

Chairman T. ELLIOTT Honda TE-03-55 01/21/03

President
T. MacCARTHY

TO:

AIAM Environment and Energy Subcommittee

MEMBERS

FROM:

John M. Cabaniss, Jr.

Director, Environment & Energy

Honda Hyundai Isuzu

Kia

RE:

CLIMATE CHANGE - International Climate Change

Partnership Meeting - January 15, 2003 - Summary -

Summaries of McCain/Leiberman and

Jeffords/Daschle Bills and Side-By-Side Comparison with Provisions of Last Year's Energy Bill and the

Administration's Program

Mitsubishi Nissan Saab Subaru Suzuki

ASSOCIATES

Toyota

Aston Martin

Bosch Denso JAMA Peugeot

Renault

Attached is a summary of the January 15, 2003 ICCP meeting. Handouts included summaries of the McCain/Leiberman and Jeffords/Daschle climate change bills and a side-by-side comparison with the climate change provisions of last year's energy bill and the

Administration's program.



International Climate Change Partnership Meeting

January 15, 2003

AIAM Summary

The ICCP held its first meeting of the new year on January 15, 2003. Attached are the agenda, the minutes of the previous meeting, the proposed budget for 2003, and several other handouts, including summaries of the McCain/Leiberman and Jeffords/Daschle climate change bills and a side-by-side comparison with the climate change provisions of last year's energy bill and the Administration's program.

Regarding administrative items, Kevin Fay, executive director of ICCP, reported that a few members had been lost, including Whirlpool and BP. Because of the reduction this caused in dues, the 2003 budget was reduced. A list of proposed ICCP meeting dates was circulated. Steve Harper of Intel was elected as chairman of ICCP for 2003. Vice chair will be elected later.

Mr. Fay distributed a draft outline of additional ICCP comments to be provided to DOE following its recent workshop on GHG reporting. See attached. ICCP members were asked to provide comments back to ICCP by January 24, 2003.

Mr. Fay reported that he had met recently with James Connaughton, chairman of the White House Council on Environmental Quality, to discuss White House plans for 2003. Mr. Connaughton indicated that the WH goals for 2003 are:

- 1. Complete the GHG registry rulemaking
- 2. Provide substantial funding to support technology developement
- 3. Encourage significant sectoral voluntary programs
- 4. Push back on legislation calling for mandatory actions
- 5. Encourage bilateral international programs

Attached are some additional notes from Mr. Fay giving his perspective on likely progress in 2003. The key items are:

- 1. The Kyoto process is moving ahead, but slowly due to economic pressures.
- 2. It appears Russia is less likely to ratify the Kyoto Protocol due to its economic woes.
- 3. Congressional and state (e.g. California GHG bill) activities are expanding.
- 4. Despite the WH goal indicated above, it is unlikely that much, if any, funding will be available in the Federal Budget to support climate change technology development.
- 5. Long term, sustainable climate change program requires global cooperation, including US and developing countries.
- 6. ICCP will focus on rulemaking activity, Congressional and state legislative activities, budgetary actions, international activities on Kyoto, and maintain liaison.

ICCP – AGENDA January 15, 2003

1:00 p.m. - 4:00 p.m.

I. Ca	ıll to O	rder/Intr	oductions
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II. Approval of Minutes – November 12, 2002 (attached)

III. Administrative

(1:15-1:45)

- A. Membership
- B. Budget
- C. Officers
- D. 2003 Meeting Schedule

IV. Domestic

(1:45 - 3:00)

- A. Recent Discussions with Administration
- B. DOE Registry Activities
 - 1. Voluntary GHG Reporting Workshops
 - 2. ICCP Post-Workshop Comments
 - 3. Business Challenge
- C. Jeffords/Daschle Climate Bill
- D. McCain/Lieberman Cap and Trade Bill
- E. Energy Bill
- F. Multi-Pollutant Legislation
- G. State Issues
- H. BRT Climate Resolve

V. International

(3:00-3:45)

