

FOIA MARKER

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

Collection/Record Group: Clinton Presidential Records
Subgroup/Office of Origin: WH Task Force on Climate Change
Series/Staff Member: Roger Ballentine; Paul Bledsoe; Julie Anderson
Subseries:

OA/ID Number: 41301
FolderID:

Folder Title:
Business Roundtable Press Conference 7/18/99

Stack:	Row:	Section:	Shelf:	Position:
S	100	3	10	2



Environment Task Force

(3.2) 861-5822
Ex) 892-1260

The Role of Technology in Responding to Concerns About Global Climate Change

July 1999

The Business Roundtable
An Association of Chief Executive Officers Committed to Improving Public Policy

Table of Contents

Executive Summary

X

Overview	
• Introduction	1
• Government's Role in Technology Advancement	2
• Summary	3
 I. INTRODUCTION	 5
The time-frame issue	5
Energy use and carbon emissions baseline	7
The role of information technology	9
II. TECHNOLOGY DEVELOPMENT IN THE TRANSPORTATION SECTOR	10
Motor vehicles	10
Commercial trucks	14
Aircraft	15
Rail	16
Shipping	17
III. TECHNOLOGY DEVELOPMENT IN THE INDUSTRIAL SECTOR	19
Industrial Overview	20
Manufacturing	21
Mining	24
Agriculture	25
Water	26
Construction	27
IV. TECHNOLOGY DEVELOPMENT IN THE COMMERCIAL SECTOR	28
Buildings	29
Equipment	31
V. TECHNOLOGY DEVELOPMENT IN THE RESIDENTIAL SECTOR	33
Buildings	33
Equipment	35
VI. TECHNOLOGY DEVELOPMENT IN THE ELECTRIC SECTOR	36
Conventional generation	37
Renewable generation	40
Transmission and Distribution	41
VII. TECHNOLOGY DEVELOPMENT IN CARBON SEQUESTRATION	43
VIII. OBSERVATIONS & RECOMMENDATIONS	45
Near-term technology acceleration	45
Long-term technology progress	47
 Appendix: Energy background	 49
 Endnotes	 52

EXECUTIVE SUMMARY

Technological progress is at the core of both the 20th century American success story and the 21st century's promise. American citizens and businesses have great faith in what technology can accomplish and have demonstrated the ability to realize technology's promise through imagination, hard work, and the enabling powers of a free and efficient market economy. It is vital that federal technology policy initiatives take into account the central role of the private sector in commercializing and making practical new and emerging technologies, as well as the underlying importance of a healthy economy.

In a preliminary review of the role of new and emerging technologies for addressing global climate change, The Business Roundtable (BRT) finds great promise and truly exciting opportunities. In every sector of the economy, the long-term prospect for new and emerging technologies holds the potential for greater productivity, safety, convenience, and greater energy and carbon efficiency.

Background

Essentially all proposals to address global climate change contain recommendations that address the role of new and emerging technologies that provide and use energy. The BRT believes that the deployment of more energy-efficient technologies and the development of new and breakthrough technologies constitutes the

[ii]

most effective response to concerns about possible changes in our climate. Nonetheless, this will not be a significant factor in meeting the targets set forth in the Kyoto Treaty.

The BRT has taken a firm position in opposition to the Kyoto Protocol in its current form because it does not include developing countries, it would have a negative impact on the U.S. economy and it would bring no significant global environmental benefit. This study identifies another major problem inherent in the Protocol's attempt to seek quick-fix solutions. In the short term, there are no technologies that make plausible the goals sought by the Kyoto Protocol. Technologies that may make a significant difference will not be commercial for a long time. The BRT believes that any effort to address climate change will need to be sustained, long-term *and* global. Further, we believe it will be some time before we understand whether the range of potential impacts from greenhouse gases will be severe or trivial. Accordingly, the BRT believes that this time should be used aggressively and sensibly to foster long-term technology advancement and commercialization.

