

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:
McCain Hearing

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



Debra Reed

09/19/2000 06:15:38 PM

.....

Record Type: Record

To: Roger S. Ballentine/WHO/EOP@EOP

cc: Paul Bledsoe/WHCCTF/EOP@EOP, Janet Anderson/WHCCTF/EOP@EOP

Subject: McCain Witness List

Note: I'll talk to Romm and to Norm -- Norm can be very helpful to us, and can add/address ag issues in a very helpful way -- he has been great on this.....

SENATE COMMITTEE ON COMMERCE, SCIENCE, AND TRANSPORTATION

- >
- >
- > Witness List*
- >
- > Hearing on Solutions to Climate Change
- >
- > Thursday, September 21, 2000 at 9:30 am
- > in Room 253 of the Russell Senate Office Building
- >
- >
- > Panel I
- >
- > The Honorable Dianne Feinstein, U.S. Senator, 331 Hart Senate Office
- > Building, Washington, DC 20510
- >
- >
- > Panel II
- >
- > Ms. Ann Mesnikoff, Washington Representative, Sierra Club, Global Warming
- > and Energy Program, 408 C St. N.E., Washington, DC 20002
- >
- > Mr. Jeff Morgheim, Climate Change Manager, BP, 501 West Lake Park Blvd.,
- > Houston, TX 77079
- >
- > Mr. Frederick D. Palmer, General Manager and Chief Executive Officer,
- > Western Fuels Association, Inc., Suite 805, 4301 Wilson Blvd., Arlington, VA
- > 22203
- >
- > Dr. Joseph Romm, Director, Center for Energy and Climate Solutions, 7010
- > Little River Turnpike, Suite 300, Annandale, VA 22003
- >
- > Dr. Norman Rosenberg, Senior Staff Scientist, Pacific Northwest National
- > Laboratory, Battelle Washington Operations, 901 D Street, 370 L'Enfant
- > Promenade, SW, Suite 900, Washington, DC 20024-2115
- >

THE UNITED STATES IS TAKING REAL ACTION TO FIGHT CLIMATE CHANGE

1. *The President and Vice President have dramatically increased the U.S. efforts to fight global warming.*
 - The President has secured more than \$6 billion in funding overall to fight climate change in the last two years.
 - Over the past two years, the President has secured more than \$2 billion to research and develop clean energy technologies alone in the four major carbon-emitting sectors of the economy — buildings, transportation, industry, and electricity generation.
2. *The President has taken extraordinary steps to implement domestic greenhouse gas emission reductions through Executive Orders, including:*
 - An Executive Order requiring that Federal agencies to reduce the amount of petroleum used by their vehicle fleets by 20 percent below 1999 levels by 2005 reducing greenhouse gas emissions by as much as 160,000 tons per year. This is especially important because the US government is the largest consumer of energy in world.
 - Executive Order requiring all US federal government agencies to reduce greenhouse gas emissions from buildings by 30% by 2010
 - Executive Order to accelerate the development of clean bio-based fuels and products.
3. *The Vice President has pioneered the way toward reducing emissions from automobiles through research technologies and tax credits*
 - Important results are starting to accrue from the public-private Partnership for a New Generation of Vehicles program lead by the Vice President. General Motors, Ford and Daimler-Chrysler have all announced plans to market highly fuel efficient "hybrid" cars that get 50-70 mpg and were partly developed under PNGV.
 - Ford and GM have announced increases in overall fuel economy using technologies developed in part under PNGV.
 - The President's tax incentives--up to \$3,000 for the purchase of a hybrid vehicle--would take effect in two years--just when vehicles are hitting the show rooms.
4. *These efforts are beginning to show results. The last few years have produced a widening disparity between fast growing US Gross Domestic Product (GDP) and much slower growth in greenhouse gas emissions. The gap between GDP and CO2 emissions has been greater in the second half of the 1990's than the first half. The President's newest proposed investments in clean energy technology and energy efficiency can further "de-couple" carbon emissions and economic growth.*

- In 1999: U.S. GDP grew by 4.2% while CO2 emissions grew by only about 1%.
 - In 1998: U.S. GDP grew by 4% while CO2 emissions grew by only .4%.
 - In the 1990's, US GDP grew almost three times more quickly than energy related CO2 emissions
5. *But the President and Vice President have proposed even more ambitious programs to fight climate change, including*
- \$4 billion in funding for renewable energy, energy efficiency, agricultural and forest-based energy, research and development, and other programs (see budget handout for details)
 - \$4.1 billion consumer tax incentives for the purchase of clean cars, homes, and appliances.

President Clinton's FY 2001 Climate Change Budget

"The greatest environmental challenge of the new century is global warming . . . If we fail to reduce the emission of greenhouse gases, deadly heat waves and droughts will become more frequent, coastal areas will flood, and economies will be disrupted. That is going to happen, unless we act. Many people . . . still believe you cannot cut greenhouse gas emissions without slowing economic growth. In the Industrial Age that may well have been true. But in this digital economy, it is not true anymore. New technologies make it possible to cut harmful emissions and provide even more growth."