A. Kyoto Protocol

- 1. Schedule of Meetings
- 2. Prospects for Ratification
- 3. Key Issues for 2003
- 4. Second Budget Period/Long-Term Objective
- B. EU Emissions Trading Program
- C. Individual Country Programs
- D. Trans-Atlantic Business Dialogue German Marshall Fund

VI. Earth Technologies Forum

(3:45-4:00)

MINUTES

INTERNATIONAL CLIMATE CHANGE PARTNERSHIP (ICCP)

Board Meeting November 12, 2002

Pursuant to a written notice, the International Climate Change Partnership met on November 12, 2002 at the offices of Alcalde & Fay in Arlington, VA. Judith Bayer, Chairman, called the meeting to order at 12:00 p.m.

Attendance

The following ICCP members, guests, and staff attended the meeting:

Rick Adcock CH2M Hill

Judith Bayer United Technologies

Tom CortinaICCPMaureen DonahueIPACRic ErdheimNEMAKevin FayICCPSteve HarperIntelTom JacobDuPontBarbara JonesHalliburton

Peter Molinaro (by phone)

Chuck Samuels

AHAM
Fred Sciance

GM

Tom Werkema

Kurt Werner (by phone)

John Wilkinson

Roy Wood

Atofina

Vulcan

Kodak

Welcome & Introduction

J. Bayer welcomed the group and introductions were made. The agenda and the meeting minutes were circulated prior to the meeting. Other information was also distributed at the meeting.

Approval of Minutes

The minutes of the October 1 meeting were approved without revision.

International

K. Fay, T. Jacob, T. Werkema and others briefed the group on the results of the COP 8 meetings in New Delhi. They reviewed the discussions leading to the Delhi Declaration, which links climate change and sustainable development. It was noted that the focus of the negotiations shifted somewhat at COP 8 from climate change mitigation to adaptation. This shift was pushed by developing countries with support from the US. The EU tried to focus the discussion at COP 8 on the second budget period and the possibility of developing country commitments, but got no support from developing countries or the US. It was noted that the process is currently in a lull as details of the operating rules are developed and Parties await the entry into force of the Kyoto Protocol. It was noted that COP 9 is tentatively scheduled to be held in Milan, Italy.

The group discussed the status of ratification of the Kyoto Protocol. It was noted that Russia still holds the key to the Protocol entering into force and that at this time Russia is still expected to ratify the Protocol, although they sent some mixed signals at COP 8. The debate in Canada over Kyoto ratification was discussed.

Individual country climate change programs were discussed, including an ECCP draft directive and an Irish cap and trade pilot program. T. Werkema briefed the group on Canada's new climate proposal that includes emissions trading, controls on industrial emissions, and actions by individual Canadians.

Domestic

The group discussed the impacts of the November elections on domestic climate change activities, programs, and legislation. It was speculated that with Republican control of Congress, the pressure to include climate provisions in energy or multi-pollutant legislation will be decreased. Discussions with Senate staff indicate that it is possible that legislation similar to the Byrd/Stevens bill will be considered in 2003.

The group discussed the status of the House/Senate conference on the Energy bill. It is not expected that Energy legislation will be considered in the lame-duck session.

The group discussed the status of DOE's efforts to enhance the existing 1605(b) GHG reporting program, as requested by the President in February. DOE will hold a series of four workshops around the country to discuss changes to the GHG reporting program. The first workshop will be held in Washington D.C. on November 18-19. ICCP will attend the first workshop and ICCP member companies will cover workshops in Chicago, Houston, and San Francisco in December.

The group discussed State activities on climate change, including a possible New York mobile source bill similar to California and a follow-up in New England to the previous Governor's agreement on climate change.

Other Activities

It was noted that the 2003	Earth Technologies	Forum is scheduled for	or April 22-24 at the
Hyatt Regency in Washington, D.O.	C.		

The meeting was adjourned at approximately 3:00 p.m.