Economic Underpinning

Technology progress depends on a healthy economy both at home and abroad. Without the financial ability to invest in R&D, undertake commercialization risks and purchase new equipment, technology progress will stall in industrial nations. Without economic growth, developing nations will not be able to purchase

(iii)

the preferred, new technologies. Thus, it is critical to ensure that all policies foster, not harm, the economy of the United States and all nations. A central policy tenet is that governments cannot foster private sector technology advancement by picking winners and losers. Instead, a central role for government is to ensure its policies are coordinated and consistent, and that unintended regulatory, policy and tax impediments to innovation are remedied.

The Document

The body of this paper is devoted to highlighting the kinds of dramatic changes in energy-related technologies that are on the horizon in every major sector of the U.S. economy. While important technology advancements can occur in relatively short time periods — say, just a few years — history and market realities show that it takes decades to make major changes in the infrastructure of the economy. This paper does not attempt an exhaustive list of all such possibilities in every sector of our \$8 trillion economy. Rather, the paper provides a topical overview of the character and direction of progress, with an emphasis on the long term, in as much as the BRT (and others) have noted that short-term fixes are both unrealistic and economically disastrous. Not only is the future of technology at some level unknowable, especially in the long term, but an exhaustive treatment of every sector of the economy is far beyond our scope and intent. The BRT's goal is to illustrate the dramatic long-term potential that exists and to propose that this potential form the vision for any federal activities directed at

reducing or changing energy use patterns in the United States. Following are some examples of emerging technologies that this paper identifies.

Technologies "On the Horizon"

- No exploration of technology progress in the 21st century would be complete without considering the impact of information technology. The "digital revolution" will likely bring pervasive and deep changes in how energy is managed and used in every sector. Not only are machines, motors, lights and equipment in general afforded "intelligence," but entire processes from design to fabrication, delivery and operation are improved by the rapidly emerging capabilities of the microprocessor and telecommunications.
- The automobile is one of the most visible technological achievements of the 20th century. Long-term research now is focused on lightweight materials, new manufacturing processes, electric drives, and hybrid-electric and fuel-cell vehicles. The fuel cell, which can convert chemical energy directly into electricity without combustion, has great long-term potential for reducing emissions from motor vehicles, including large trucks and railroad engines. In addition, new technologies may make alternative fuels viable, such as ethanol, methanol, compressed natural gas and even converting natural gas directly to ultraclean liquid fuel. Advances in biotechnology hold promise for converting biomass to fuel as well as low-cost ways to strip sulfur from diesel fuel.

- Aircraft will utilize the technology progress in ultra-strong and lightweight materials and advanced controls systems. Tantalizing prospects in emerging technologies point to the potential to reduce turbulence and wind resistance — "smart" wings — which could dramatically improve fuel efficiency. Aerodynamic technology will benefit the high-speed passenger trains of the future as well. Researchers have demonstrated that low-cost magnetic levitation brings the prospect of such superfast passenger trains nearer. Emerging technologies can reduce drag for ships through new hull designs and exotic or "smart" coatings that will boost speed and cut fuel use for the billions of tons of products shipped around the world each year.
- On the manufacturing front, the scope of emerging technologies is staggering — and highly promising — both for U.S. competitiveness and environmental progress. Logs may be cut with powerful lasers, furniture assembled with microwave dryers and coatings set with electron beams. A high-temperature plasma (18,000°F) can vaporize materials that can then be literally sprayed onto surfaces, directly depositing a coating with great efficiency and quality. Silicon wafers may be cleaned without water, using powerful ultraviolet laser light. Electron beams can sterilize food-product containers. Ion implantation can improve metal hardness so that equipment lasts longer. Superefficient chemical processes are emerging based on the use of microwaves and lasers rather

than thermal energy. Laser "scissors" can marry computer-driven systems to efficiently make custom shapes for textiles and allow rapid, affordable made-to-order-and-fit clothing, saving money, inventory and materials. In the long term, the idea of "desktop manufacturing" could emerge for complex components based on successful pilot projects today that use computers integrated with powerful lasers and powder metals.

