

Thank you for your attention to this letter.

Yours truly,

Tony Stroinski

Tony Stroinski
President & COO

TS:bt

CC: Vice President Al Gore
Indiana Global Climate Coalition



NOV 24 1997

EXECUTIVE CHAMBERS
HONOLULU

BENJAMIN J. CAYETANO
GOVERNOR

November 17, 1997

The Honorable William J. Clinton
President of the United States
The White House
1600 Pennsylvania Avenue
Washington, D.C. 20500

Dear President Clinton:

As you prepare for the Third Conference of the Parties to the United Nations Framework Convention on Climate Change in Kyoto on December 1, I would like to offer my support for your climate change action policy. The policy outlined in your October 22, 1997, speech before the National Geographic Society offers an excellent plan to mitigate future climate change while minimizing negative economic effects.

Hawaii is in the process of developing its Climate Change Action Plan with the support of the Environmental Protection Agency's (EPA) State and Local Outreach Program. As part of that program, we conducted a public Climate Change Action Plan Workshop on October 30 to identify Hawaii's climate change goals and possible ways to reduce Hawaii's greenhouse gas emissions. The citizens attending the workshop advocated support of your climate change policy.

We also commend EPA's climate change mitigation efforts. The State and Local Outreach program has been highly supportive of our efforts. We also note their current work on developing a computer model for each of the states to use to test the cost-effectiveness of mitigation measures. This model is the same that Hawaii has used since 1993 for its Hawaii Energy Strategy and its current Climate Change Action Plan development.

Hawaii's state energy policy calls for cost-effective efficient energy with maximum use of indigenous, renewable energy sources. This policy, which is supportive of climate change mitigation efforts, faces many difficulties in the face of low oil prices. We seek to maximize energy efficiency measures, particularly in the area of solar energy and hope to be a major participant in the Department of Energy's "Million Solar Roofs" program.

11/25

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Climate change letters from

11/24

Don

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The Honorable William J. Clinton
November 14, 1997
Page 2

In the area of promoting a sustainable environment, Hawaii is thinking locally and acting globally. For example, under a state economic development initiative, we are working with the Philippines to assist them in developing biomass energy sources and energy efficiency programs.

Finally, I would like to offer my best wishes for a successful meeting and substantive results, which will reduce future greenhouse gas emissions.

With warmest personal regards,

Aloha,



BENJAMIN J. CAYETANO

c: The Honorable Daniel Inouye
The Honorable Daniel Akaka
The Honorable Patsy Mink
The Honorable Neil Abercrombie
The Honorable Carol Browner, Director, Environmental Protection Agency
The Honorable Frederico Pena, Secretary of Energy



NOV 24 1997

INTERNATIONAL CLIMATE CHANGE PARTNERSHIP

November 20, 1997

President William J. Clinton
The White House
Washington, D.C. 20500

Dear Mr. President:

On behalf of the members of the International Climate Change Partnership (ICCP) I am writing concerning the upcoming meeting of the Conference of Parties to the Framework Convention on Climate Change, scheduled to be held in Kyoto, Japan, beginning December 1. ICCP is a coalition of companies and industries in the United States and affiliates around the world, dedicated to responsible participation in the climate change policy process.

ICCP members recognize the importance of addressing the climate change issue and the need for an effective global approach based on long-term objectives. Your Administration has succeeded in elevating the debate about this important issue, and created an awareness among the public at large of the need to address it.

Despite the substantial efforts made by your Administration, we question whether enough progress has been made to permit completion of a successful treaty that can address the important environmental and economic issues involved and that also stands a reasonable chance of gaining ratification by the United States Senate.

Some fundamental issues with respect to the treaty structure are unresolved and could result in an overall failure to achieve its goal. We are concerned that efforts in the next few weeks may not produce a workable treaty that will provide a sound foundation for global climate change protection.

For example, the parties have grown farther apart on the system of accounting for greenhouse gases, including all sources and sinks. It is troubling to us that parties are negotiating a target for emission reductions without having an explicit explanation of what is included in each country's baseline. While the United States has advocated a comprehensive approach that includes all gases, sources and sinks, there remains significant disagreements whether the treaty covers three gases or six, and whether appropriate baseline adjustments should be made depending on the number of gases covered. There is no agreement on how to address the inclusion of sinks. The comprehensive approach should be flexible enough to accommodate all gases and should recognize the need for appropriate baseline adjustments depending on the scope of coverage.

Further, the selection of a single base year is a political decision that creates different economic advantages for different parties. The accounting mechanism and baseline issues need much more thought, discussion and resolution before the impact of any final agreement could be analyzed.

Second, the "Revised Text Under Negotiation" produced by AGBM Chairman Estrada says detailed provisions on emissions trading and compliance will not be negotiated until after Kyoto. The U.S. has built some support among key allies for emissions trading as part of the treaty. This support is significant but much work remains to be done before agreement could be reached on how such a trading system might work.

Among the key concerns industry has is the lack of clear compliance guidelines so we can be assured of fair enforcement of a treaty once adopted. Leaving these details open pending future negotiation is an undesirable course that leaves the treaty open to potentially unacceptable changes.

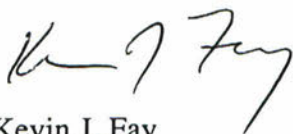
Third, the ICCP has advocated the identification of a credible long-term objective as part of the treaty process. The United States has advocated such an objective as part of the protocol negotiations. The current negotiating text makes no provision for a long-term objective and there has been little or no discussion among the parties about such an objective. ICCP believes identification of a long-term objective is precisely what is necessary to guide industry, current and future negotiators, and developing countries on the common global goal. In fact, this should be one of the first issues dealt with since it establishes the direction and foundation for the entire global effort.

Fourth, no climate treaty can achieve any reasonable long-term objective without adequate participation of developing countries. You have made some progress recently with announcement of support by the Argentine President for developing country commitments and joint implementation with credit. Additional effort is required to build the critical mass of support among developing countries and to identify a fair, but effective, scheme for universal participation in this global effort. The fact remains, however, that most of these countries continue to oppose discussion of commitments or even a process to identify future commitments.

In testimony last June before the Senate Foreign Relations Committee, ICCP urged that a successful outcome, in Kyoto or beyond, had to deal with all of the issues the U.S. proposed at the second Conference of Parties meeting, including those discussed in this letter. We trust that the negotiators will remain focused on this objective.

In sum, there is much to be commended in the manner in which the United States has provided leadership to develop an effective climate change treaty. ICCP recognizes the complexity of the issues and the challenges they present. This is one of the most challenging international negotiations ever undertaken. Its complexity argues for a cautious, thoughtful, comprehensive approach to these issues. We will have to live with the outcome, therefore we should take the steps necessary to get it right.

Sincerely,

A handwritten signature in dark ink, appearing to read "Kevin J. Fay", with a stylized flourish at the end.

Kevin J. Fay
Executive Director

2523 B 44th Ave. N.W.
Olympia, WA 98502
November 22, 1997

'97 NOV 28 AM 9:03

President Bill Clinton
1600 Pennsylvania Ave. N.W.
Washington, DC 20500

Dear President Clinton,

This is the first time I have ever written to a president of the USA, so you can be assured that I am truly concerned about the issue of Global Warming.

I understand that you are going to Kyoto, Japan in December for the Climate Summit. I am urging you to **take a strong stand** for reducing greenhouse gas emissions. Please don't waste your time, and our tax dollars to send you there, by compromising the future of our planet by giving in to the pressures of foot-dragging corporate interests.

The European Union seems to have a good grasp of the situation, and I call on you to agree at least to the limits that are being suggested by our European neighbors. As I understand it, this means asking for a 7% cut below 1990 emission levels by the year 2005, and a 15% cut by 2010. This is a **minimum** of what is necessary to halt the crisis which is clearly in view.

The evidence is now undeniable. Global Climate disruption has vast consequences socially, economically and politically for our generation and for generations to come. The fossil fuel industry is a dead end, and I mean this literally. It is time to steadfastly **promote renewable sources of energy**, and to take a leading role in finding creative ways to prevent further destruction to our atmosphere.

Again, I call upon you to stand for a **strong treaty** in Kyoto and to join with the rest of the awake nations in preserving and healing our ailing planet.