	Respectfully submitted,
Approved:	Tom Cortina
Judith Bayer Chairman	

Line Item	2002 Final	2002	Proposed 2003
Line item	31-Dec	Budget	Budget
Beginning Balance	\$11,451	\$10,000	\$2,500
OPERATING BUDGET			
REVENUES			* 005.000
Dues	\$321,500	\$350,000	\$305,000
Misc. Contributions	\$6,000	\$6,000	\$6,000 \$200
Interest	\$118	\$300	\$300
Conference Proceeds	\$0	\$0	\$0
Total	\$327,618	\$356,300	\$311,300
EXPENSES			***
Management Fee (Jan Dec.)	\$300,000	\$300,000	\$275,000
Administrative (copies, postage, etc.)	\$12,593	\$20,000	\$15,000
Expenses (staff travel)	\$13,026	\$20,000	\$15,000
Accounting, Legal, Consulting	\$1,060	\$2,000	\$2,000
Climate Web Portal	\$10,000	\$20,000	\$0
Total	\$336,679	\$362,000	\$307,000
Operating Surplus	(\$9,061)	(\$5,700)	\$4,300
CONFERENCE LOAN			
OUTH ENTERIOR MOTHER	(\$10,000)	(\$10,000)	(\$10,000)
	\$10,000	\$10,000	\$10,000
	\$0	\$0	\$0
Year End Balance	\$2,390	\$4,300	\$6,800



INTERNATIONAL CLIMATE CHANGE PARTNERSHIP

The following meeting schedule is proposed for 2003 ICCP meetings:

Tuesday, March 11 20

Thursday, May 15

Tuesday, July 14 i5

Wednesday, September 17

Thursday, November 13

SBSTA/SBI

June 2-13 in Bonn

<u>COP 9</u>

December 1-12 in Milan, Italy

2111 Wilson Blvd. Suite 850 Arlington, VA 22201 Telephone: 703-841-0626 FAX: 703-243-2874

Draft Outline of ICCP Post-Workshop Comments to DOE

Emissions Reporting

- ICCP supports the concept of a two-tiered program where different levels of reporting will be necessary to distinguish between reporting for informational purposes and reporting to document reductions in order to gain transferable credits or baseline protection. (This concept was generally supported by industry during the DOE workshops.)
- ICCP supports entity-wide reporting at the facility level, but believes that project-level reporting to earn transferable credits should be allowed.
- ICCP supports the inclusion of direct emissions, carbon storage activities, stationary and mobile sources under an entity's control, avoidance of emissions, energy efficiency projects, fuel switching, project reductions, transfers to other entities, reductions achieved in and out of the US, and product related reductions.
- ICCP believes that DOE should look closely at the WRI/WBCSD Greenhouse Gas (GHG) Protocol as this corporate accounting and reporting standard was supported by many workshop participants from both industry and environmental NGOs.
- ICCP supports including all six gases in the reporting program.

Transferable Credits

- ICCP strongly supports providing transferable credits for all verified GHG reductions.
- ICCP believes that credits earned from verified GHG reductions should be fully fungible in any domestic or international emissions trading programs.
- ICCP agrees with the general consensus of workshop participants that it is not up to the government to assign value to any GHG credits it awards, the market will determine value.

Products

- ICCP strongly supports the ability to report and receive credit for product-based emission reductions.
- ICCP believes that awarding credit for product-based emissions along the value chain should be done on a contractual basis.

Emissions Intensity

• ICCP supports the concept of providing transferable credits for improvements in emissions intensity.

Timeframe

- ICCP strongly supports providing transferable credits for all reductions achieved since 1990.
- ICCP supports the consensus of most workshop participants that in order to gain credits for reductions achieved prior to the guidelines being revised, those reports would have to meet the new guidelines.

Verification

- ICCP supports a rigorous and credible verification process.
- ICCP believes that different standards should apply to informational reports and those reports intended to gain credits or baseline protection.
- ICCP believes that self-certification remains appropriate for informational reports, but for crediting purposes a more rigorous verification procedure will be necessary that should include third-party verification as an option.

Confidentiality

• ICCP believes that protection of confidential business information should be provided for reports intended to gain credits or baseline protection. A rigorous verification process should assure the environmental integrity of the reductions.