-- President Bill Clinton, State of the Union Address, January 27, 2000

Meeting the Challenge of Global Warming. Against a backdrop of growing scientific consensus that the Earth is warming – and that human activities are at least partly to blame – President Clinton's FY 2001 budget is proposing \$2.4 billion (a 43 percent increase over FY 2000 enacted levels) in funding to combat global climate change. This includes a series of new initiatives, such as accelerated efforts to develop clean energy sources both at home and abroad and a new Clean Air Partnership Fund to boost state and local efforts to reduce greenhouse gases and air pollution, as well as a five-year package of tax incentives to spur clean energy technologies and increased investment for R&D in energy efficient technology and renewable energy. In addition, the President is proposing more than \$1.7 billion for global change research, for a total package for FY 2001 of over \$4 billion.

International Clean Energy Initiative. To help accelerate the development and deployment of clean energy technologies around the world, President Clinton is proposing \$201 million (a more than 100 percent increase over FY 2000 enacted levels) for a multi-agency initiative to encourage open competitive markets; remove market barriers in developing countries to clean energy technologies; and to provide new incentives for clean energy technology innovation and export. The initiative will promote U.S. clean energy exports, create high-value jobs, and assist developing countries in fighting air pollution and climate change.

Bioenergy & Bio-based Products Initiative. The budget includes \$289 million to accelerate the development of bio-based technologies, which convert crops, trees and other "biomass" into a vast array of fuels and products – an increase of \$93 million over FY 2000 enacted levels. In addition to helping meet environmental challenges like global warming, this initiative will increase the viability of alternative energy sources, support farm incomes, and diversify and strengthen the rural economy.

Clean Air Partnership Fund. The President proposes \$85 million for a new fund to provide grants to state and local governments for projects that reduce both greenhouse gases and pollutants like soot, smog, and air toxics.

Climate Change Technology Initiative (CCTI). The CCTI is a package of targeted tax incentives and investments aimed at increasing energy efficiency and spurring the broader use of renewable energy. The package will save consumers money and reduce greenhouse gas emissions at the same time. CCTI investments have risen substantially each of the past two years. The President's new budget proposes a still more accelerated effort.

\$4.0 billion in Tax Incentives over 5 years. The proposed package contains \$4.0 billion over five years in tax cuts (\$201 million for FY 2001) for consumers who purchase energy efficient products and for producers of energy from renewable sources. This year's CCTI tax package is \$400 million greater than last year's proposed five-year package. Highlights include:

- Tax credits for energy efficient homes. Consumers can receive a \$1000-2000 credit toward the purchase of a new energy efficient home; a 20 percent tax credit for the purchase of selected energy efficient products for homes and buildings; and a \$1000-2000 credit for installing a solar energy system.

- Tax credits for fuel-efficient cars. The package extends the current tax credit (of up to \$4000) through 2006 for qualified electric and fuel cell vehicles and also includes a tax credit of \$500-3000 for the purchase of a qualifying hybrid vehicle from 2003-2006.
- Tax credits for clean energy. The package extends the 1.5 cent per kilowatt hour tax credit for the production of electricity from wind and closed-loop biomass; provides credits for open-loop biomass facilities and coal-biomass cofiring; and provides credits for electricity produced from methane from certain landfills.

\$1.4 billion for Energy Efficiency & Clean Energy. The proposed package contains over \$1.4 billion in FY 2001 to research, develop, and deploy clean technologies for the four major carbon-emitting sectors of the economy -- buildings, transportation, industry, and electricity -- a 30 percent increase over the amount appropriated in FY 2000. Highlights include:

- Partnership for a New Generation of Vehicles. PNGV is a government-industry effort to develop comfortable, affordable cars that meet all applicable safety and environmental standards and get up to three times the fuel efficiency of today's cars. The combined proposal for PNGV in the FY 2001 budget is \$255 million, an increase of \$30 million over FY 2000 enacted levels.
- Partnership for Advancing Technology in Housing. PATH is a government-industry partnership to improve the energy efficiency of new homes by more than 50 percent and to retrofit 15 million existing homes to make them 30 percent more energy efficient within a decade. The FY 2001 budget request for building efficiency efforts, such as PATH, Energy Star, and Building America, totals \$275 million, a 42 percent increase over FY 2000 appropriations.
- Renewable Energy. The President proposes \$410 million for the Department of Energy's solar and renewable energy programs, a 32 percent increase over the amount appropriated in FY 2000. The package includes expanded efforts in key renewable technologies, such as wind, bioenergy, photovoltaics, and geothermal energy.

Cleaner Fossil Fuels. The budget request contains \$233 million for R&D to develop next-generation technologies for coal combustion with much higher energy efficiency and lower greenhouse gas emissions.

Weatherization & State Energy Grants. The budget request includes \$191 million -- a \$22 million increase over FY 2000 appropriations -- to deliver energy conservation services to low-income Americans and to assist state energy offices in addressing their energy priorities.

U.S. Global Change Research Program. The FY 2001 request includes over \$1.7 billion for scientific research to improve our understanding of human and natural forces that influence the Earth's climate system and to assess the likely consequences of global warming.