- The technology revolution embraces agriculture through developments in biotechnology, information technology and radically new technologies for fertilizing. Biotechnology holds the promise for increasing crop yield, reducing spoilage, and reducing both fertilizer and water with new generations of crops — all of which reduce energy use and emissions. Aquaculture is another emerging area and includes both ocean- and land-based "farming" of crops and fish.
- America's businesses, schools, governments, factories and hospitals are housed in millions of buildings. Emerging building technologies that first appear in the commercial sector frequently show up in residential building designs as costs drop. Already computer-aided design makes it far easier to achieve efficient designs. New "smart" windows that can match changing heating conditions are in the development phase. Practical, small, self-contained combined heat and power systems, both microturbines and fuel cells, are on the horizon. Advanced building control

systems that use cybernetic systems (smart controllers and fuzzy logic) will enable optimal energy usage, storage, production, purchase and sale for buildings by responding to local climate and weather conditions as well as energy prices. Advances also continue in lighting systems, and new light "engines" combined with fiber optics may illuminate an entire building from a single ultraefficient light source.

- Conventional and unconventional electricity generating systems will benefit from emerging technologies. New materials will increase efficiencies for mines, wells, pipelines and power plants. Next generation nuclear plant designs could bring a renaissance to the nation's largest noncarbon energy source. Advanced coal technologies, such as pressurized fluidized bed combustion, advanced supercritical and integrated coal gasification combined cycle, will boost efficiencies. New chemical and biotechnologies promise ultraclean fossil fuels and can make the fuels needed for fuel cells, another emerging source of electricity. Advances in materials science and control systems will bring down costs for wind, solar and geothermal sources of electricity. And scientists will continue to move ever closer to unraveling the challenges of practical fusion energy. New materials and technologies in high-power electronics, neural networks and superconductors promise a virtual revolution in electricity distribution.

- Technology also will bring advances to mechanisms for “carbon sequestration” — removing carbon from the earth’s atmosphere or the systems that produce carbon emissions. In the long term, carbon sequestration technologies in agricultural, geological and physical removal or “scrubbing” all hold potential. Biotechnology may play a particularly important long-term role by enhancing future biomass growth both on land and in the ocean, or by using engineering bacteria to directly convert combustion exhaust or atmospheric carbon dioxide into fertilizer or fuel.

Key Conclusions

Our conclusions are presented in the form of answers to four key questions.

1. *Must technology be part of a solution to our concerns about global climate change?*

Yes. Long-term technologies in every sector hold enormous potential to improve energy and resource efficiency while also bringing important gains in such key areas as productivity, safety, convenience and competitiveness. These opportunities can only be realized in the long term because of the nascent and unproven nature of new technologies, the inherent time-to-commercialization cycles for radically new technologies, the ability of businesses and consumers to adopt them, and the nature of capital formation and investment.

Fostering and accelerating the emergence of new and breakthrough technologies is the most effective response to those concerns. It requires a clear understanding of the appropriate roles for the government and private sector in basic research, technology demonstration and technology deployment.

2. *What are the barriers to accelerating the emergence of new technologies?*

A set of relatively well-defined but complex barriers exist in four central areas:

- Market-oriented factors in setting priorities for basic federal research funding;
- Mechanisms to advance public/private applied research partnerships while protecting commercial interests;
- Issues relating to cost and risk sharing at the pre-commercial phase;
- Regulatory conflicts, hidden disincentives in such areas as the tax code and related issues that can discourage or impede commercialization.

3. *What performance measures can be applied to ensure proper stewardship of taxpayer investments and subsidies?*

Federal research and technology activities need to incorporate both long-term policy objectives and a framework that takes into account realistic characteristics of businesses, markets and consumers. A primary objective should be to incorporate a high degree of accountability for the use of taxpayer funds.

4. *Is technology a viable solution for meeting the emissions reductions mandated by the Kyoto Protocol?*

Not in the timeframe envisioned in the Kyoto Protocol. While often valuable for other reasons, there is no evidence to support the belief that technologies can meet the kinds of energy and carbon goals inherent in the Kyoto Protocol. Technology and innovation simply cannot be mandated. The Kyoto Protocol provides neither the time nor the appropriate policy environment to develop, commercialize on a large scale and disseminate worldwide the innovation energy technologies that would be needed to make such large reductions in greenhouse gas emissions without serious harm to the world's economy. (See also The American Society of Mechanical Engineers' February 1999 General Position Paper, "Technology Implications for the U.S. of the Kyoto Protocol Carbon Emissions Goals.")