Perspectives

- KP Process Moving Forward Despite Bush Administration View
- KP Remains Market-Based Mechanism But Threatens to Become Less
- International Dialogue Slowed by Economic/Competitiveness Concerns
- Russia Wild Card
- Bush Program Initially Helpful But . . .

Perspectives (cont.)

- Classic Republican Environment Policy Scenario w/ added burden of Leadership
- Environment Not Priority of Bush Political Base
- Mixed Messages to Industry Unlikely to Produce Enough Voluntary Action in Near Term Nor Spur Technology Revolution

Administration Goals

- Complete Registry Rulemaking
- Substantial Technology Program\$\$
- Significant Sector Voluntary Programs
- Push Back on Mandatory Legislation
- Bilateral Program Announcements

ICCP Activities (cont.)

- Monitor Market Mechanisms in KP
- Maintain Liaison with International Officials and Business Community
- Monitor Individual Country Program Development

Summary of McCain/Lieberman - Climate Stewardship Act of 2003

- The bill would establish two targets, one for the year 2010 and the other for the year 2016. The 2010 target would set the U.S. emissions level for the affected sectors at 5896 million metric tons (or the year 2000 levels). The 2016 target would set the U.S. emissions level for the affected sectors at 5123 million metric tons (or the year 1990 levels).
- All covered entities, those which emit more than 10,000 metric tons of greenhouse gases per year, would be required to submit to the EPA one tradable allowance for each metric ton of greenhouse gases emitted during the reporting period. For the transportation sector, each petroleum refiner or importer would be required to submit an allowance for each unit of petroleum product sold that will produce a metric ton of emissions. The Administrator will determine the amount of emissions that will be emitted when a unit of petroleum products is used.
- The Secretary of Commerce would be required to determine the amount of allowances to be given away or "grandfathered" and the amount to be auctioned. The Secretary's determination would be subject to a number of allocation factors identified in the bill. Proceeds from the auction would be used to reduce energy costs of consumers and assist disproportionately affected workers. Consideration would be given to any company that would be willing to commit to meeting the year 2016 targets by the year 2010.
- Alternatively, an entity may satisfy up to 15 percent of its emission reduction requirements by submitting tradable allowances from another nation's market in greenhouse gases, submitting a registered net increase in sequestration, or submitting emission reductions that was registered by a person that is not a covered entity. After the year 2016, this limit would be reduced to 10 percent. If a covered entity has an excess of tradable allowances for a reporting period, the entity may hold those allowances in order to sell, exchange, or use in the future.
- The bill also would allow for the buying and selling of credits earned under the Corporate Average Fuel Economy (CAFE) program. Credits from the program would be earned when a manufacturer exceeds the Café standards by more than 20 percent. Manufacturers would be allowed to purchase up to 10 percent of their requirements to meet the CAFE standards.
- Any company not meeting its emissions limits would be fined for each ton of
 greenhouse gases over the limit at the rate of three times the market value of a ton of
 greenhouse gas. The market value would be based upon the price of emission
 credits from trading system provided for in the bill. Additionally, any company

planning to make capital investments or deploy technologies within the next 5 years would be allowed to borrow against those expected future reductions to meet current year requirements. The loan would include a 10 percent interest rate.

- The trading aspects of the bill would be accomplished by incorporating the registry system that was included in last year's Senate-passed Energy bill. It would allow companies that realized a verifiable emission reduction to register that reduction in the registry and subsequently trade them on the open market. Companies not regulated under the mandatory limits would be permitted to participate in the trading system. By participating, they would be required to report their emissions as part of the emission reduction verification process. This provision would allow regulated companies to trade emission reduction with non-regulated companies.
- The EPA Administrator would be required to implement a comprehensive system for greenhouse gas reporting, inventorying, and reductions registrations. The system would be, to the maximum extent possible, complete, transparent, and accurate. The system should also minimize costs incurred by entities in measuring and reporting of emissions. The Secretary of Commerce, within one year of enactment, would be required to develop measurement and verification standards and standards to ensure a consistent and accurate record of greenhouse gas emissions, emissions reductions, sequestration, and atmospheric concentrations for use in the registry.
- The bill would establish a scholarship program at the National Science Foundation for students studying climate change, require a report from the Department of Commerce on technology transfer, and require a report from the Secretary of Commerce on the impact of the Kyoto Protocol on the U.S. industrial competitiveness and international scientific cooperation.
- The bill also would make changes to the U.S. Global Change Research Program, establish an abrupt climate change research program at the Department of Commerce, and establish a program at the National Institute of Standards and Technology in the areas of standards and measurement technologies.