**THE UNITED STATES CLIMATE CHANGE POLICY:
COMMITTED TO ACTION**

Climate change is the premier environmental challenge of the 21st Century. There is overwhelming scientific consensus that human activity has begun to affect the climate, and that continuing on our present course may have dire consequences. The evidence of this warming trend has only grown stronger in the last few years

Many segments of American society are embracing the need for action against climate change. These include major corporations, state and local leaders, religious organizations, scientific organizations and others. A strong majority of Americans are not only concerned about climate change; they support action to fight it.

The United States is fully committed to meeting the challenge of climate change, both through strong domestic actions to reduce greenhouse gas emissions, and by working with other nations to achieve agreement on a sound, cost-effective global strategy and binding agreement.

THE UNITED STATES IS TAKING REAL ACTION AT HOME

Domestic action to reduce greenhouse gases emissions is not only important to overall US climate change policy, it as a necessary element in setting the stage for ratification of the Kyoto Protocol.

1. *The President and Vice President have dramatically increased the U.S. efforts to fight global warming.*

- The President has secured more than \$6 billion in funding overall to fight climate change in the last two years.
- Over the past two years, the President has secured more than \$2 billion to research and develop clean energy technologies alone in the four major carbon-emitting sectors of the economy — buildings, transportation, industry, and electricity generation.

2. *The President has taken extraordinary steps to implement domestic greenhouse gas emission reductions through Executive Orders, including:*

- An Executive Order requiring that Federal agencies to reduce the amount of petroleum used by their vehicle fleets by 20 percent below 1999 levels by 2005 reducing greenhouse gas emissions by as much as 160,000 tons per year. This is especially important because the US government is the largest consumer of energy in world.
- Executive Order requiring all US federal government agencies to reduce greenhouse gas emissions from buildings by 30% by 2010
- Executive Order to accelerate the development of clean bio-based fuels and products.

3. *The Vice President has pioneered the way toward reducing emissions from automobiles through research technologies and tax credits*

- Important results are starting to accrue from the public-private Partnership for a New Generation of Vehicles program lead by the Vice President. General Motors, Ford and Daimler-Chrysler have all announced plans to market highly fuel efficient "hybrid" cars that get 50-70 mpg and were partly developed under PNGV.
- Ford and GM have announced increases in overall fuel economy using technologies developed in part under PNGV.
- The President's tax incentives--up to \$3,000 for the purchase of a hybrid vehicle--would take effect in two years--just when vehicles are hitting the show rooms.

4. *These efforts are beginning to show results. The last few years have produced a widening disparity between fast growing US Gross Domestic Product (GDP) and much slower growth in greenhouse gas emissions. The gap between GDP and CO2 emissions has been greater in the second half of the 1990's than the first half. The President's newest proposed investments in clean energy technology and energy efficiency can further "de-couple" carbon emissions and economic growth.*
- In 1999: U.S. GDP grew by 4.2% while CO2 emissions grew by only about 1%.
 - In 1998: U.S. GDP grew by 4% while CO2 emissions grew by only .4%.
 - In the 1990's, US GDP grew almost three times more quickly than energy related CO2 emissions
5. *But the President and Vice President have proposed even more ambitious programs to fight climate change, including*
- \$4 billion in funding for renewable energy, energy efficiency, agricultural and forest-based energy, research and development, and other programs (see budget handout for details)
 - \$4.1 billion consumer tax incentives for the purchase of clean cars, homes, and appliances.

THE ROAD TO RATIFICATION: NEGOTIATING A RATIFIABLE INTERNATIONAL AGREEMENT

Our negotiating efforts leading up to and at The Hague this November are aimed at laying the groundwork for truly effective, global action to combat climate change. But many key elements must be negotiated to make this a real possibility. Resolving the key issues cited below will mean we are well on the way to completing the historic work begun in Kyoto.

Environmental Integrity:

- *The Protocol exists to serve an environmental purpose; to begin to reduce the emissions of the gases that will alter the global climate in an unprecedented manner. Any elaboration and implementation of the Protocol must, as the highest priority, assure the world that the reductions and removals of these gases from the atmosphere have actually occurred. Toward this end, the United States has taken the lead in proposing comprehensive, effective and binding rules to monitor and report emissions and removals, to track trades and to encourage compliance with the obligations of the Protocol.*

Cost-Effectiveness:

- *Over the long run, predictable, cost-effective reductions will allow for the greatest environmental benefit possible for every dollar spent on climate change. Cost-effective action is only possible if the Kyoto mechanisms and sinks can be implemented as widely and as simply as possible while preserving the environmental integrity of the Protocol. Overly bureaucratic requirements or artificial limits on these important tools will only limit the ability of the Parties to act and undermine support for the Protocol.*

Developing Countries:

- *At the same time, climate change is a global problem that requires a global solution. Developed countries have taken the lead but other countries must also contribute in ways that promote their sustainable development. Many developing countries are already making significant strides to improve energy efficiency, slow deforestation and otherwise stem their emissions growth. The Clean Development Mechanism will provide the means for many countries to take additional action without sacrificing economic development.*
- *The United States fully supports the efforts of developing countries to expand their economies and improve the well being of their citizens. We also firmly believe that this goal can be achieved without repeating the wasteful and polluting practices of the past century.*

The United States is committed to completing the work begun at Kyoto. But much remains to be done to address these critical issues.