Key Observations and Recommendations for Action

The BRT has identified two key premises relating to short- and long-term technology advancement as well as four related proposals for action.

Near-Term Technology Acceleration

The BRT believes that there may be potential for additional or more rapid implementation of near-term energy-efficient technologies, both domestically and internationally, that can modestly reduce carbon emissions. The BRT notes the following premise and proposes a related action item.

Premise #1

Government barriers can unintentionally impede efficient investment.

Proposal #1

The BRT will undertake a study to identify specific problems and opportunities to remove government barriers.

Long-Term Technology Fostering

Long-term technology progress is key to both public and private economic and environmental planning. The BRT believes there are refinements or additions to current initiatives that could play an important role in accelerating the emergence of technologies relevant to global climate change issues. The BRT notes the following premise and proposes a related action item.

Premise #2

Technology transfer and public/private partnerships can be improved, which will accelerate the movement of new and emerging technologies into the market.

Proposal #2

The BRT will create and host a national summit on technology transfer in the 21st century. The purpose of the summit will be to engage those in the public and private sectors to identify concrete proposals for improving the process of technology transfer with a

[xii]

focus on increasing the value and involvement of the private sector
in commercializing new technologies.

Comments on S.882, Murkowski/Hagel Climate Change Bill & BRT Report

We are gratified to see that Senators Murkowski and Hagel recognize that climate change is a serious issue that needs to be addressed and we welcome the bill's emphasis on promoting the research and development of technologies to reduce or sequester the greenhouse gases that cause global warming.

We similarly welcome today's report issued by the Business Roundtable ("The Role of Technology in Responding to Concerns About Global Climate Change", July 1999). Here too there is a large overlap much of what the BRT is proposing and what the Administration has proposed. In particular, we applaud the report's emphasis on:

- the "potential for additional or more rapid implementation of near-term energy-efficient technologies, both domestically and internationally."
- identifying opportunities to remove government barriers to technology diffusion.
- the importance of "accelerating the emergence of technologies relevant to global climate change" through improved public/private research partnerships.

We think it is self-evident that supporters of the Murkowski bill and the BRT proposals should strongly support the Administration's package of investments and tax incentives, which includes:

- a vigorous effort to **accelerate the research, development and deployment of energy efficient technologies and renewable energy**. These efforts include both medium and long-term research as well as more immediate programs like those encouraging the use of high-efficiency Energy Star products and Green Lights. These programs were funded at over \$1 billion in FY 99, with nearly \$1.4 billion requested for FY 00.
- a **five-year package of tax incentives** to encourage the purchase of clean energy products;

At the same time, ~~the~~ neither the Murkowski bill nor the BRT proposals should be seen as a substitute for the broad range of activities that the Administration is carrying on both domestically and internationally to address climate change. In addition to the investment and tax incentive package outlined above, these include:

- a bill to **restructure the electricity industry** that is projected to save 40-60 million metric tons of carbon per year;
- a set of **working industry partnerships** with sectors including autos, home building, steel, chemicals and forest products;
- an **energetic diplomatic effort** to complete the unfinished business of the Kyoto Protocol and bring about the meaningful participation of key developing countries;

- a **\$1.7 billion program in scientific research** to improve our understanding of the forces that shape the Earth's climate.

We are pleased that Senators Murkowski and Hagel have clearly stated that the \$200 million a year proposed R&D authorization program would be *in addition* to federal efforts already underway to address climate change. But the real question for Congress is how much it agrees to appropriate for clean energy efforts that are good for business, good for consumers, good for U.S. competitiveness, and good for our energy security.

We are also concerned that the bill would not give businesses real, bankable credit for taking early action to reduce greenhouse gases. It proposes steps to improve the voluntary reporting of greenhouse gas emissions, but businesses deserve more: they deserve real credit when they take real action.