Summary of Jeffords/Daschle - "Global Climate Security Act of 2003"

- Creates Sense of the Senate language that the Congress make climate change a high priority, pass a multi-pollutant bill and promote clean energy domestically and internationally
- Establishes a national greenhouse gas emission registry and reporting system that requires mandatory reporting for entities above an unspecified threshold level and allows voluntary reporting of reductions for non-covered entities
- Creates Sense of the Senate language that the U.S. must act to reduce greenhouse gas
 emissions and participate in developing a future binding climate change treaty
- Establishes a commission to recommend a legislative roadmap for reducing greenhouse gas emissions
- Requires the President to regularly issue a U.S. climate change impact assessment
- Requires the President to issue a report on funding for programs aimed at reducing greenhouse gas emissions
- Requires that changes in greenhouse gas emissions and climate impacts be considered as part of environmental reviews for federal projects or actions
- Directs the President to reduce the Federal government's greenhouse gas emissions to 1990 levels by 2013
- Encourages the Securities and Exchange Commission to clarify regulations disclosing the financial risks due to net greenhouse gas emissions and climate impacts
- Requires the Department of Commerce to develop a methodology for determining the greenhouse gases emitted in the production and delivery of goods and services imported into the U.S.
- Provides \$2 billion in grants to states for greenhouse gas data collection, emission projects and research efforts
- Requires the Department of the Treasury submit a report to Congress on changes to the tax code that would result in reducing greenhouse gas emissions to safer levels

ICCP Issues

Bill makes no provisions for reporting of emissions reductions achieved before 2003

Bill contains no provisions for baseline protection, legal recognition of early reductions, or transferable credits for verified reductions

SENATE ENERGY BILL H.R. 4 as Passed by the Senate on April 25, 2002	JEFFORDS/DASCHLE 2003	MCCAIN/ LIEBERMAN 2003	BUSH CLIMATE PROPOSAL
Administrative/Regulatory			
Directs the President, through the Office of National Climate Change Policy and in consultations with an Interagency Task Force, to develop and implement a National Climate Change Policy.	Establishes a commission to be known as the "Commission to Implement the Rio Agreement." Will be composed of 11 members, 3 appointed by the President, 4 by the Senate and 4 by the House.	Establishes two emissions targets: 2010 emissions would be capped at 2000 levels (5896 MMT), 2016 emissions would be capped at 1990 levels (5123 MMT).	Establishes a goal of reducing the greenhouse gas intensity of the U.S. economy by 18% by 2012.
Requires the Strategy to have as a long-term goal stabilization of GHG concentrations; define interim emission mitigation levels to stabilize GHG emissions; commit to technology development of breakthrough technologies; focus research on climate change adaptation; and use climate science research that builds on existing knowledge and focuses on reducing remaining scientific uncertainty.	Commission will review the measures necessary to reduce net GHG emissions to below levels that would otherwise results in a doubling of GHG concentrations in the atmosphere from 1870 levels. The Commission will report to Congress by June 1, 2004, with recommendations for legislation and administrative action that will produce the required net reductions in emissions while minimizing any	Covered entity is any entity in the electrical power, industrial, or commercial sectors (as defined in the U.S. GHG inventory) that emits over 10,000 metric tons of GHG per year measured in carbon dioxide equivalents. Starting in 2010, all covered entities would be required to submit to EPA one tradable allowance for each metric ton of GHG it emits.	
Establishes within the White House an Office of National Climate Change Policy responsible for: (1) achieving the long-term goal of the Strategy while minimizing adverse short-term and long-term economic and social impacts; (2) establishing an	adverse impacts on the U.S. economy. Requires CEQ to develop and submit to Congress by October 1, 2004, a plan for minimizing the risks associated with climate change to public health and safety,	Producers or importers of HFCs, PFCs, or SF ₆ that are covered entities must submit one tradable allowance for each metric ton of HFC, PFC, or SF ₆ they produce or import.	