Priority Climate Change Budget Items – and Funding Status

		REQUEST	HOUSE	SENATE
INTERNATIONAL CLEAN ENERGY INITIATIVE				
USAID	-- Foreign Ops	\$109	\$79	\$79
DOE	-- Energy and Water	\$32	\$9	\$7
	-- Interior	\$20	\$7	\$2
DOC	-- CJS	\$4	0	0
TDA	-- Foreign Ops	\$21	\$16	\$16
EXIM	-- Foreign Ops	\$15	0	0
TOTAL		\$201	\$111	\$104

Status:

Funding in both the House and Senate bills represents primarily base funding for this initiative, and very little of the additional \$101 requested. Need to increase funding in all 4 bills.

		REQUEST	HOUSE	SENATE
BIOBASED PRODUCTS AND BIOENERGY				
DOE	-- Energy and Water	\$130	\$107	\$121
	-- Interior	\$44	\$26	\$28
USDA	-- Agriculture	\$93	\$63	\$61
	-- Interior	\$19	\$9	\$14
TOTAL		\$286	\$205	\$224

Status:

These important programs are underfunded across the board, and represent lost energy and renewable products opportunities for the country.

CLIMATE CHANGE TECHNOLOGY INITIATIVE		REQUEST	HOUSE	SENATE
DOE	-- Energy and Water	\$451	\$379	\$437
	-- Interior	\$718	\$531	\$649
EPA	-- VA/HUD	\$227	\$103	\$101
USDA	-- Agriculture	\$11	0	\$2
	-- Interior	\$13	0	\$5
HUD	-- VA/HUD	\$12	\$10	\$?

Status:

Senate numbers for DOE are good (need additional info. on specifics, however). EPA and USDA requests are woefully inadequate.

		REQUEST	HOUSE	SENATE
PNGV	-- DOE	\$148	\$5	
\$140				
	-- NSF	\$47	\$42	\$?
	-- EPA	\$40	\$26	\$?
	-- DOC	\$16	\$6	\$?
	-- DOT	\$4	0	
	0			

Status:

Senate number for DOE is good – (must still get additional Senate numbers for remaining agencies).

DOE PROGRAMS –		REQUEST	HOUSE	SENATE
(Included in above numbers – reported differently here)				
Solar and Renewable Energy R&D		\$410	\$343	\$397
Energy Conservation and Efficiency		\$851	\$650	\$762

Status:

Senate numbers are good.

MEMO:

TO: Rosina, Roger, Paul, Debbie, David

FROM: Sam

RE: Review of House and Senate E&W Appropriations and Report Language

DATE: September 6, 2000

BUDGETs are listed in the table below; report language follows. Particular problems/solutions include:

- House numbers are generally low. Senate numbers should be supported, plus \$20M if possible.
- International solar is limited to JI and the ICEI is zeroed out. Most important is to support the +\$7M in the international line item to demonstrably negate the Committee Report language (see below).
- Concentrating solar is reduced by about 7% from last year's level; a plus-up is indicated.
- Bioenergy is well below the request (but above last year); a plus-up is indicated.

BUDGET REQUESTS AND APPROPRIATIONS

	FY97 App	FY98 App	FY99 Reqst	FY99 Omnbs	FY00 Reqst	FY00 Final	FY01 Reqst	FY01 House	FY01 Senate	FY01 Plus-up
Solar Buildings				3.556	5.500	1.968	4.500	3.95	4.5	
Photovoltaics				70.561	93.309	65.912	82.000	75.775	76.5	+4.0
(PV Research)								(2.847)	(2.847)	
(Solar Photoconversion Research)								(14.26)	(14.26)	
Concentrating Solar				16.791	18.850	15.168	15.000	13.8	14.0	+1.0
Biomass/Biofuels				72.052	92.391	70.727	102.44	79.62	91.35	+4.0
Power Systems				30.816	38.950	31.835	48.000	33.46	47.6	
Transportation				41.236	53.441	38.892	54.441	46.16	43.75	
(Energy Research)								(26.74)	(26.74)	
Wind				34.076	45.600	32.481	50.500	36.9	43.617	+4.0
(Wind Energy Research)								(0.283)	(0.283)	
REPI				4.000	1.500	1.500	4.000	3.925	4.0	
Solar Prog Support				0.000	10.000	4.936	5.000	4.0	3.0	
International Solar				6.272	6.000	3.819	13.000	4.0	6.0	+7.0
NREL				3.900	1.100	1.100	1.900	4.0	4.0	
Geothermal				28.150	29.500	23.621	27.000	26.92	28.00	
Hydropower				3.210	7.000	4.921	5.000	3.488	5.5	
Renewable Indian Energy				4.779	0.000	3.864	5.000	2.0	6.6	
Program Direction				18.100	19.171	17.720	18.159	18.159	18.0	
Hydrogen R&D				21.976	28.000	24.587	23.000	23.00	30.95	
(Hydrogen Research)								(2.97)	(2.97)	
Elec. Energy Sys & Storage				40.896	41.000	37.792	48.000	41.875	59.0	
Elec. Grid Reliability				4.251	4.000	2.955	12.500	5.975	12.0	
Hi-Temp Supercond				32.100	31.000	31.408	32.000	31.9	41.0	
Energy Storage				4.445	6.000	3.429	3.500	4.0	6.0	
Dept'l Energy Mgmt							5.000	2.0	2.0	
TOTAL SOLAR + Research							456.6	390.5	444.117	+20.0
(Energy Research)							(47.1)	47.1	47.1	
TOTAL SOLAR - Research	270	272	372.00	335.52	398.15	310.11	409.5	343.41	397.017	+20.0