Finally, regarding the Kyoto Protocol, it must be remembered that the Administration has said from the beginning that the Protocol is a work in progress -- a vital and significant accomplishment that embodies the fundamentally market-based approach that the United States fought for -- but a treaty that needs more work. In particular, a number of key provisions need to be further fleshed out and, most important, there needs to be greater participation by developing countries. Until that unfinished business is finished, the Administration has made clear it won't submit the Protocol for ratification. It is not in the best interests of the United States to give up on this process.

Our strategy should be to keep working on the diplomatic front to complete Kyoto so that it can be ratified, and to keep working on the domestic front on win-win steps to promote research, innovation, the diffusion of clean energy products and voluntary industry actions to reduce and sequester greenhouse gases.

DRAFT

TO: Rosina, Mike, Jeff Seabright, David Gardiner
FROM: Sam Baldwin
RE: Possible Press Release per the Business Round Table Announcement
DATE: July 16, 1999

We are pleased to see the Business Round Table report, "The Role of Technology in Responding to Concerns About Global Climate Change."

We agree with the Business Round Table when they say:

- "In every sector of the economy, the long-term prospect for new and emerging technologies holds potential for greater productivity, safety, convenience, and greater energy and carbon efficiency
- "the deployment of more energy-efficient technologies and the development of new and breakthrough technologies constitutes the most effective response to concerns about possible changes in our climate"

The BRT singled out technologies, including:

- Transport: "electric drives, hybrid-electric and fuel-cell vehicles" "alternative fuels...such as ethanol, methanol, compressed natural gas, and even converting natural gas directly to ultraclean liquid fuels. Advances in biotechnology hold promise for converting biomass to fuel.
- Buildings: "computer-aided design...smart windows, combined heat and power, microturbines, fuel cells, advanced control systems. Advanced lighting systems
- Fossil energy: integrated coal gasification combined cycle
- Renewables: wind, solar, geothermal, superconductors, power electronics
- Carbon sequestration, both geological and biological

The BRT also identified barriers in the following areas:

- Market-oriented factors in setting priorities for basic federal research funding
- Mechanisms to advance public/private applied research partnerships while protecting commercial interests
- Issues relating to cost and risk sharing at the pre-commercial phase

The BRT also "believes that there may be potential for additional or more rapid implementation of short-term energy-efficient technologies both domestically and internationally, that can modestly reduce greenhouse gas emissions

We disagree with the BRT when they say that the "Kyoto Protocol in its current form" ... "would have a negative impact on the U.S. economy and [it] would bring no significant global environmental benefits

- This statement ignores the flexibility mechanisms that the United States successfully negotiated in the protocol that will allow the protocol's timetables and targets to be met at the lowest possible cost

The Administration has focused particular attention on the development of technology to address the climate change issue, as well as:

- **maximizing economic benefits** to the United States by ensuring a low cost and reliable source of clean energy supplies and developing global energy markets;
- **minimizing security risks and costs** to the United States of possible oil supply disruptions and the risk of nuclear proliferation; and
- **addressing local and regional environmental problems** such as urban air quality and regional acid deposition.

The Administration has accomplished this by developing a strong energy technology R&D portfolio, drawing from the expert guidance provided by the President's Committee of Advisors on Science and Technology study, *Federal Energy Research and Development for the Challenges of the Twenty-First Century*, November 1997. A comparison across these budgets is provided below.

The Business Round Table emphasized improving vehicle energy efficiency through advanced motor hybrid and fuel cell power systems, and others. This is the focus of the Administrations Partnership for New Generation of Vehicles, yet the Senate and House are cutting funding back to or even below the FY98 level.

Similarly, energy efficiency in buildings, industry and transport (including PNGV) is being capped at below current levels.

Finally, solar and renewable energy offers huge potential, as noted by the Business Round Table, but House and Senate are cutting it below current funding levels.