Yours sincerely,

Margo Celestino, B.A., L.M.P.

cc: Todd Stern
Presidential Policy Coordinator on Global Warming

10 December 1997

To: Please See the Attached List

From: USDEL/Kyoto - Mark G. Hambley

Subject: The Third Conference of the Parties to the UN Framework Convention on Climate Change (UNFCCC), Update No. 10: December 9/10, 1997

This is an informal and unclassified account of key events and activities which occurred at the meetings of the Third Conference of the Parties (COP-3) to the Climate Convention which is being held in Kyoto, Japan, between November 30 and December 10, 1997. This report covers events from the afternoon of December 9 through the morning sessions on December 10. Although unclassified, it is not intended for use outside of the U.S. Government. Included with this report is a copy of the December 9 edition of the "Earth Negotiations Bulletin." A summary may be extracted from this report as necessary or desired. This will be the last update in this series.

COP-3 Update No. 10: "A Deal in the Offing" as the U.S., Japan and the European Union come to an Agreement; Formal Unveiling of the Kyoto Trading Umbrella" also Expected to Create Headlines

A Deal is Struck?

After long hours until the early dawn of sometimes intensive negotiations with European Union (EU) Ministers (headed by UK Deputy Prime Minister Prescott) and Japan (effectively headed by Japanese Ambassador Tanabe), Under Secretary of State Stuart E. Eizenstat, ably assisted by OES Acting A/S Melinda Kimble and a capable team of advisors and experts, finally hammered out an agreement on a package of measures to form the basis for a Kyoto Protocol on Dec 10. The package was sent to the EU Council of Environment Ministers for its assent early this afternoon. Barring some unforeseen issue, it is expected to be approved, following which the EU is supposed to "actively" engage in promoting Article 10 and other aspects of the package.

Sorry, No Numbers for Public Vetting - Yet

At the core of the agreement were the numbers for a reduction which are embargoed for this publication (sorry about that) but which demonstrate significant flexibility on the part of all three delegations. The numbers for both Japan and the U.S. are somewhat higher than those proposed by Chairman Estrada in his draft text which gives the U.S. a five percent reduction and Japan one of 2.5 percent.

Budget Period Preserved

Key to the understandings reached is our preferred first budget period of 2008 to 2012 versus the 2006-2010 which appears in the current final draft text for the agreement and which will have to be changed during the plenary of the Committee of the Whole. In addition, it was decided to use the date 2005 as a kind of bench mark to judge how implementation of the agreement is taking place.

Clean Development Fund Nears Approval (the "new" JI with credit)

Joint Implementation (JI) with credit has been subsumed under a new device called a "clean development funding mechanism." After its somewhat lukewarm support for this Brazilian-inspired concept, the EU has now agreed to give it its full backing and support. Similar support from other Parties is also expected and while not completely assured of passage, we would give it more than a 60/40 prospect. These have increased enormously due to the support received from China - probably because many developing countries seen this new mechanism as one providing "free or at least easy" money.

The Future of Developing Country Mechanisms Less Robust

Remaining quite problematic is the question of Article 10, the voluntary graduation mechanism for key developing countries. We met with the Indonesia delegation on Dec 10 and received assurances from them of their active support of this concept. Similar meetings are also planned for other delegations, including those of Egypt, Argentina, and South Africa. However, from a Dec 9 meeting with Latin American and Caribbean delegations as a whole - and from our frequent contacts with the Chinese, Indians, and Brazilians on this point (all are strident critics, as is OPEC) - it is distinctly an uphill fight to get this concept on board.

Similarly, it is not known what kind of follow-on process - if any - may be feasible. Suffice it to note that New Zealand has prepared another proposed COP decision which would encapsulate a review process along the lines of the "contraction" theories of South African-born NGO Aubrey Meyer. This version is unlikely to go anywhere.

Corridor gossip continues to maintain that India has drafted a text which would be used both as a substitute for Article 10 and as a propellant for some kind of post-Kyoto follow-on process. However, this proposal, if it exists, has not as yet surfaced. When and if it does, it will undoubtedly have to be edited extensively to give it any chance of acceptability with Annex I Parties, generally, and with the U.S., specifically.

Opening a Kyoto Umbrella: "Double Bubble; Double Trouble?"

Another interesting twist to the conference was added on Dec 9 with the informal establishment of a Kyoto Umbrella Initiative. Designed as a purely emissions trading regime, this "umbrella" will operate, in effect, as a second bubble under the terms of the Convention. Initially conceived by the Russians in response to the EU "Bubble", the concept was subsequently endorsed and essentially organized by the U.S. because of the significant benefits which could accrue to us, and to other umbrella partners, through cost-reductions achieved under the umbrella's trading arrangements. These arrangements and allocations will all have to be worked out sometime in 1998.

Among the countries actively participating in the umbrella discussions or who have indicated an interest in doing so are Russia, the U.S., Canada, New Zealand, Ukraine, Australia, Iceland, and Norway. There are plans at the time of this writing (1500 hours local) to announce this arrangement at a press conference tonight after the meeting ends. However, given the expected lateness of that hour and the groundwork which would have to be laid to get an appropriate declaration prepared, it is unclear whether or not such an event will be practical.

Final Comment

In the final analysis, it appears likely that there will be broad agreement that a new protocol document will be prepared for signature beginning next March. It will not contain everything that the U.S. wanted. Whether it will contain sufficient material for us to move ahead on it remains to be seen. Compliance will be somewhat weak, but there will be opportunities to improve upon methodologies next year. Similarly, although the sinks outcome is hardly spectacular, there will be an opportunity to review sinks and their accounting for use during future budget periods starting next year, as well.

Developing country issues will be the most unsatisfactory from our point of view. Even if Article 10 in some form survives, any follow-on process agreed to at Kyoto is likely to be very weak. There will be several years in which we can encourage more visible and pertinent participation by developing countries under the Convention which might be tied to our submission of the agreement to Senate for its advice and consent. But there is one factor that negotiators in this process over the past 29 months is the somewhat tarnished Berlin Mandate, for this mandate will be dead.

An additional update on this negotiation will be sent from Washington late next week if events warrant and time is available. In the meantime, "sayonara" from historic Kyoto!

10 December 1997

To: Please see attached list

From: USDEL/Kyoto - Mark G. Hambley

Subject: Third Conference of the Parties to the UN Framework Convention on Climate Change, Supplement to Update No. 10 for December 10

This unclear and informal report provides a supplement to the daily reporting summarizing Update No. 10 for December 9/10. The Third Conference of the Parties (COP-3) to the UN Framework Convention on Climate Change, which began on November 30, is scheduled to end late today or early tomorrow morning. This report should be read in conjunction with Update No. 10. It is not intended for distribution outside of the U.S. Government.

COP-3: Supplement to Update No. 10 (for Dec 10th): G-77 Recalcitrance Threatens Momentum During Climate Conference's Final Hours; Deadlock Possible, although Hope Still Pervades the Corridors

G-77 Objections to Emissions Trading Threatening Final Agreement

From the rather robustly optimistic appraisal of the prospects for some kind of agreement at COP-3 earlier today comes a more sobering assessment taken from participants in Chairman Estrada's core group of country's who are now negotiating the text in a smallish chamber in the Kyoto International Conference Hall. Among the countries represented are the U.S., Canada, Japan, Germany, the Netherlands, China and Tanzania. There have been some major tussles on articles critical to the U.S. Not unexpectedly, the attitude of developing countries towards Art 10 on a voluntary "graduation" mechanism remains highly critical. Reportedly, this article is being redrafted and will be placed elsewhere in the text.

More unexpected was an assault on Article 6 which deals with emissions trading among Annex I countries. This attack was unexpected in its intensity. Led by China, emissions trading was attacked by the G-77 generally to the extent that it is not clear if it can remain in the text in a manner palatable to the U.S., New Zealand, Russia, or Australia. In particular, the G-77 is arguing that trading can only begin after various regulations and modalities have been worked out at one point in the future. To counter this effort, and as an attempt to obtain some insurance, the U.S. has worked closely with the Secretariat to draft language for Article 3 on the target which could suffice for the damage being done to trading in Article 6 - if it is permitted to remain in the revised text.

Vigorous U.S. Number Reported to the Media

Meanwhile, reports of the deal struck by the U.S., the EU and Japan has reached the press via a press interview given by UK Deputy Prime Minister Prescott to the Japanese media. Prescott claimed that the target undertaken by the three parties involve emissions cuts of 8 percent for the EU, 7 percent for the U.S., and 6 percent for Japan. All figures are reported to be for reductions from 1990 levels within a budget period of 2008 to 2012.

Next Steps: The Committee on the Whole Briefly Resumes; Final Text Being Prepared

At about 1830 hrs on Dec 10, Chairman Estrada reconvened the Committee of the Whole (the so-called COW) and informed it that he is now going to prepare a final draft for presentation to the COW later tonight. Meanwhile, it is expected that consultations will continue to try to overcome some of the major blocks impeding final agreement and especially those regarding emissions trading.