COMMITTEE REPORT LANGUAGE: In addition to the above budget lines, for which a strong push in support of the Senate numbers plus the indicated \$20M plus-up would be very helpful, the Committee Reports for the Energy and Water appropriations include some objectionable language, particularly for the International Clean Energy initiative. Given the importance of this initiative in terms of addressing global energy use, opening markets, reducing emissions, and strengthening the US position in global negotiations, it is very important to find a means in the budget endgame to support this initiative.

SENATE LANGUAGE problems include:

- **International renewable programs**, page 103-104. "The Committee strongly supports the U.S. international joint implementation program funded in this account and recommends only \$6,000,000 for that purpose. ~~No funds are recommended for the international clean energy initiative.~~ The Committee supports efforts to increase international market opportunities for the export and deployment of advanced clean energy technologies -- end-use efficiency, fossil, renewable, and nuclear energy technologies. The Administration should improve the Federal Government's role in the national and international development, demonstration, and deployment of advanced clean energy technologies by **establishing an interagency working group jointly chaired by the Departments of Energy and Commerce and the U.S. Agency for International Development.** This working group should also include representation from the Departments of State and Treasury, Environmental Protection Agency, Export-Import Bank, Overseas Private Investment Corporation, Trade and Development Agency, and other departments and agencies, as appropriate. The Administration should also consult with the private sector and other interest groups on the export and deployment of clean energy technologies through the establishment of an advisory panel. **Progress on the international deployment of clean energy technologies should be reported annually to Congress by March 1. The Administration should analyze technology, policy, and market opportunities for further international clean energy program development and provide Congress a 5-year strategic plan by June 1, 2001.** This plan should be developed in consultation with the advisory panel."
- **PROBLEM:** The language, in bold above, creates a situation where no new funds are provided the international renewable energy program—and may be interpreted to mean that even existing activities are not to be supported within the program line items—while requiring a number of new reporting requirements without the resources to develop them.
- **SOLUTION:** Put funds specifically into the International Solar line item—which will demonstrate that the language in the conference report is invalid. Add clear direction that the PV, wind, and biomass programs themselves have funds to conduct international energy R&D and should do so. This would be particularly emphasized under the above plus-up scenario.
- **Basic Research:** page 102: "the Committee recommends basic research that will provide significant improvements over existing technologies rather than on the deployment or incremental improvement of commercial or near commercial technologies.... The Committee expects non-Federal financial to support the final stages of product development and all stages of market development".
 - **PROBLEM:** A limitation to basic research constrains the programs from conducting a variety of needed public-private partnerships to facilitate market entry by these new technologies.
 - **SOLUTION:** Establish language that notes the important role of public-private partnerships in facilitating the market entry of advanced clean energy technologies.

HOUSE LANGUAGE problems include:

- Laboratory-directed research and development, or LDRD, is limited to 4%.
 - **PROBLEM.** LDRD is the principle source of funds for exploring new innovative research areas. In comparison, the Administration requested 6% and the Senate mark provided 6%. The 6% level was also recommended in external reviews by the Laboratory Operations Board Report and

by the Stockpile Stewardship Program Review. The House also directs that LDRD be separately identified and broken out in the budgets rather than through overhead accounts, which will constrain the use of these funds to conduct innovative cross-cutting research or investigate new research areas outside traditional program lines.

- SOLUTION: Language should be developed with Congress that specifically allows 6% LDRD rates.
- Contractor travel is limited to \$150M for all DOE E&W programs, \$50M below Administration request and Senate mark.
 - PROBLEM: The Senate Committee report notes “the fiscal year 2000 travel ceiling has caused an unintended reduction in programmatic and scientific travel that is necessary for fulfilling the Department’s mission.”
 - SOLUTION: Reference the Senate language which recommends the Administration’s proposed level.

INITIATIVE BRIEFS

International Clean Energy Initiative. To help accelerate the development and deployment of clean energy technologies around the world, President Clinton is proposing \$201 million (a 100 percent increase over FY 2000 enacted levels) for a multi-agency initiative to encourage open competitive markets; remove market barriers in developing countries to clean energy technologies; and to provide new incentives for clean energy technology innovation and export. The initiative will promote U.S. clean energy exports, create high-value jobs, and assist developing countries in fighting air pollution and climate change.

- Status: Of the \$100M new money requested, the House bill provides \$12M, the Senate \$2.5M, all for DOE (E&W plus Interior), while the USAID, ExIm, and TDA requests have been zeroed in both House and Senate.
- Importance: Developing country energy use is expected to account for three-fourths of the increase in global energy use between now and 2050. These energy technology markets are projected to cumulatively total \$4 to \$5 trillion over the next 20 years, \$15 to \$25 trillion over the next 50 years.