Interagency Task Force to assist the	change to public health and safety,	or import.	
National Office; (3) recommending	community infrastructure, private		
necessary changes to Federal agency	property, biological diversity,	Petroleum refiners or importers	
programs involved in climate chance	ecosystems, and the food supply.	that are covered entities must	
activities; and (4) aligning US		submit one tradable allowance	
environmental and energy policies	Requires that the President take	for each unit of petroleum	
with climate change policies.	actions by January 1, 2004, to	product sold that will produce a	
	reduce the net GHG emissions of	metric ton of emissions.	
Requires Director of the National	the federal Government to 1990		
Office to create and chair an	levels by 2013.	For the years 2010 – 2015, a	
Interagency task Force, composed of		covered entity may satisfy 15%	
heads of specific federal agencies, to	Requires the SEC to promulgate	(10% after 2015) of its total	
assist the National Office in preparing	regulations within 2 years directing	allowance submission with	
and updating the Strategy and	insurers of securities to inform	tradable allowances from	
preparing annual reports to Congress.	investors of the risks relating to the	another nation's market,	
7 . 11:1 OCC COT	issuer's net emissions of GHGs	submitting a net increase in sequestration that is registered in	
Establishes an Office of Climate	and potential economic impacts of	the National GHG Database,	
Change Technology within the DOE	global warming on the issuer.	submitting a GHG reduction that	
to manage an energy technology R&D		is registered in the National	
program that directly supports the		GHG Database, or submitting a	
Strategy.		credit against future reductions	
Requires the Office to foster		obtained from DOC. Credits	
development of tools, data and		earned through the CAFE	
measures necessary to analyze		program by exceeding the	
alternative climate change response		standard by more than 20% can	
scenarios, design programs to develop		be used as tradable allowances.	
analytical competencies and			
computational modeling to implement		Any company not meeting its	

JEFFORDS/DASCHLE

2003

SENATE ENERGY BILL

H.R. 4 as Passed by the Senate on April 25, 2002

BUSH CLIMATE

PROPOSAL

MCCAIN/

LIEBERMAN

2003

SENATE ENERGY BILL H.R. 4 as Passed by the Senate on April 25, 2002	JEFFORDS/DASCHLE2003	MCCAIN/ LIEBERMAN 2003	BUSH CLIMATE PROPOSAL
the Strategy and track U.S. progress. Directs the Office to establish an international carbon dioxide sequestration monitoring and data program to collect analyze and disseminate data to determine whether engineered and terrestrial sequestration will be acceptable technologies.		emissions limits would be fined for each ton of GHG over the limit at the rate of three times the market value of a ton of GHG. DOC and EPA will jointly promulgate regulations to establish tradable allowances, denominated in carbon dioxide equivalents. DOC will determine that amount of tradable allowances to be allocated to each sector and the amount to be auctioned. A covered entity can earn additional allowances by agreeing to reduce its emissions to 1990 levels by 2010. Some tradable allowances will be allocated to a non-profit Consumer Fiduciary Corporation that will be established to reduce costs borne by consumers and to provide transition assistance to dislocated workers and communities.	