Waiting Game: Estrada versus the G-77/China: Will the Climate be the Loser?

Thus, we are now in a waiting game in Kyoto. It may be several hours before we know if a determined Chairman Estrada has prevailed upon recalcitrant Parties (and especially those from the G-77/China) to make the compromises necessary to arrive at an acceptable agreement. We are somewhat concerned that the EU will, in the end, concede to G-77 demands for severe restrictions on trading. We will work to avoid this. We are also looking at various fall back strategies in the event that we are unable to reach a final agreement by the forthcoming deadline. One thing is clear: Kyoto will, in any case, be considered a success because of the broad agreement achieved among Annex I developed country Parties to reduce emissions to degree completely unanticipated as recently as three days ago.

This will (probably) be the last supplement to Update No. 10 for December 10, 1997 - the final day of COP-3.

Earth Negotiations Bulletin

Vol. 12 No. 75

Published by the International Institute for Sustainable Development

Wednesday, 10 December 1997

HIGHLIGHTS FROM THE THIRD CONFERENCE OF THE PARTIES TO THE UNITED NATIONS FRAMEWORK CONVENTION ON CLIMATE CHANGE 9 DECEMBER 1997

Delegates to the Third Conference of the Parties (COP-3) to the UN Framework Convention on Climate Change (FCCC) continued the high-level segment throughout the day. The Committee of the Whole (COW) met in the evening and early morning to consider a revised Chair's negotiating text.

HIGH-LEVEL SEGMENT

Many developing country speakers, including EGYPT, ZAMBIA, the PHILIPPINES, TOGO, MICRONESIA, ZIMBABWE, GAMBIA, SWAZILAND, LESOTHO, GHANA, MYANMAR, SENEGAL, MAURITIUS, MALAWI, CAMBODIA, ERITREA, SOLOMON ISLANDS, SUDAN, KENYA, UGANDA, LAOS, MALTA, BHUTAN, PERU, VIET NAM, COTE D'IVOIRE, KIRIBATI, ETHIOPIA and TUNISIA called on Annex I Parties to commit to meaningful and prompt reduction targets. They also, *inter alia*, highlighted the principle of common but differentiated responsibilities; objected to commitments for developing countries; and stressed that industrialized countries have a moral obligation to take responsibility for their historic emissions. Many noted that developing countries are already implementing sustainable development policies and objected to being labeled "free riders." ETHIOPIA and SWAZILAND noted poverty eradication as a developing country priority. SINGAPORE noted its emissions will increase as its economy and population grows.

Other speakers, such as KAZAKHSTAN, NIGER, VIET NAM, KIRIBATI, EGYPT, JORDAN, LEBANON, ECUADOR, URUGUAY, LESOTHO, KENYA, SAUDI ARABIA, TURKMENISTAN and SLOVENIA recounted the effects of climate change and national efforts to address these problems and lower GHG emissions. BHUTAN noted its effort to maintain its forests as carbon sinks. FIJI stated that island states would experience the worse effects of climate change. CUBA noted that even under an unfair economic blockade it has taken action on climate change as a small island developing country.

Many countries, including KAZAKHSTAN, EGYPT, ZIMBABWE, ZAMBIA, MALAWI, CAMBODIA, SOLOMON ISLANDS, LAOS, URUGUAY, VIET NAM, GAMBIA, KENYA, TUNISIA, MYANMAR, NIGER, UGANDA, MOROCCO, LESOTHO, SWAZILAND emphasized the need for technology transfer, financial resources and capacity building to address climate change. Some countries, such as PERU, CHILE and COLOMBIA, supported a clean development fund. BELGIUM called for a more equitable way of sharing technologies between North and South.

LATVIA said Annex I countries should lead the process of GHG reduction, but developing countries should demonstrate the political will to follow. SLOVAKIA agreed to commit to reductions even if its economy is not highly developed. ESTONIA said advanced developing countries should begin adopting some commitments. THAILAND supported dividing developing countries into two groups with different timeframes for reaching targets while calling for support and leadership from developed countries. AZERBAIJAN, ARMENIA and CROATIA said difficulties in the transition to a market economy should be taken into account.

AUSTRIA and ITALY described their target within the EU proposal. AUSTRIA said the number of outstanding issues underscores the need for a follow-up process. ITALY highlighted domestic increases in renewable energy investments. FINLAND highlighted its actions on climate change and called national actions the most critical. IRELAND noted that its indicative emissions target for 2010 represents a 15% increase over 1990 levels rather than the 55% increase that would be realized otherwise. The CZECH REPUBLIC and MONACO supported the EU's targets and policies and measures for achieving them.

KAZAKHSTAN, SLOVENIA, LATVIA and ESTONIA supported emissions trading but emphasized strong monitoring and compliance mechanisms. POLAND called for a budget approach to allow countries that reduce emissions before 2000 to bank those credits against later emissions. MALAWI, URUGUAY, ETHIOPIA, COLOMBIA and ROMANIA welcomed activities implemented jointly (AIJ). CAMBODIA said emissions trading and joint implementation (JI) could be useful if focused on clean technology dissemination. The PHILIPPINES cautioned against using sinks, emissions trading and JI.

TURKEY said it is not able to be a Party to the FCCC, due to unfair social and economic burdens stemming from being included in both annexes.

The UNITED ARAB EMIRATES, YEMEN and GAMBIA supported a compensation mechanism for countries that suffer economic losses under the Convention. GAMBIA and YEMEN called for more enhanced and effective support from the GEF. ALGERIA called for simplified procedures for disbursing assets for priority needs of developing countries.

Delegates also heard statements from the IPCC, GEF, IEA, GLOBE International, World Business Council for Sustainable Development, Climate Action Network-South East Asia, OPEC, UNDP, US Climate Action Network, Japan Federation of Economic Organizations International (Keidanren), Business Council for Sustainable Energy, International Youth Movement for the UN, IOC, International Confederation of Free Trade Unions, the Climate Train, World Council of Churches, International Federation of Chemical, Energy, Mine and General Workers' Unions, the World Food Programme, Asian Development Bank, European Bank for Reconstruction and Development, the Permanent Commission of the South Pacific, SPREP and the UN Economic and Social Commission for Asia and the Pacific.

This issue of the *Earth Negotiations Bulletin* (enb@iisd.org) is written and edited by Paola Sottelli (psottelli@ix.netcom.com), Chad Carpenter, LL.M. (chadc@iisd.org), Deborah Davenport (ddavenport@emory.edu), Peter Doran (pdoran@ecology.u-net.com) and Steve Wise (swise@igc.apc.org). Webmistress Stephanie Sim (stephsim@pacific.net.sg). The Editor is Pamela Chasek, Ph.D. (pam@iisd.org) and the Managing Editor is Langston Jentes "Kimo" Gores VI (kimo@iisd.org). The sustaining donors of the *Bulletin* are the Netherlands Ministry for Development Cooperation, the Government of Canada and the United States of America (through USAID). Support for coverage of this meeting was provided by the UNFCCC Secretariat, the Ministry of Foreign Affairs of Norway, the Canadian Pulp and Paper Association and Keidanren: Japan Federation of Economic Organizations. General support for the *Bulletin* during 1997 is provided by the Department for International Development (DfID) of the United Kingdom, the Ministry of Foreign Affairs of Denmark, the European Community (DG-XI), the German Ministry of Environment, Nature Conservation and Nuclear Safety, the Ministries of Environment and Foreign Affairs of Austria, the Ministry of Environment of Sweden, the Swiss Federal Office of the Environment, the Ministry of Environment of Finland and UNDP. During COP-3 the authors can be contacted at +81 (0)75 705 1234 Ext. 2618. ISD can be contacted at 161 Portage Avenue East, 6th Floor, Winnipeg, Manitoba R3B 0Y4, Canada; tel: +1-204-958-7700; fax: +1-204-958-7710. The opinions expressed in the *Earth Negotiations Bulletin* are those of the authors and do not necessarily reflect the views of ISD and other funders. Excerpts from the *Earth Negotiations Bulletin* may be used in non-commercial publications only and only with appropriate citation. Electronic versions of the *Bulletin* are sent to e-mail distribution lists and can be found on the Linkages WWW server at <http://www.iisd.ca>. The satellite image was taken from 100,000 km above Kyoto, Copyright (c) 1997 The Living Earth, Inc. (<http://Livingearth.com>). For further information on ways to access, support or contact the *Earth Negotiations Bulletin*, send e-mail to enb@iisd.org.

COMMITTEE OF THE WHOLE

Chair Raul Estrada introduced a new draft text (FCCC/CP/1997/CRP.4) at an early evening session of the COW, with recommendations from a number of negotiations including those on Article 3 (QELROs).