Bioenergy & Bio-based Products Initiative. The budget includes \$289 million to accelerate the development of bio-based technologies, which convert crops, trees and other “biomass” into a vast array of fuels and products – an increase of \$93 million over FY 2000 enacted levels. In addition to helping meet environmental challenges like global warming, this initiative will increase the viability of alternative energy sources, support farm incomes, and diversify and strengthen the rural economy.

- Status. Of the \$93M request for new money, the House Bill provides \$14M and the Senate \$32M.
- Importance: The President’s Executive Order 13134, established in August 1999, sets a goal of tripling use of bioenergy and biobased products by 2010. This would potentially increase farm income by as much as \$20 billion per year and offset as much as 100 million metric tonnes of carbon emissions per year.

Climate Change Technology Initiative (CCTI). The CCTI is a package of R&D investments and targeted tax incentives aimed at increasing energy efficiency, spurring the broader use of renewable energy, maintaining the nuclear option, and reducing carbon emissions from fossil fuels. The package will save consumers money and reduce greenhouse gas emissions at the same time.

- Importance: Advanced technology is the only viable means of significantly reducing greenhouse gas emissions—through energy efficiency and new energy supply that releases less carbon.

\$1.4 billion for Energy Efficiency & Clean Energy RD&D. The proposed package contains

over \$1.4 billion in FY 2001 to research, develop, and deploy clean technologies for the four major carbon-emitting sectors of the economy -- buildings, transportation, industry, and electricity -- a 30 percent increase over the amount appropriated in FY 2000. Highlights include:

- Status: (CCTI includes PNGV and parts of Bioenergy and ICEI). Overall CCTI mark (Energy and Water, Interior, EPA) is down from request of \$1432 to \$1023 in the House, pending in the Senate.
- Partnership for a New Generation of Vehicles. PNGV is a government-industry effort to develop comfortable, affordable cars that meet all applicable safety and environmental standards and get up to three times the fuel efficiency of today's cars. The combined proposal for PNGV in the FY 2001 budget is \$255 million, an increase of \$30 million over FY 2000 enacted levels.
 - Status: PNGV: Overall request of \$255 is down to \$79 in the House, pending in the Senate. House Mark cuts PNGV request for DOE from \$148M to \$5M; Senate provides \$140M for DOE.
 - Importance: Given a summer of concern over gasoline prices, it must be noted that PNGV is the single most effective way to reduce U.S. oil imports and oil vulnerability. This is a flagship public-private partnership with huge public benefits.
- Partnership for Advancing Technology in Housing. PATH is a government-industry partnership to improve the energy efficiency of new homes by more than 50 percent and to retrofit 15 million existing homes to make them 30 percent more energy efficient within a decade. The FY 2001 budget request for building efficiency efforts, such as PATH, Energy Star, and Building America, totals \$275 million, a 42 percent increase over FY 2000 appropriations.
 - Status:
 - Importance: The buildings industry is extremely fragmented and does very little research. This program offers a highly innovative means of redirecting this industry towards much more efficient and safer buildings, while significantly increasing productivity and reducing materials waste.
- Renewable Energy. The President proposes \$410 million for the Department of Energy's solar and renewable energy programs, a 32 percent increase over the amount appropriated in FY 2000. The package includes expanded efforts in key renewable technologies, such as wind, bioenergy, photovoltaics, and geothermal energy.
 - Status: As discussed above.
 - Importance: Renewables have shown remarkable advances over the past two decades, with prices for PV and wind, for example, dropping by 90%. Market growth has been above 20% annually for both in recent years, with some 3.6 GW of wind energy generating capacity sold in 1999 and 200 MW of PV sold. Renewables offer the principal means of sharply reducing carbon emissions from energy supply; the alternatives are nuclear energy, which must overcome significant proliferation, waste disposal, and safety challenges before it can be economically, technically, and politically viable; and geological sequestration of carbon from fossil fuels, which also requires extensive research.

MEMO:

TO: Rosina, Roger, Paul, Debbie, David
 FROM: Sam
 RE: Review of House and Senate E&W Appropriations and Report Language
 DATE: September 6, 2000

BUDGETs are listed in the table below; report language follows. Particular problems/solutions include:

- House numbers are generally low. Senate numbers should be supported, plus \$20M if possible.
- International solar is limited to JI and the ICEI is zeroed out. Most important is to support the +\$7M in the international line item to demonstrably negate the Committee Report language (see below).
- Concentrating solar is reduced by about 7% from last year's level; a plus-up is indicated.
- Bioenergy is well below the request (but above last year); a plus-up is indicated.