BUDGET COMPARISONS

BUDGET	FY98 Actual	FY99 Actual	FY2000 Request	FY2000 Senate	FY2000 House
PNGV (DOE portion)	123	134	150	121	125
Energy Efficiency (includes Buildings, Industry, Transport, FEMP, Weatherization)	612	692	838	696	683
Solar and Renewable Energy (net)	272	336	399	279	301

BUDGET	FY98 Actual	FY99 PCAST	FY99 Request	FY99 Actual	FY2000 PCAST	FY2000 Request	FY2000 Senate	FY2000 House
Energy Efficiency								
--Buildings R&D								
--Industry R&D								
--Transport R&D								
Energy Efficiency	430	615	617	502	690	615		
Renewable Energy R&D	294	475	389	336	585	398		
Prior Year Balances	-24		-17					
Office of Science								
Total Renewable Energy	270	475	372					
--State/local Grants								
--Other								
TOTAL Energy Efficiency and Renewable Energy								

Comments on S.882, Murkowski/Hagel Climate Change Bill & BRT Report

We are gratified to see that Senators Murkowski and Hagel recognize that climate change is a serious issue that needs to be addressed and we welcome the bill's emphasis on promoting the research and development of technologies to reduce or sequester the greenhouse gases that cause global warming.

We similarly welcome today's report issued by the Business Roundtable ("The Role of Technology in Responding to Concerns About Global Climate Change", July 1999). Here too there is a large overlap much of what the BRT is proposing and what the Administration has proposed. In particular, we applaud the report's emphasis on:

- the "potential for additional or more rapid implementation of near-term energy-efficient technologies, both domestically and internationally."
- identifying opportunities to remove government barriers to technology diffusion.
- the importance of "accelerating the emergence of technologies relevant to global climate change" through improved public/private research partnerships.

We think it is self-evident that supporters of the Murkowski bill and the BRT proposals should strongly support the Administration's package of investments and tax incentives, which includes:

- a vigorous effort to **accelerate the research, development and deployment of energy efficient technologies and renewable energy**. These efforts include both medium and long-term research as well as more immediate programs like those encouraging the use of high-efficiency Energy Star products and Green Lights. These programs were funded at over \$1 billion in FY 99, with nearly \$1.4 billion requested for FY 00.
- a **five-year package of tax incentives** to encourage the purchase of clean energy products;

At the same time, ~~the~~ neither the Murkowski bill nor the BRT proposals should be seen as a substitute for the broad range of activities that the Administration is carrying on both domestically and internationally to address climate change. In addition to the investment and tax incentive package outlined above, these include:

- a bill to **restructure the electricity industry** that is projected to save 40-60 million metric tons of carbon per year;
- a set of **working industry partnerships** with sectors including autos, home building, steel, chemicals and forest products;
- an **energetic diplomatic effort** to complete the unfinished business of the Kyoto Protocol and bring about the meaningful participation of key developing countries;

- a **\$1.7 billion program in scientific research** to improve our understanding of the forces that shape the Earth's climate.

We are pleased that Senators Murkowski and Hagel have clearly stated that the \$200 million a year proposed R&D authorization program would be *in addition* to federal efforts already underway to address climate change. But the real question for Congress is how much it agrees to appropriate for clean energy efforts that are good for business, good for consumers, good for U.S. competitiveness, and good for our energy security.

We are also concerned that the bill would not give businesses real, bankable credit for taking early action to reduce greenhouse gases. It proposes steps to improve the voluntary reporting of greenhouse gas emissions, but businesses deserve more: they deserve real credit when they take real action.

2. Finally, regarding the Kyoto Protocol, it must be remembered that the Administration has said from the beginning that the Protocol is a work in progress -- a vital and significant accomplishment that embodies the fundamentally market-based approach that the United States fought for -- but a treaty that needs more work. In particular, a number of key provisions need to be further fleshed out and, most important, there needs to be greater participation by developing countries. Until that unfinished business is finished, the Administration has made clear it won't submit the Protocol for ratification. It is not in the best interests of the United States to give up on this process.

Our strategy should be to keep working on the diplomatic front to complete Kyoto so that it can be ratified, and to keep working on the domestic front on win-win steps to promote research, innovation, the diffusion of clean energy products and voluntary industry actions to reduce and sequester greenhouse gases.