He indicated that the proposed text on Article 3 would be treated as a take it or leave it "kind of offer" and he would allow time for delegations to acquaint themselves with the content and consult. The QELROs proposal was the global bubble as suggested at different moments during the negotiations, in particular by Russia. The Chair's text contains a proposal amounting to a global reduction of 5 per cent in emissions of CO₂, CH₄, NO₂ from 1990 levels, for the commitment period between 2006 and 2010, with the possibility that Parties fulfil the commitment individually or jointly. It is expected that COP-4 will adopt an annex to the Protocol establishing reduction commitments covering HFCs, PFCs, and SF₆ with commitment linkage between the two baskets. He said the global reduction commitment had been distributed in a differentiated way, with some countries possibly increasing emissions, others keeping their current levels, and most reducing. Afforestation, reforestation and deforestation had been included as sinks, with provision for further analysis. The text for draft Article 6 on emissions trading was negotiated at AGBM-8 in Bonn. On Article 7, Chair Estrada said joint implementation between Annex I and non-Annex I Parties had been dropped. Draft Article 10 on voluntary commitments by non-Annex I Parties remains by default as presented after AGBM-8.

Chair Estrada said the proposed Clean Development Mechanism (CDM) had evolved in such a way that it now deserved separate treatment in the new Article 14. He invited Parties to read the text with care. The Chair of a working group on Article 12 dealing with the relationship between the protocol and FCCC Article 4.1, Bo Kjellén (Sweden), said he was prepared to recommence negotiations on outstanding issues, hopeful that resolution of related text on policies and measures and on finance would help.

The Chair of the working group on Article 14, Luis Gylvan Meira Filho, said he had introduced a bracket free text as time restraints had not allowed his group to complete its work. Chair Estrada suggested consultation with the legal drafting group. URUGUAY sought clarification on provision in Article 14 for Annex I Parties to use certificates of reductions accruing from CDM projects to contribute to compliance "with part of their" QELROs commitments. Meira Filho said there had been no full agreement on the text because a number of delegations thought that either a number should be specified in the text as a percentage of commitments or that the COP should determine a percentage representing a maximum of commitments that could be met using the CDM. Others preferred a more general restriction. SAUDI ARABIA objected that an alternative text from Chair Estrada's negotiating text had been dropped. Chair Estrada said it was clear that the draft Article 14 did not reflect a consensus.

Chair Estrada said the article on compliance is the softer of the two available options. On entry into force, he chose the threshold of 60 ratifications, incorporating Annex I Parties which account in total for at least 60% of the total carbon dioxide emissions for 1990 of Annex Parties. He explained that 60 percent was just outside the limit of giving a veto to one Party. The biggest emitter within the group is responsible for 34 percent.

BURKINA FASO, supported by BANGLADESH and UGANDA, called for a reference to an FCCC provision on taking full account of the situations of the least developed countries in Article 3. MAURITANIA said the Burkina Faso concern had been addressed in draft Article 2. IRAN said Parties should not make Chair Estrada's job more difficult by making issues complicated. Chair Estrada said it was clear that one group wanted a reference to FCCC Article 4.9 and another did not. He invited Iran to consult with Burkina Faso. KUWAIT suggested adjourning the meeting. MAURITANIA said he would assume that OPEC countries were opposed to their inclusion among the least developed countries. He

asked if that was the position indicated by Iran, Kuwait and Nigeria in their interventions. NIGERIA described Mauritania's intervention as undiplomatic. He invited Mauritania to submit a fresh proposal on incorporating a reference to FCCC Article 4.9. The G-77/CHINA said delegations had just heard a display of the group's unity in diversity and the transparent way in which the group conducted its business. He offered to take up the question within the group. MAURITANIA apologized and welcomed Nigerian support for including a reference to least developed countries. Chair Estrada said he saw no objection. The meeting was suspended.

The COW resumed at 3:20 am Wednesday. Chair Estrada said intense negotiations and consultations had been conducted within and between groups since the draft protocol text had been circulated earlier. He said he expected a positive end to negotiations, but there were still some points to settle.

He highlighted areas needing discussion in Article 3 on QELROs. He said questions had been raised whether the global five percent reduction commitment could be understood as the responsibility of each Annex I Party. He said the text needed refinement to indicate that each Party would be responsible for its respective number in Annex A.

He noted a real possibility to reach agreement on covering six gases from the beginning, rather than the "three plus three" approach. Different wording would be needed, particularly regarding base years for each group of gases: 1990 for CO₂, CH₄ and NO₂; and 1995 in some cases for other gases. He said this required careful drafting to provide the necessary transparency.

He said there were some proposals to change the commitment period, 2006-2010, in the draft. The G-77/CHINA and other countries prefer to begin as soon as possible. Others are reluctant to start before 2008.

He said everybody agrees that the questions on Article 3 need to be solved to solve the rest. He noted ongoing negotiations and telephone calls to capitals, and proposed delaying discussion until later in the day. He also asked delegates to devote some thinking to Article 12 on existing commitments under Article 4.1.

BRAZIL said he hoped a reopened discussion on sinks would only address baselines, and that he would not agree to including all managed sinks in QELROs. Chair Estrada said sinks are not a matter to be discussed.

IN THE CORRIDORS

Delegates indicated that a number of major issues were still in play after the adjournment of the COW early Wednesday. A revised sinks text was reportedly circulating. Several delegations suggested they were not yet ready to accept the quantified emission limitation and reduction commitment in the Chair's draft Annex A, which put the EU at -8 percent, the US, Russia, Canada and Ukraine at -5 percent, Japan at -4.5 percent, New Zealand even, Australia and Norway at +5 percent, and Iceland +10 percent compared to 1990 levels. Delegates are also thought to be re-crafting the proposal on evolution, a follow-up to New Zealand's bid to get developing countries on board.

THINGS TO LOOK FOR TODAY

COW: Plenary is expected to meet at 11:00 am.

COP: Plenary will convene at 3:00 pm in the Main Hall.

39 East Shore Drive
Random Lake, WI 53075
June 12, 1997

Mr. Todd Stern
White House Staff Secretary
1600 Pennsylvania Avenue NW
Washington, DC 20500

1997 JUL 30 PM2:17

Dear Mr. Stern:

I understand that you have been appointed by President Clinton to serve as a global warming "czar" and that you will undoubtedly have significant effects on the outcomes of heading the initiative on climate change. It is time for the United States and our President to provide real leadership to protect our planet from global warming and to clean up our environment in many other ways.

Perhaps I should introduce myself by stating that I am a concerned citizen who has taught environmental sciences at the secondary level for more than 34 years; I was Coordinator of Monroe Area Recycling (with one of the most effective recycling programs in the country for several years) for a seven year period; and during the past six years have served on RENEW Wisconsin, a statewide committee concerned with the development of renewable energy within our state. One of the major reasons I belong to RENEW Wisconsin is to try to encourage the development of hydrogen as a fuel to clean up our environment.

I realize that this letter is perhaps longer than most letters that you might receive, but I hope you will bear with it and finish reading and comprehending it before you lay it down.

During the past five years I have attempted to convince the President, the Vice President, the head of the EPA and others that President Clinton could make a proclamation that would have a greater impact and be more significant for humanity than President Kennedy's announcement of sending a man to the moon. Right now the timing is right for our President to announce to the world that the USA will take the leadership as outlined below:

It is important that we "launch" a hydrogen economy and have ZEV's (zero emission vehicles) replacing the fossil fuel burning engines within the next ten years. It can be done and it wouldn't need to cost much more than the production of present day automobiles. Even though the infrastructure for such a program is not yet in place, neither was it present when Henry Ford started producing his automobiles on the assembly line. The infrastructure will develop when there is a need. There are many scientists who know how to accomplish this and the technology is already here...however, it still needs to be fine tuned.

In those letters of the past five years, I suggested that we begin the development of a hydrogen economy using renewables to produce the hydrogen and using the hydrogen in fuel cells to produce the energy needed to run our economy (I could send a copy of that long letter if you are interested). Or you could read the book that is parallel to my thinking. It was written by Luther W. Skelton, Ph.D. who describes, in **The Solar-Hydrogen Energy Economy** (copyright 1984 by Van Nostrand Reinhold Company, Inc.), three primary potential benefits that support the need to make a transition to a solar-hydrogen economy as soon as possible. They are:

1. First, the solar-hydrogen economy offers the possibility of a safe, non-polluting, inexhaustible energy supply. This energy supply is founded on an open-system thermodynamic process and can be designed to meet the needs of almost any degree of centralization. It has the potential of providing individual residences with independent energy as well as supplying the centralized needs of industry. The range of choices available within the system need be limited only by the demands and preferences of the users;

2. Secondly, the solar-hydrogen economy is not dependent on foreign sources in any way. The independence it can provide would greatly enhance national security and reduce the risk of global conflict;

3. Thirdly, and of immediate impact, the development and production of the technologies inherent in the solar-hydrogen economy would provide new jobs, new professions, and new futures for people and businesses throughout the country. (p. 174)

Certainly there will be doubters and those who fear the explosive properties of hydrogen gas, but still more dangerous is gasoline which we've learned to live with because we were brought up with it.