BUDGET REQUESTS AND APPROPRIATIONS

	FY97 App	FY98 App	FY99 Reqst	FY99 Omnbs	FY00 Reqst	FY00 Final	FY01 Reqst	FY01 House	FY01 Senate	FY01 Plus-up
Solar Buildings				3.556	5.500	1.968	4.500	3.95	4.5	
Photovoltaics				70.561	93.309	65.912	82.000	75.775	76.5	+4.0
(PV Research)								(2.847)	(2.847)	
(Solar Photoconversion Research)								(14.26)	(14.26)	
Concentrating Solar				16.791	18.850	15.168	15.000	13.8	14.0	+1.0
Biomass/Biofuels				72.052	92.391	70.727	102.44	79.62	91.35	+4.0
Power Systems				30.816	38.950	31.835	48.000	33.46	47.6	
Transportation				41.236	53.441	38.892	54.441	46.16	43.75	
(Energy Research)								(26.74)	(26.74)	
Wind				34.076	45.600	32.481	50.500	36.9	43.617	+4.0
(Wind Energy Research)								(0.283)	(0.283)	
REPI				4.000	1.500	1.500	4.000	3.925	4.0	
Solar Prog Support				0.000	10.000	4.936	5.000	4.0	3.0	
International Solar				6.272	6.000	3.819	13.000	4.0	6.0	+7.0
NREL				3.900	1.100	1.100	1.900	4.0	4.0	
Geothermal				28.150	29.500	23.621	27.000	26.92	28.00	
Hydropower				3.210	7.000	4.921	5.000	3.488	5.5	
Renewable Indian Energy				4.779	0.000	3.864	5.000	2.0	6.6	
Program Direction				18.100	19.171	17.720	18.159	18.159	18.0	
Hydrogen R&D				21.976	28.000	24.587	23.000	23.00	30.95	
(Hydrogen Research)								(2.97)	(2.97)	
Elec. Energy Sys & Storage				40.896	41.000	37.792	48.000	41.875	59.0	
Elec. Grid Reliability				4.251	4.000	2.955	12.500	5.975	12.0	
Hi-Temp Supercond				32.100	31.000	31.408	32.000	31.9	41.0	
Energy Storage				4.445	6.000	3.429	3.500	4.0	6.0	
Dept'l Energy Mgmt							5.000	2.0	2.0	
TOTAL SOLAR + Research							456.6	390.5	444.117	+20.0
(Energy Research)							(47.1)	47.1	47.1	
TOTAL SOLAR - Research	270	272	372.00	335.52	398.15	310.11	409.5	343.41	397.017	+20.0

COMMITTEE REPORT LANGUAGE: In addition to the above budget lines, for which a strong push in support of the Senate numbers plus the indicated \$20M plus-up would be very helpful, the Committee Reports for the Energy and Water appropriations include some objectionable language, particularly for the International Clean Energy initiative. Given the importance of this initiative in terms of addressing global energy use, opening markets, reducing emissions, and strengthening the US position in global negotiations, it is very important to find a means in the budget endgame to support this initiative.

SENATE LANGUAGE problems include:

- **International renewable programs**, page 103-104. “The Committee strongly supports the U.S. international joint implementation program funded in this account and recommends only \$6,000,000 for that purpose. **No funds are recommended for the international clean energy initiative.** The Committee supports efforts to increase international market opportunities for the export and deployment of advanced clean energy technologies -- end-use efficiency, fossil, renewable, and nuclear energy technologies. The Administration should improve the Federal Government's role in the national and international development, demonstration, and deployment of advanced clean energy technologies by **establishing an interagency working group jointly chaired by the Departments of Energy and Commerce and the U.S. Agency for International Development.** This working group should also include representation from the Departments of State and Treasury, Environmental Protection Agency, Export-Import Bank, Overseas Private Investment Corporation, Trade and Development Agency, and other departments and agencies, as appropriate. The Administration should also consult with the private sector and other interest groups on the export and deployment of clean energy technologies through the establishment of an advisory panel. **Progress on the international deployment of clean energy technologies should be reported annually to Congress by March 1. The Administration should analyze technology, policy, and market opportunities for further international clean energy program development and provide Congress a 5-year strategic plan by June 1, 2001.** This plan should be developed in consultation with the advisory panel.”
 - **PROBLEM:** The language, in bold above, creates a situation where no new funds are provided the international renewable energy program—and may be interpreted to mean that even existing activities are not to be supported within the program line items—while requiring a number of new reporting requirements without the resources to develop them.
 - **SOLUTION:** Put funds specifically into the International Solar line item—which will demonstrate that the language in the conference report is invalid. Add clear direction that the PV, wind, and biomass programs themselves have funds to conduct international energy R&D and should do so. This would be particularly emphasized under the above plus-up scenario.
- **Basic Research:** page 102: “the Committee recommends basic research that will provide significant improvements over existing technologies rather than on the deployment or incremental improvement of commercial or near commercial technologies.... The Committee expects non-Federal financial to support the final stages of product development and all stages of market development”.
 - **PROBLEM:** A limitation to basic research constrains the programs from conducting a variety of needed public-private partnerships to facilitate market entry by these new technologies.
 - **SOLUTION:** Establish language that notes the important role of public-private partnerships in facilitating the market entry of advanced clean energy technologies.

HOUSE LANGUAGE problems include:

- Laboratory-directed research and development, or LDRD, is limited to 4%.
 - **PROBLEM.** LDRD is the principle source of funds for exploring new innovative research areas. In comparison, the Administration requested 6% and the Senate mark provided 6%. The 6% level

was also recommended in external reviews by the Laboratory Operations Board Report and by the Stockpile Stewardship Program Review. The House also directs that LDRD be separately identified and broken out in the budgets rather than through overhead accounts, which will constrain the use of these funds to conduct innovative cross-cutting research or investigate new research areas outside traditional program lines.