BRT TECHNOLOGY PRESS CONFERENCE --- PRESS LIST

Name	Publication	Phone/Fax
Tony Kriendler	BNA	202-452-4331/5331
Katherine Silverthorne	USPIRG	202-261-1900
Victoria Green	Natural Gas Week	202-662-0728
Neil Franz	Enviro & Energy Weekly	628-6500/737-5299
Mike Schmidt	Financial Times Energy	703-816-8762
Greg Quinn	Bloomberg	624-1820/638-3155
Harry Stoffer	Automotive News	662-7212/638-3155
Chris Holly	Energy Daily	662-9720
Patrick Connole	Reuters	898-8316/8490

**Center for International Environmental Law • Environmental Defense Fund • Greenpeace
National Environmental Trust • Natural Resources Defense Council
Physicians for Social Responsibility • Ozone Action • Sierra Club
Union of Concerned Scientists • U.S. PIRG • World Wildlife Fund**

MURKOWSKI-HAGEL "CLIMATE" BILL CALLED DIVERSION

Environmental Coalition Applauds Senators' Concern, But Not Their Approach

WASHINGTON, April 27, 1999—While happy to see that Senators Frank Murkowski (R-AK) and Chuck Hagel (R-NE) have finally acknowledged that global warming is a serious concern, a broad coalition of environmental organizations labeled the legislation they introduced today as a dangerous diversion from real solutions to global warming. Misleadingly titled "the Energy and Climate Policy Act of 1999", the Murkowski-Hagel bill does not represent credible climate or energy policy; it will not produce cuts in the pollution that causes global warming.

The Murkowski-Hagel bill represents no change from the purely voluntary climate change strategy of last decade. This approach has proven insufficient to curb U.S. greenhouse gas emissions—U.S. emissions have risen more than 10 percent this decade. The bill throws money at a Rube Goldberg assemblage of unsound, untenable technologies that are not solutions to climate change, including coal gasification, nuclear power and complex schemes to retrieve the pollution, rather than simply preventing it. While long-term research-based strategies are an important component of an effective climate policy, the U.S. must take immediate steps to reduce our greenhouse gas emissions.

The fact is, we *have* the technology to start making significant, economical cuts in global warming pollution today. The following steps will reduce greenhouse gas emissions, improve efficiency, create jobs, and save money — as well as achieving other environmental benefits:

- Increase federal vehicle efficiency standards;
- Close a loophole for older, coal-fired power plants by requiring them to meet modern pollution standards that set progressively tighter caps on emissions of mercury, sulfur dioxide, nitrogen oxides, and carbon dioxide;
- Approve incentives for consumers to purchase efficient, low-emission energy technologies, and provide adequate funding for additional research to get these technologies out of the lab, (as in the President's Climate Change Technology Initiative and other budget proposals);
- Provide incentives for increasing the efficiency of manufacturing facilities and commercial and residential buildings; and
- Eliminate existing government subsidies to fossil fuels.

Although the Murkowski-Hagel legislation fails to include measures to actually reduce emissions, environmentalists congratulate the sponsors for joining the debate on research and development priorities. However, the focus of our climate and energy policy should be on accelerated deployment of environmentally sound energy technologies, such as renewable energy and energy efficiency, not additional funding for development of coal, nuclear power, or diversionary carbon sequestration strategies.

If we hope to combat global warming, the U.S. Congress must take action that will produce real emissions reductions now.

FOR MORE INFORMATION CONTACT:

Center for International Environmental Law

Donald Goldberg/Steve Porter
202/785-8700

Ozone Action

Kert Davies/Kymberly Escobar,
202/265-6738

Environmental Defense Fund

Steve Cochran, 202/387-3500

The Sierra Club

Ann Mesnikoff, 202-546-9707

Greenpeace

Gary Cook, 202/319-2419

Union of Concerned Scientists

Alden Meyer/Jim Ball, 202/332-0900

National Environmental Trust

Emily Smith, 202/887-8850

**U.S. Public Interest Research Group
(U.S.PIRG)**

Katherine Silverthorne, 202/546-9707

Natural Resources Defense Council

Dan Lashof/Jeff Fiedler, 202/289-6868

World Wildlife Fund

Rebecca Eaton, 202/822-3465

Physicians for Social Responsibility

Karen Hopfl-Harris, 202/898-0150