"...the discovery with which we are dealing involves forces of nature too dangerous to fit into any of our usual concepts." (The Congressional Record of 1875, concerning the discovery of gasoline - Quoted by Anthony M. Moos in **Fuel Cells**, Vol. II, ed. G. J. Young, [New York: Reinhold Publishing Corporation, 1963]).

In his book Skelton sets up the following outline:

IMPLEMENTATION OF A SOLAR-HYDROGEN ECONOMY

(As proposed by Dr. Luther W. Skelton)

PERCENT OF ENERGY USE DURING EACH PHASE

Energy Sources	1st 15 yrs	Next 30 yrs	Following 50 yrs
A. Natural Gas	15.2	3	-0-
B. Coal Combustion	32.0	-0-	-0-
C. Coal Gasification to Hydrogen	20.0	52	-0-
D. Solar Thermal	2.0	14	25
E. Water Power	7.6	11	30
F. Wind Power	.8	4	20
G. Solar Electricity	.4	3	25
H. Oil	22.0	13	-0-

(The chart shows a gradual weaning from the fossil-fuel **combustion** to a clean renewable energy supported Solar-Hydrogen/Fuel Cell Economy. Remember, his book was written in 1984. Technologies have improved tremendously since that time. Windmills are more efficient; photovoltaics are much more efficient; fuel cells are far cleaner than the combustion of fossil fuels and they are competitive [check with Energy Research Corporation - Fuel Cell Engineering Corp. - 3 Great Pasture Road - Danbury, CT 06813 or Internet - World Wide Web: <http://www.ercc.com> or E-Mail: ercorp@nai.net]; numerous types of renewable forms of energy are cost effective when all externalities are considered; etc.)

According to the Intergovernmental Panel on Climate Change (IPCC), the average global surface temperature has risen by 0.5-1.1 degrees F. since the late 1800's. "More pointedly, all of the 10 warmest years on record since 1860 have occurred in the last 15 years, and this despite the three-year global cooling effect caused by the 1991 Mount Pinatubo volcanic eruption." -(Nucleus, The Magazine of the Union of Concerned Scientists Vol. 18 No. 1 Spring 1996)

This concerns me tremendously especially since I am aware that the leading industrialized countries, especially the United States, are responsible for producing and releasing the largest portions of greenhouse gases.

What concerns me even more is that we can do something about it but, at the same time, I have learned that, according to the June '96 issue of US Climate Action Network HOTLINE, a House Budget Resolution proposes to:

"1. reduce funding for renewable energy technologies to \$191 million in FY '97 down from \$393.8 million in FY '95 and \$178 million below the Administration's FY '97 request of \$368.9 million;

2. eliminate all funding for wind energy systems, solar buildings, and renewable energy production incentives;

3. move toward phase out of all energy conservation research by reducing funding for energy efficiency research and development (R&D) to \$230 million in FY

'97, down from \$484.4 million in FY '95 and \$336 billion below the Administration's FY '97 request of \$566.2 million;

4. eliminate all funding for federal in-house energy management programs (which save taxpayers \$4 for every dollar invested), global warming R&D programs, and new energy efficiency standards;

5. cut funding for the Energy Information Administration by 50 percent below FY '95, privatize the national laboratories operated by the US Department of Energy as well as eliminate DOE itself."

Perhaps I should not worry about this problem...since I am 63 years old, I will be dead before the dreadful effects of global warming grabs hold of our environment and squeezes the life out of the planet we so dearly love...evidently not everyone dearly loves it because they are willing to let the environment go awry.

We must change from a fossil fuel/nuclear energy economy and develop our renewable energy sources...not cut their development.

We must develop, as soon as possible, a HYDROGEN economy and move from the FOSSIL FUEL/NUCLEAR ENERGY economy that we've depended upon for so long...we should especially eliminate the subsidies that are awarded the fossil fuel industries. Petroleum and coal resources are too valuable for producing millions of other products...we should not be wasting these valuable resources by burning them.

Hydrogen, by the way, can be produced by renewable energy - windmills, solar panels, hydroelectric, waves, tides, OTEC, geothermal, etc. - it can be used in a zero polluting fuel cell to efficiently convert its energy into electrical energy. Automobiles and other vehicles, homes and industry can (and perhaps in the future will have to) be run on hydrogen. We can clean up our environment, but we'll have to switch to hydrogen at a much faster rate than our Energy Department is planning at the present.

Instead of cutting the budget and instead of "taking a cautious approach" as indicated in recent news articles, it is time to expand the budget in this most important area for saving our planet. At the same time it will cut short our dependence on foreign petroleum and the burning of our valuable fossil fuels.

Nothing would make me happier than to hear President Clinton announce the launching of a **hydrogen economy**.

Sincerely,



Wayne Stroessner
Ph:(920)996-2471

Bot
Populi

PHOTOCOPY
PRESERVATION



The Stroessners

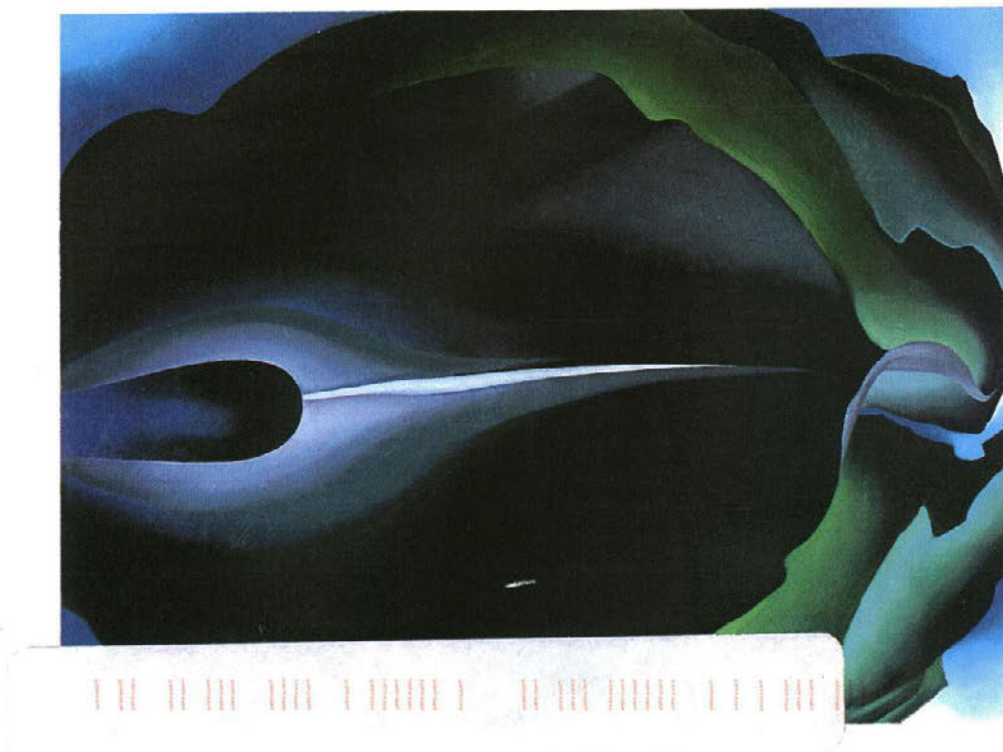
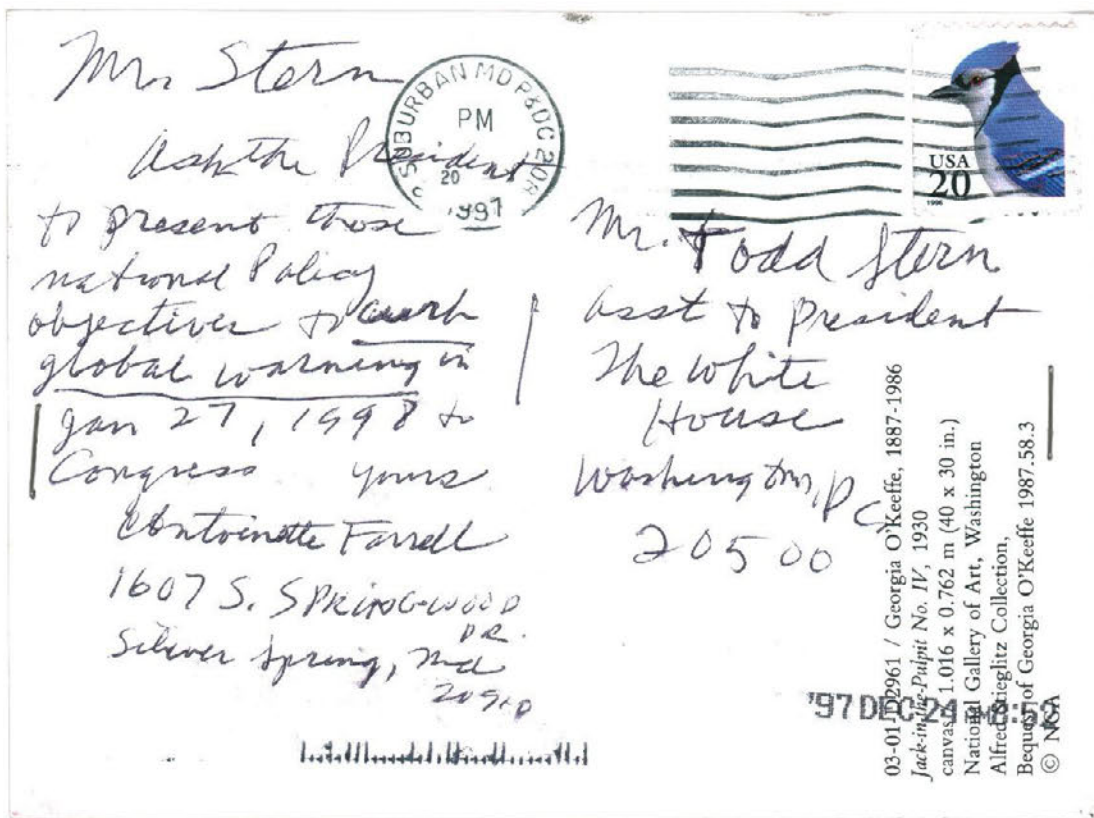
Carole & Wayne
39 E. Shore Dr.
Random Lake, WI 53075-1608