- SOLUTION: Language should be developed with Congress that specifically allows 6% LDRD rates.
- Contractor travel is limited to \$150M for all DOE E&W programs, \$50M below Administration request and Senate mark.
 - PROBLEM: The Senate Committee report notes “the fiscal year 2000 travel ceiling has caused an unintended reduction in programmatic and scientific travel that is necessary for fulfilling the Department’s mission.”
 - SOLUTION: Reference the Senate language which recommends the Administration’s proposed level.

INITIATIVE BRIEFS

International Clean Energy Initiative. To help accelerate the development and deployment of clean energy technologies around the world, President Clinton is proposing \$201 million (a 100 percent increase over FY 2000 enacted levels) for a multi-agency initiative to encourage open competitive markets; remove market barriers in developing countries to clean energy technologies; and to provide new incentives for clean energy technology innovation and export. The initiative will promote U.S. clean energy exports, create high-value jobs, and assist developing countries in fighting air pollution and climate change.

- Status: Of the \$100M new money requested, the House bill provides \$12M, the Senate \$2.5M, all for DOE (E&W plus Interior), while the USAID, ExIm, and TDA requests have been zeroed in both House and Senate.
- Importance: Developing country energy use is expected to account for three-fourths of the increase in global energy use between now and 2050. These energy technology markets are projected to cumulatively total \$4 to \$5 trillion over the next 20 years, \$15 to \$25 trillion over the next 50 years.

Bioenergy & Bio-based Products Initiative. The budget includes \$289 million to accelerate the development of bio-based technologies, which convert crops, trees and other “biomass” into a vast array of fuels and products – an increase of \$93 million over FY 2000 enacted levels. In addition to helping meet environmental challenges like global warming, this initiative will increase the viability of alternative energy sources, support farm incomes, and diversify and strengthen the rural economy.

- Status. Of the \$93M request for new money, the House Bill provides \$14M and the Senate \$32M.
- Importance: The President’s Executive Order 13134, established in August 1999, sets a goal of tripling use of bioenergy and biobased products by 2010. This would potentially increase farm income by as much as \$20 billion per year and offset as much as 100 million metric tonnes of carbon emissions per year.

Climate Change Technology Initiative (CCTI). The CCTI is a package of R&D investments and targeted tax incentives aimed at increasing energy efficiency, spurring the broader use of renewable energy, maintaining the nuclear option, and reducing carbon emissions from fossil fuels. The package will save consumers money and reduce greenhouse gas emissions at the same time.

- Importance: Advanced technology is the only viable means of significantly reducing greenhouse gas emissions—through energy efficiency and new energy supply that releases less carbon.

\$1.4 billion for Energy Efficiency & Clean Energy RD&D. The proposed package contains over \$1.4 billion in FY 2001 to research, develop, and deploy clean technologies for the four major carbon-emitting sectors of the economy -- buildings, transportation, industry, and electricity -- a 30 percent increase over the amount appropriated in FY 2000. Highlights include:

- **Status:** (CCTI includes PNGV and parts of Bioenergy and ICEI). Overall CCTI mark (Energy and Water, Interior, EPA) is down from request of \$1432 to \$1023 in the House, pending in the Senate.
- **Partnership for a New Generation of Vehicles.** PNGV is a government-industry effort to develop comfortable, affordable cars that meet all applicable safety and environmental standards and get up to three times the fuel efficiency of today's cars. The combined proposal for PNGV in the FY 2001 budget is \$255 million, an increase of \$30 million over FY 2000 enacted levels.
 - **Status:** PNGV: Overall request of \$255 is down to \$79 in the House, pending in the Senate. House Mark cuts PNGV request for DOE from \$148M to \$5M; Senate provides \$140M for DOE.
 - **Importance:** Given a summer of concern over gasoline prices, it must be noted that PNGV is the single most effective way to reduce U.S. oil imports and oil vulnerability. This is a flagship public-private partnership with huge public benefits.
- **Partnership for Advancing Technology in Housing.** PATH is a government-industry partnership to improve the energy efficiency of new homes by more than 50 percent and to retrofit 15 million existing homes to make them 30 percent more energy efficient within a decade. The FY 2001 budget request for building efficiency efforts, such as PATH, Energy Star, and Building America, totals \$275 million, a 42 percent increase over FY 2000 appropriations.
 - **Status:**
 - **Importance:** The buildings industry is extremely fragmented and does very little research. This program offers a highly innovative means of redirecting this industry towards much more efficient and safer buildings, while significantly increasing productivity and reducing materials waste.
- **Renewable Energy.** The President proposes \$410 million for the Department of Energy's solar and renewable energy programs, a 32 percent increase over the amount appropriated in FY 2000. The package includes expanded efforts in key renewable technologies, such as wind, bioenergy, photovoltaics, and geothermal energy.
 - **Status:** As discussed above.
 - **Importance:** Renewables have shown remarkable advances over the past two decades, with prices for PV and wind, for example, dropping by 90%. Market growth has been above 20% annually for both in recent years, with some 3.6 GW of wind energy generating capacity sold in 1999 and 200 MW of PV sold. Renewables offer the principal means of sharply reducing carbon emissions from energy supply; the alternatives are nuclear energy, which must overcome significant proliferation, waste disposal, and safety challenges before it can be economically, technically, and politically viable; and geological sequestration of carbon from fossil fuels, which also requires extensive research.