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Climate Change Hill Bills/Related

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AMENDMENT NO. _____

Calendar No. _____

Purpose: To express the sense of the Senate on global climate change.

IN THE SENATE OF THE UNITED STATES—106th Cong., 2d Sess.

S. CON. RES. 101

Setting forth the congressional budget for the United States Government for fiscal years 2001 through 2005 and revising the budgetary levels for fiscal year 2000.

Referred to the Committee on _____
and ordered to be printed

Ordered to lie on the table and to be printed

AMENDMENT intended to be proposed by Mr. LAUTENBERG

Viz:

1 At the appropriate place, insert the following:

2 **SEC. ____.** **SENSE OF THE SENATE ON GLOBAL CLIMATE**
3 **CHANGE.**

4 (a) **FINDINGS.**—The Senate finds that—

5 (1) the Intergovernmental Panel on Climate
6 Change concluded that “the balance of evidence sug-
7 gests that there is a discernable human influence on
8 global climate”, and a more recent National Acad-
9 emy of Sciences study found that global warming
10 trends are “undoubtedly real”;

1 (2) global climate change may contribute to
2 threats to human health and the global environment,
3 including—

4 (A) extreme weather events;

5 (B) a rise in sea levels;

6 (C) the spread of disease;

7 (D) agricultural and ecosystem disruption;

8 and

9 (E) reduction in available water resources;

10 (3) climate change is a global problem that ulti-
11 mately requires a global solution involving the par-
12 ~~ticipation of both industrialized and developing coun-~~
13 ~~tries, as called for~~ *in 1990 as recognized* by Senate Resolution 98 of the
14 105th Congress;

15 (4) economic prosperity and environmental pro-
16 tection are interrelated and can be advanced simul-
17 taneously, resulting in the achievement of robust
18 economic growth and the protection of the environ-
19 ment;

20 (5) 181 nations have ratified the United Na-
21 tions Framework Convention on Climate Change,
22 done at New York on May 9, 1992, which the
23 United States ratified in October 1992; and

24 (6) the United States ~~has the responsibility and~~ *should*
25 ~~ability to~~ take a leadership role to work more closely

1 with all countries to implement economically and en-
2 vironmentally sound solutions to combat climate
3 change and the adverse effects of climate change.

4 (b) SENSE OF THE SENATE.—It is the sense of the
5 Senate that the levels in this resolution assume that Con-
6 gress will enact legislation to provide funding to—

7 (1) continue a robust scientific research pro-
8 gram on global climate change;

9 (2) continue international negotiations with the
10 aim of completing a strong economically and envi-
11 ronmentally sound international agreement;

12 (3) continue to encourage and assist developing
13 countries in reducing greenhouse gas emissions;

14 (4) work more closely with other industrialized
15 and developing countries to find mutually beneficial
16 opportunities to reduce emissions, including—

17 (A) the increased use of technologies that
18 improve efficiency and produce cleaner energy;
19 and

20 (B)(i) accelerated research concerning, and
21 development of, more efficient technologies; and

22 (ii) the rapid demonstration, deployment,
23 and commercialization of those technologies,
24 both domestically and in developing countries;

- 1 (5) stimulate domestic efforts to reduce green-
- 2 house gas emissions; and
- 3 (6) help communities—
- 4 (A) prepare for and adapt to changing cli-
- 5 mate conditions; and
- 6 (B) protect against potential catastrophic
- 7 events and economic dislocations.

**FAX COVER SHEET****United States Department of State****Bureau of Oceans and International, Environmental and Scientific Affairs***sent to
Linda*Date: 2/11/00 Time: _____ Number of Pages (Including Cover Sheet): 22☐**URGENT**☐

See Attached

☐

For Your Assistance

☐

Per Our Conversation

☐

For Your Information

☐To: Roger BallentineTelephone: 456-1782Office: White HouseFacsimile: 456-1736Subject: Brownback's legislation**Teresa Hobgood****2201 C Street, NW, Room 7831****Washington, D.C. 20520****Telephone: 202-647-3550****Facsimile: 202-647-4221****MESSAGE:***per your conversation w/ David Sandalow*

International Conservation Credits

Goal: To link international environmental investment with domestic environmental "credits." This would take a two-pronged approach – either an investment in setting aside environmentally sensitive lands, or an investment in sustainable agriculture to enable increased prosperity with less land use.

For example, a company like Cargill could invest in an Indian conservation reserve project and in return receive a certain amount of environmental credits that could be used or sold by that company in one of several ways:

1. Credits could be used against future U.S. regulatory burdens on carbon dioxide emissions (not currently regulated).
2. Credits could be sold to small businesses who have a more difficult time meeting tougher environmental standards.

How would this credit program work?

This bill could reign in greenhouse gas emissions by creating credits for carbon sequestration via international conservation.

- A model to consider is the international aspect of CO₂ reduction found in a component of the Kyoto Treaty: the Joint Implementation (JI) provision. JI is an attempt to expand the availability of cost-effective CO₂ reductions into the international sphere through a variety of different activities primarily involving the investment of environmental betterment from industrialized Western countries to the Third World.