JUL 28 1997

Mr. Todd Stern
White House Staff Secretary
1600 Pennsylvania Avenue NW
Washington, DC 20500





Dear Mr. Stern,



C. Barstow
1485 Sumac Ave.
Boulder, CO 80304-0807



I'd like to urge
you to pay attention
to the important
information contained in
the book "Factor Four" which
details how an approx. 4 fold
reduction in energy use
can be achieved profitably.

We need to use this
plan to create meaningful
reductions in greenhouse
gases in the world through
the Kyoto Climate
Summit.

Todd Stern
Asst to the
President
The White House
1600 Pennsylvania NW
Washington DC 20500

Cedar / Barstow



WALTER V. HAYS
Mediator
355 Parkside Drive
Palo Alto, CA 94306
(415) 424-9633 • FAX (415) 493-8966

'97 DEC 23 PM12:02

December 18, 1997

Hon. Tod Stern
Assistant to the President
The White House
Washington, D.C. 20502

Re: The President's Global Warming Program; Silicon Valley Support

Dear Mr. Stern:

I am on the Board of the Environmental Partnership, an Initiative launched by a group called Joint Venture: Silicon Valley Network (JV). JV is a collaborative effort of industry, government and business to maintain the Valley's competitiveness, and its membership includes most of the major corporations in the area.

Among other activities, the Partnership has asked one of our members to serve as liaison to each of JV's other Initiatives, to provide an environmental perspective. In that role I have been serving as liaison to the Tax Policy Group (TPG).

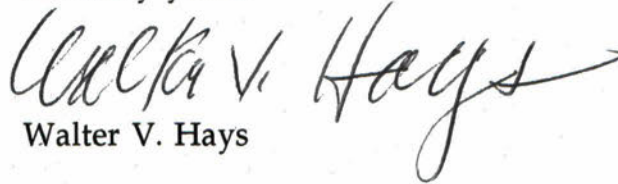
In the months leading up to the Kyoto conference, I was working to interest the TPG in supporting a modest carbon tax as a response to global warming, with the revenues used to reduce other distortionary taxes. Most recently, I made a presentation on the subject at a JV-sponsored forum on International Tax Reform (copy of flyer enclosed) and received a surprisingly positive response.

JV will be taking positions on various tax issues in 1998, and there is a reasonable chance that I can persuade them to do something on global warming. However, since the President has precluded any consideration of a carbon tax, even in connection with a "tax shift," it would seem more strategic to try instead to support whatever tax measures you intend to propose to Congress.

I understand from the assistant who answered your phone that your proposals are not yet finalized, and that you can't release them to the public until you present them to Congress. However, I would very much appreciate your sending me copies as soon as you can do so. I think it would be worth your while, because support from Silicon Valley could go a long way in countering the coalition that opposes your policies.

Thank you for your assistance.

Sincerely yours

A handwritten signature in cursive script that reads "Walter V. Hays". The signature is fluid and elegant, with a long horizontal flourish extending from the end of the name.

Walter V. Hays

International Tax Reform Forum



Sponsored by the Tax Policy Group of
Joint Venture: Silicon Valley Network

December 4, 1997 Thursday
7:45 a.m. - 11:00 a.m.
Cupertino, California

Purpose: To present and discuss draft policy papers prepared by the Tax Policy Group to help in informing Congress and others on issues of importance to Silicon Valley. These papers will be made available to attendees prior to the forum because we seek additional comment on this educational and advocacy project.

Topics: The topics chosen are those for which proposals for major change exist (such as repeal of FSC), or that are emerging issues that must be considered in any efforts to change current international tax rules. Background on the current rules, proposals for change, relevance to Silicon Valley, as well as factors to be considered with respect to international tax reform will be covered.

Export source rule - Bill Barrett, Applied Materials (Forum Chair)
Deferral - Dan Kostenbauder, Hewlett Packard
Foreign sales corporation (FSC) - Don Scott, Oracle
Electronic commerce - Jim Cigler, Price Waterhouse
Global environmental taxes - Walt Hays, Environmental Partnership
Overall perspective and direction - Larry Langdon, Hewlett Packard

Please register by November 26, 1997 - use form below.
Questions? Contact Annette Nellen — nellen_a@cob.sjsu.edu or (408) 924-3508.

Register by mailing this form to Joint Venture, 99 Almaden Blvd. #700, San Jose, CA 95113 with a \$20 check payable to Joint Venture (\$15 gov't and non-profit). Registration fee includes continental breakfast and program materials.

Name _____

Company _____

Address _____

Phone _____ Fax _____

E-mail _____

Directions to the forum and the papers will be sent to you either by -

E-mail ____ Fax ____ (please check your choice)

WALTER V. HAYS
Attorney and Mediator
355 Parkside Drive
Palo Alto, CA 94306



Hon. Tad Stern
Assistant to the President
The White House
Washington
DC 20502

'97 DEC 29 PM5:10

December 23, 1997

President Bill Clinton
The White House
Washington, DC 20500

Dear President Clinton:

I look forward to your address to Congress when you present the State of the Union message. I always find your speeches inspiring if not always your actions.

There are two messages I would like to hear from you on January 27. I would like to hear that we are joining the rest of the nations in signing the land mines treaty. We are not up to date with the rest of the world in insisting on certain conditions. The condition should be to abolish such weapons that kill more civilians than military. Please lead the world in carrying out the provisions of the Ottawa treaty.

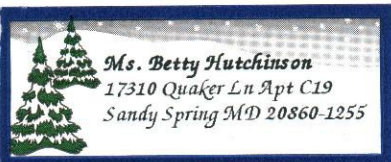
Next I would like to hear that we will lead the nations in restricting greenhouse gas emissions and thus contributing to a healthier environment for future generations. Over 2000 of the worlds leading scientists agree that global warming is a serious threat requiring immediate attention.

I would like to think of President Clinton as the President who had the courage to carry us into the 21st Century with an end to landmines treaty and a forceful global warming treaty. Best wishes for the success of your State of the Union address.