SENATE ENERGY BILL H.R. 4 as Passed by the Senate on April 25, 2002	JEFFORDS/DASCHLE 2003	MCCAIN/ LIEBERMAN 2003	BUSH CLIMATE PROPOSAL
GHG Database/Registry			
Directs DOE, DOC, USDA, DOT, and EPA to enter into a Memorandum of Agreement that will serve as the basis for developing a National Greenhouse Gas Database consisting of (1) an inventory of GHG emissions and (2) a registry of GHG reductions. Requires the Database to contain a system to identify verified reductions made by a reporting entity relative to that entity's baseline. Authorizes voluntary reporting of GHG emissions reductions to the Database. GHG emission reductions that may be reported include: (1) project reductions from facilities owned by the entity, or transferred to the entity by another, including from outside the U.S.; (2) reductions that predate the database provide they meet requirement of the database program and information is submitted within 4 years of enactment; and (3) activities	Directs EPA to establish and administer a national greenhouse gas registry, inventory, and emissions information system. Requires mandatory reporting of each GHG emitted by a covered entity in an amount that exceeds a threshold quantity. Threshold quantities for each combination of sources and GHGs will be determined by EPA. Reporting is required on an entity-wide and facility-wide basis. First year reports (2003 emissions) are only required to include estimates of direct emissions. Subsequent reports must include estimates of indirect emissions, process emissions, fugitive emissions, mobile source emissions, and timber and carbon stocks. Authorizes voluntary reporting of	Directs DOC to establish, operate, and maintain a database to be known as the "National Greenhouse Gas Database" which will consist of an inventory of GHG emissions and a registry of GHG reductions and sequestrations. Requires mandatory reporting of GHG emissions by all covered entities starting in 2009 (2008 emissions). Covered entities may also register any GHG reductions achieved after 1990 and before 2010. Covered entity is any entity in the electrical power, industrial, or commercial sectors (as defined in the U.S. GHG inventory) that emits over 10,000 metric tons of GHG per year measured in carbon dioxide equivalents. Entity-wide reporting is required	Directs the Secretary of Energy, in consultation with the Secretary of Commerce, Secretary of Agriculture and the EPA Administrator to propose improvements to the current voluntary emission reduction registration program under section 1605(b). Directs the Secretary of Energy to recommend reforms to ensure that businesses and individuals that register reductions are not penalized under a future climate policy, and to give transferable credits for real reductions.

SENATE ENERGY BILL H.R. 4 as Passed by the Senate on April 25, 2002	JEFFORDS/DASCHLE 2003	MCCAIN/ LIEBERMAN 2003	BUSH CLIMATE PROPOSAL
that reduce or sequester GHG emissions including fuel switching, energy efficiency improvements, use of renewable energy, combined heat and power, land and forestry management, carbon capture and storage, and GHG offset investment. Requires the Office of Climate Change Policy, within 5 years of enactment, to determine whether reports submitted to the registry represent less than 60 percent of the national aggregate of GHG emissions. Directs that the reporting requirements become mandatory if it is determined that less than 60 of the national aggregate of GHG emissions percent is being reported. Requires entities with at least one facility emitting more than 10,000 metric tons of GHG or an entity emitting a combined total of more than 10,000 metric tons of GHG over a one year period report under a mandatory regime.	project reductions, indirect emissions, and product use phase emissions as part of a national GHG registry. Allows reporting of activities that reduce or sequester carbon including fuel switching, energy efficiency improvements, use of renewable energy, combined heat and power, management of cropland, grassland, and grazing land, carbon capture and storage, methane recovery, and carbon offset investment. Only allows reporting of reductions achieved in 2003 (preceding calendar year) and beyond. Makes no mention of reductions achieved or reported from 1990 to 2003. Contains no provisions for granting transferable credits for verified reductions or for baseline protection against a future regulatory mandate.	at the facility level. Reports must include direct emissions, petroleum products sold or imported, indirect emissions from imported electricity, heat, and steam, process and fugitive emissions, production or importation of GHGs. Allows voluntary reporting of any GHG reductions achieved by non-covered entities since 1990. Non-covered entities wishing to register reductions must establish a baseline and submit a full entity-wide report.	