Sincerely yours,


Betty Hutchinson
17310 Quaker Lane, C19
Sandy Spring, MD 20860

CC:Mr. Robert Bell, National Security Council
Mr. Todd Stern, Assistant to the President



Mr. Todd Stern
Assitant to the President
The White House
Washington, DC 20500



December 8, 1997

'97 DEC 15 AM 11:27

Mr. Todd Stern
Assistant to the President
The White House
Washington, DC 20500

RE: Environment

Dear Mr. Stern,

My name is Crystal Shoop and I am in the eleventh grade at Pelham High School. This year I have taken a science class that is dealing with the environment and its problems. One chapter we have studied is pollution and how badly it effects the earth and the environment. Some of the things that we are told is being damaged by pollution is: global warming will cause the earth's sea levels to rise, melting of polar ice caps, erratic climate changes, the increase of health problems and the spread of cultural diseases.

One of the things I don't understand is how can people just act like there is nothing wrong with the environment. The U.S. only makes up 4% of the population, but we produce 20% of the world's greenhouse gases. That is too much for us to be producing. I believe if everyone pitched in to help cut back on the pollution that is being produced, we could reduce global warming a considerable amount.

I personally try to help save the environment in several ways. Some of the ways are: throwing away my garbage in a trash can, recycling, using biodegradable products, and turning off lights in rooms that are not being used. Everyone needs to take responsibility and do their part in helping the environment.

There are some great things being done for the environment. One of the things is the fact that people are joining together in groups to protest some of the big business that are polluting our environment. Another is the Adopt a Stream Program. This program helps to maintain streams and to clean up streams that have been polluted. This program also helps the wildlife living in or around our streams

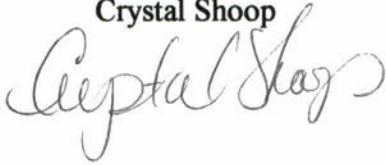
The government has made futile attempts in the recent past to reduce the carbon dioxide emissions. Still over twenty five billion tons of carbon dioxide are being released every year. The fact is if a factory is emitting more than allowed, this factory can buy emissions from another factory that is under the limit, so long as they are in the same geographical location. I ask you what good is this law if all the companies are not in compliance? Sure the economic loss to a company would be significant but what is more important.

It is time for us to look at the future instead of a temporary fix for today. Our children deserve more than a political move that would make one think our government has a real concern. It is time we get tough on pollution laws so the major problems we are facing will be solved for future generations.

Thank you for taking the time to read my letter. I certainly trust the more important facts will be foremost in your mind as we are being represented by people like yourself.

Sincerely Yours,

Crystal Shoop

A handwritten signature in cursive script, appearing to read 'Crystal Shoop', written in dark ink.

CRYSTAL SHOOP
129 KENTWOOD LN.
ALABASTER, AL 35007



22:56 12/13/97 DCR#4 ISS#631 WGMF



Mr. Todd Stern
Assistant to the President
The White House
Washington, DC 20500





Consumer Electronics Manufacturers Association

A sector of the Electronic Industries Association

2500 Wilson Boulevard ■ Arlington, Virginia 22201-3834 USA

Tel 703/907-7664 ■ Fax 703/907-7690

E-mail: jthompson@eia.org ■ <http://www.cemacity.org>

Jonathan F. Thompson

Vice President, Communications and
Strategic Relationships

'97 DEC 12 AM 9:30

December 9, 1997

Mr. Todd D. Stern
Asst. to the President &
Staff Secretary
The White House
Washington, DC 20500

Dear Mr. Stern:

It is with sincere pleasure that I write to express to you my thanks and appreciation for becoming personally involved in our request for a letter and message from the President.

Your staff has a true appreciation for moving with alacrity when urged by timelines. In this instance they helped our organization considerably by making certain the President's letter and important message will be seen by nearly 100,000 attendees, including 3,000 journalists from around the World, who will be coming to the 1998 International Consumer Electronics Show.

Risking the prospect of overlooking others who helped, I must add that Phillip Kaplan, Deputy Assistant to the President and Deputy Staff Secretary, made a special point of reaching me and following-up our voice mail attempts to talk. He was extremely professional, and was very confident a message could be obtained, under the circumstances, in short order.

Again on behalf of the consumer electronics industry our thanks to you and your entire staff.

Sincerely,

Jonathan F. Thompson

cc: The Honorable Erskine Bowles



The Sponsor and Producer of The Consumer Electronics Shows

Polyisocyanurate Insulation Manufacturers Association
1001 Pennsylvania Avenue, NW
Washington, DC 20004

'97 DEC 29 PM 3:39

Jared Blum
President

Tel (202) 624-2709
Fax (202) 628-3856

December 19, 1997

Mr. Todd Stern
The White House
Washington, DC

Dear Todd:

Just a brief note to thank you for the incredible effort you made in Kyoto to reach an agreement to benefit your and my children, and their children. Your willingness to meet with business groups in an effort to bridge the issues that needed to be resolved both domestically and internationally has resulted, I believe, in a deeper understanding and support for the Protocol process in a number of industry sectors.

PIMA will be working to develop increased support for the Protocol and the Administration's domestic climate programs in the coming year. We look forward to working with you in that regard.

Again, many thanks for your hard work and warmest personal regards and wishes for a happy and healthy new year.

Cordially,


Jared O. Blum

'97 NOV 21 PM7:58

Mrs. Kemble Stout
1115 N E Orchard Dr.
Pullman, WA 99163

Nov. 18, 1997

Mr. Todd Stern
Assistant to the President and Staff Secretary
The White House
1600 Pennsylvania Ave. N W
Washington, D. C. 20500

I am very concerned about our country's contribution at the Kyoto Climate Summit.

Some U S industries and members of Congress are opposed to a treaty limiting emission of heat-trapping gases. I believe this is selfish and short-sighted.

Global warming is already disrupting normal weather cycles. The United states should cooperate with world scientists who ask for a legally binding commitment to reduce industrial nations' emissions significantly below 1990 levels.

Upsetting normal growth cycles produces less food for an ever-growing world population which already cannot feed itself. We should be thinking in terms of future overcrowding as well as stewardship of resources--while there are still some that can be saved.

Please let the President know that we are concerned and apprehensive. I realize that commitment to before 1990 levels means that all residents must voluntarily limit use of our automobiles, and change to more environmentally friendly heating and cooling installations. Technology is ready. We need the leadership of the president to appeal to citizens' common sense.

Sincerely,

Mildred Stout

UNION OF CONCERNED SCIENTISTS

December 19, 1997

The Honorable Albert Gore, Jr.
Vice President of the United States
Old Executive Office Building
Washington, DC 20501

*Todd —
Thanks for all of your
good work on this. I
We really appreciate it.
Bord*

'97 DEC 29 PM 3:39

Dear Mr. Vice President:

I want to thank you for your very excellent leadership in securing a successful outcome at the Kyoto negotiations. All of us at UCS – board, staff, and membership – are very grateful, and I know that that sentiment will be widely shared throughout the scientific community in the US and abroad.

Your December 8 speech, in which you signaled our government's willingness to be flexible, and your tireless efforts to bring other world leaders and delegations on board, clearly had an extraordinary impact on the negotiations. Stu Eizenstadt, Katie McGinty, David Sandalow, Rafe Pomerance, and many others also deserve a lot of credit for a job well done. We very much appreciate the extensive opportunities you, Katie, Todd Stern, and Gene Sperling provided for our input, both during the months before the negotiations and at Kyoto. Thank you!

The targets, timetables, and conceptual framework embodied in the Kyoto Protocol should provide a solid foundation for the future. We recognize that securing ratification by the US Senate will require a very careful and deliberate campaign, but we are confident that ratification can be achieved. UCS stands ready to help in whatever ways we can.

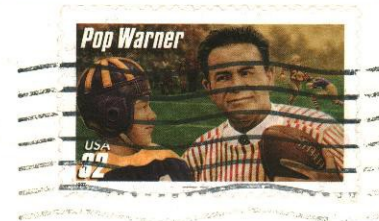
Sincerely,



Howard Ris
Executive Director

**UNION OF
CONCERNED
SCIENTISTS**

Two Brattle Square
Cambridge, MA 02238-9105



Todd Stern
Assistant to the President & Staff Secretary
The White House
Washington DC 20500

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'97 NOV 26 PM2:44

Mr. Todd Stern
Assistant to the President
The White House
FAX 202-456-2461

P. O. Box 025216 Depart 76020
Miami, FL 33102-5216
Nov. 23, 1997

Dear Mr. Stern:

I urge you to go to the Kyoto, Japan conference (December 1-10) with a stronger U. S. policy to reduce greenhouse gases. It is extremely important that you support reductions below 1990 levels, beginning by the year 2005.

The U.S. should indeed show determined responsibility on this issue since it produces almost a fourth of the world's greenhouse emissions. Our huge slice of the poisonous gas pie requires that we do more in reducing our share of it.

The burning of fossil fuels and deforestation have led to an overall warming of our planet. With over 25 billion tons of CO2 released in our atmosphere annually, the U. S. with only 4% of the human population produces 20 percent of the world's greenhouse gases.

Scientists predict that unless greenhouse gases are reduced substantially, the Earth's average temperature will rise by 2 to 6 degrees Fahrenheit by the end of the next century. This will be disastrous for us all. Global warming will cause a rise in sea levels, melting glaciers and polar ice caps, erratic weather pattern including floods and droughts, agricultural damage and health and ecological damage including the spread of diseases and the destruction of sensitive ecosystems.

Over 2000 of the world's leading scientists are unanimous in their opinion that global warming is a serious threat that requires immediate action. And 72 percent of the public back serious efforts to address global warming.

Coal, oil and auto lobbyists are working hard against restrictions on greenhouse gas emissions with a multi-million dollar campaign. They fear a possible economic downturn in their industries with restrictions. The U.S. department of Energy strongly asserts in reply to them that the U. S. can convert to energy-efficient technologies without significant economic loss.

President Clinton said in October, 1997, "We can not wait until a climate change treaty is negotiated and ratified to act. We must begin now... The U. S., will pursue a comprehensive framework". It is extremely important now that U. S. policy match the President's rhetoric.

Sincerely yours,

Jean P. Patterson
Jean P. Patterson

SIA Facsimile

'97 NOV 26 PM5:18

To: Name TODD Stern
Company _____
Fax# 202 456-2215
Number of pages 3
Date 11.26.97

From: Lee Neal

Note:

Semiconductor Industry Association
181 Metro Drive ♦ Suite 450
San Jose ♦ California 95110
Telephone: 408/436-8680
Facsimile: 408/436-8648

SIA SEMICONDUCTOR INDUSTRY ASSOCIATION

181 Metro Drive, Suite 450 ♦ San Jose, CA 95110

Phone (408) 436-6600 ♦ Fax (408) 436-6646

November 26, 1997

Mr. Todd Stern
Staff Secretary to the President
White House
Washington, D.C. 20500

REF: Semiconductor Industry's Perspective on PFCs

Dear Mr. Stern:

In January of this year, representatives of the U.S. semiconductor industry met with Undersecretary of State Timothy Wirth to emphasize the importance of the use of perfluorocompounds (PFCs) in the manufacturing processes of the U.S. semiconductor industry. In view of the upcoming ICOP3 meeting in Kyoto, Japan, the industry would like to reiterate the importance of PFCs to the U.S. semiconductor industry, to review the voluntary commitments the industry and EPA have made to reduce PFC emissions, and to request that the Administration continue to support the industry's voluntary efforts to reduce PFC emissions.

Semiconductor manufacturing is a national success story, employing 145,000 American workers, advancing U.S. technology and national defense capabilities, and producing approximately \$61 billion in revenues. PFCs are an integral part of advanced semiconductor manufacturing processes and are essential to produce the very small features of today's advanced circuits. Although PFCs have long atmospheric lifetimes, they are not used in large quantities by the semiconductor industry. While research and development efforts are underway, there are currently no known substitutes or comprehensive emissions reduction strategies which will not have a significant negative impact on the environment. Any change in the quantity and/or makeup of the gases that are used in semiconductor processes is constrained by a number of factors, including severe engineering challenges, worker health and safety considerations, and other potential environmental impacts. In addition, semiconductor companies have installed a huge manufacturing base that relies on the availability of PFCs. The development and installation of new tools that do not rely on PFCs will

require technology breakthroughs accompanied by significant additional capital costs and lead time.

Most of the U.S. semiconductor industry has entered into a voluntary Memorandum of Understanding (MOU) with EPA which has established the "PFC Emission Reduction Partnership for the Semiconductor Industry." Each industry partner has agreed to report annual emissions estimates and to use its best effort to reduce PFC emissions from its U.S. operations as measured against a 1995 baseline developed under the MOU. The strategies being reviewed as a means of reducing PFC emissions include; 1) the more efficient use of PFCs in the manufacturing process; 2) potential PFC substitutes; 3) recycle; and 4) abatement. The partners and EPA will reconvene next Spring to discuss whether specific PFC reduction targets should or can be identified based on progress made through research and development efforts which are currently underway.

The U.S. semiconductor industry strongly supports the U.S. position for including PFCs, HFCs and SF6 in a basket with CO2, methane, and nitrous oxide to allow flexibility and a comprehensive approach to addressing the climate change issue. The industry is working proactively to reduce PFC emissions; any proposal to eliminate or phase out manufacturing of PFC gases poses a serious threat to the semiconductor industry. SIA requests that the Administration continue to fully support the semiconductor industry's voluntary efforts to reduce PFC emissions in Kyoto and at future international climate change meetings.

Sincerely,



George Scalise
President

Semiconductor Industry Association

November 25, 1997

Mr. Todd Stern
Assistant To The President
The White House
1600 Pennsylvania Ave., N. W.
Washington, D.C. 20500

Dear Mr. Stern:

On behalf of the National Indian Business Association (NIBA), I am forwarding the original copy of a Petition on the President's Global Climate Change Policy. The signatures were gathered during a Panel discussion on Air Quality and Global Climate Change, sponsored by NIBA at the recent National Congress of American Indians Conference in Santa Fe, New Mexico.

I thought you would want to bring this to the President's attention prior to Kyoto.

If you have any questions, I can be reached at 703-931-0870.

Thank you.

Sincerely,



Alicia A. Dugan
President

PETITION

GLOBAL CLIMATE CHANGE POLICY

In December 1997, the Clinton Administration will attend a United Nations Summit in Kyoto, Japan, to consider a Treaty on Global Climate Change. This Treaty, as currently drafted, would place energy use restrictions and increased costs on all parties to the Agreement in an effort to control so-called "greenhouse" gases that potentially contribute to global warming.

The Treaty would exempt developing countries from complying and place the control burden primarily on the United States. This is so, even though developing countries like China, India and Mexico are expected to contribute the lion's share of the greenhouse gas emissions over the next 50 years.

The economic consequences of this Treaty, in terms of increased energy costs, is well documented and falls disproportionately on small and minority-owned businesses.

Today, many Native Americans live in poverty. Unemployment levels are several times the national average in tribal communities. Native American's need business opportunities both on and off reservations.

THEREFORE:

- The Native American business community urges the current Administration not to sign any Treaty on global climate change that would force the US to adopt policies that damage our economy and result in significant job losses; and
- Which exempts developing Nations from their responsibility for addressing concerns about future greenhouse gas emissions.

NAME

TRIBAL AFFILIATION

Geri W. Lohman	Cherokee
Terri A. Waller	Chadco/Cherokee
Bob Lohman	Spokane
Rita Lohman	Mohave
Robert L. Lohman	Pendleton
Pat Chet Miller	Navajo Nation
Clayton D. Timblorner	LUMMI NATION
Alexander S. MacKabb	Micmac
Alton Lohman	Chippewa
Randy Edmister	KIOWA/CHADCO
Margaret Cook	Inter Tribal Council of Ariz.
BEN SHAWWOGA	SHAWWOGA
Jim SHAWWOGA	SHAWWOGA - CASS
Angela Jones	SALT-RIVER DINA
Alvin Moyle	Fallon Paiute Shoshone Tribe
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Charmas H. H. H. H. H.	Menominee NATION
Debra Begay Davis	Navajo
Ellen Lohman Blumel	Layana/Yagui
Don Quendine	LUMBEA
JOE WALKINGSTICK	CHEROKEE
Barbara Byrne	San Juan Resident Committee

NAME

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JERRY ESPINO

Yakama

Velda Kidd

Yakama

Jinda Anish

Cherokee

Dennis Chappell

Comanche

Patricia Lee-McKay

Crow/Say

Jacqueline K. Santiago

Blackfeet/Laguna

Tom Estamo

Yakama

Pearl Edmo Jackson

Shoshone-Bannock

Janet Baker

AMEIND BISKINGNT

Lynne W. Hadsworth

Shoshone-Bannock

Lynne M. Hsin

Lakota

Lynne J. MacLean

MicMac

Leon Canyon

Navajo

Lynne E. Lee

Lakota

Sally Huxley Michin

Rumault

Ron Anisall

LA Tolla Tribe

Randy Edmonds

Kiowa/Caddo Shaw, other

Bert SHAWNEE

CROW-SEWANA

Jan SHAWNEE

SHAWNEE

CARRER CAMP

PONCA TRIBE

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Lumbee

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Jimmie Pevernoff

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