SENATE ENERGY BILL	JEFFORDS/DASCHLE	MCCAIN/ LIEBERMAN	BUSH CLIMATE PROPOSAL
H.R. 4 as Passed by the Senate on April 25, 2002	2003	2003	
Research			
Requires DOE to conduct a comprehensive research program on the effects of energy production and use on the global climate system, focusing on research into factors responsible for the Earth's radiation balance and integration of radiation, combustion products and clouds in climate models. Establishes an agricultural research program at the USDA for sequestering carbon dioxide in soil and for developing data to address soil carbon fluxes. Establishes an Interagency Working Group on Clean Energy Technology Exports to analyze technology, policy and market opportunities and issues for technology transfer, and assess the issues to deploy technologies to developing countries in energy sector reform, in the creation of open markets, in the training of personnel, and in demonstrating cost-buydown mechanisms.	USDA, DOC, DOE, and EPA may provide grants to State or local governments to operate a GHG inverntory or trading system, to implement GHG reduction or sequestration projects, or to conduct research and modeling efforts.	Directs the National Science Foundation to establish a scholarship program for post- secondary students studying climate change. Requires DOC to conduct a study of technology transfer barriers, best practices, and outcomes of technology transfer at Federal laboratories. Requires DOC to submit a report to Congress within 6 months on the effects of entry into force of the Kyoto Protocol will have on U.S. industry and its ability to compete globally, and on international scientific cooperation. Requires DOC, through NOAA, to carry our a program of research on abrupt climate change. Establishes a research program at NIST in the areas of standards	Requests \$3 billion in the FY 03 budget as the first part of a ten year commitment to implement and improve the conservation title of the farm Bill, which will significantly enhance the natural storage of carbon. Directs the Secretary of Agriculture to provide recommendations for further, targeted incentives aimed at forest and agricultural sequestration of GHGs. Directs the Secretary of Agriculture, in consultation with EPA and DOE to develop accounting rules and guidelines for crediting sequestration projects. Proposes \$4.6 billion in clean energy tax incentives over the next five years to spur investments in renewable energy (solar,

SENATE ENERGY BILL	JEFFORDS/DASCHLE 2003	MCCAIN/ LIEBERMAN	BUSH CLIMATE PROPOSAL
H.R. 4 as Passed by the Senate on April 25, 2002	2003	2003	
Amends the Global Change Research Act of 1990 research program to include a revised implementation plan for a 10-year period beginning in 2002. Directs DOC under the National		at NIST in the areas of standards and measurement technology.	renewable energy (solar, wind, biomass), hybrid and fuel cell vehicles, cogeneration, and landfill gas. Establishes a cabinet-level committee on climate change science and
Climate Program Act to prepare a plan of action for a National Climate Service. Requires the Plan to provide			technology integration to advance and coordinate climate change science and technology research. FY 03 budget proposes \$1.7 billion
recommendations and funding estimates for (1) a center for operational climate monitoring and predicting; (2) the design, development and deployment of a national climate observing system; (3) establishing a coordinated modeling strategy for short and long term projections; (4) improving capabilities, and coordinating with the private sector.			to fund basic scientific research and \$1.3 billion to fund research on advanced energy and sequestration technology.
Requires the President, through the National Ocean Research Leadership Council, to establish and maintain an integrated ocean and coastal observing			

SENATE ENERGY BILL H.R. 4 as Passed by the Senate on April 25, 2002	JEFFORDS/DASCHLE 2003	MCCAIN/ LIEBERMAN 2003	BUSH CLIMATE PROPOSAL
system to provide continuous, real- time observations to assess global change, improve weather forecasting, strengthen national security and military preparedness, and support efforts to restore coastal marine ecosystems.			
Requires the National Institute of Standards and Technology to develop measurements, calibrations, standards and technologies which will reduce the US production of GHGs.			
Requires NIST to develop a research program, in conjunction with the EPA, NOAA, and NASA, on global climate change standards and processes.			
Directs President to establish a regional climate assessment program through the Dept. of Commerce.			
Directs the Administrator of NASA, through the NOAA Coastal Services Center, to establish a grant program for pilot projects that use remote sensing to forecast a plan for adaptation to coastal zone changes.			