- International Conservation Credits **KEY** attributes:
- The program is **completely voluntary** – not linked to any global climate change treaty and would not require the approval or sharing of the credit with foreign nations. From the foreign country's perspective: this also means less bureaucracy since these investments will work through already existing ties set up by Non-Government Organizations (NGOs) and USAID.
- USAID will serve as a liason between business and foreign conservation projects. This bill taps into the already existing network of conservation projects USAID and NGOs have negotiated with foreign governments for conservation purposes. This bill allows for the expansion of these conservation projects by infusing private money into preservation projects.
- Companies can craft their own conservation proposals, but must work with USAID to implement them.
- Projects are monitored by USAID and reported to a President's panel (comprised of agency delegates from USDA, DOE, EPA and USAID). This panel also provides periodic reports to Congress and after 2 years of the project, will conduct an extensive review of the program and the carbon sequestration benefits made vs. credits given out.
- Credits will be redeemed against future U.S. domestic regulation of greenhouse gases – NOT against an abstract future global treaty.
- Companies could choose either to invest fully in conservation setasides or partially in sustainable agricultural projects to receive conservation credits. Sustainable agriculture projects would be linked to the parameter of the conservation area to increase the

success rate of real conservation.

The logic here is that preservation or "setasides" will not be enforced as long as poverty-stricken natives surrounding the reserve area can not make a living off the land. It makes sense to simultaneously invest in sustainable ag projects – using existing American technology/know-how to help other nations use less land more wisely. This too preserves the environment.

- This bill has a limited scope: the program will expire after 5 years unless Congress renews it. Unless the bill proves its value as a conservation tool and climate change mitigator, it will discontinue with very little cost to the government, and a tremendous influx of real data to base future environmental decisions on.
- Retroactive credit: This bill offers an opportunity for companies to submit records and receive up to 1 ton of carbon emissions credit for previous or ongoing carbon sequestration projects they have entered into.

BENEFITS:

- This bill provides an incentive for free market environmental improvement. Companies are offered a way to hedge the chances that they will have to face stricter carbon dioxide emissions standards by offsetting those emissions in very environmentally sensitive lands. This bill would reward companies who take a proactive stand to improve the environment.
- Return on Investment: **For business**, the return is an ability to get ahead of the curve – to address the next environmental problem before they are forced into costly regulations. **For the environment**, this is an infusion of wealth into countries that can not otherwise afford to deal with critical global environmental problems.

- It is voluntary and could cost the government very little in monitoring costs since we will be able to tap into the already existing network that USAID has established.
- This bill will make possible substantive improvement on the issue of global climate change without basing regulations on uncertain science. As a result, this bill can gain bi-partisan support since it runs parallel to the mired down debate over the Kyoto Protocol, but is not connected to it. Whether the U.S. signs a global climate change treaty is a separate issue from the conservation investments encouraged in this bill.
- This bill can pass: Since it is not a cure-all for global climate change, but a vital step in the right direction, this bill can provide politically achievable environmental benefit.
- Great Public Relations for industry. This would provide a vehicle for industry to do a good thing and get "credit" for it – it could become very popular and spin itself into a real global good.

106TH CONGRESS
2D SESSION

S. _____

IN THE SENATE OF THE UNITED STATES

Mr. BROWNBACK introduced the following bill; which was read twice and referred to the Committee on _____

A BILL

To amend the Foreign Assistance Act of 1961 to authorize the President to enter into agreements to provide credit for voluntary carbon sequestration or sustainable agriculture projects in foreign countries.

1 *Be it enacted by the Senate and House of Representa-*
2 *tives of the United States of America in Congress assembled,*

3 **SECTION 1. INTERNATIONAL CONSERVATION CREDIT.**

4 The Foreign Assistance Act of 1961 (22 U.S.C. 2151
5 et seq.) is amended by adding at the end the following:

1 **"PART VI—INTERNATIONAL CONSERVATION**

2 **CREDIT**

3 **"SEC. 901. SHORT TITLE.**

4 "This part may be cited as the 'International Con-
5 servation Credit Act of 2000'.

6 **"SEC. 902. PURPOSE.**

7 "(a) **PURPOSE.**—The purpose of this part is to en-
8 courage voluntary actions to mitigate potential environ-
9 mental impacts of greenhouse gas emissions by author-
10 izing the President to enter into binding agreements under
11 which entities operating in the United States will earn
12 credit, usable in any future Federal program that regu-
13 lates greenhouse gas emissions, for carrying out voluntary
14 carbon sequestration or sustainable agriculture projects in
15 foreign countries.

16 "(b) **RELATIONSHIP TO KYOTO PROTOCOL AND FED-**
17 **ERAL REGULATORY ACTIONS.**—Nothing in this part—

18 "(1) constitutes an indication of support for, or
19 an endorsement or ratification of, the Kyoto Pro-
20 tocol to the United Nations Framework Convention
21 on Climate Change; or

22 "(2) establishes an obligation on the part of
23 Congress to enact a domestic greenhouse gas regu-
24 latory statute.

25 **"SEC. 903. DEFINITIONS.**

26 "In this part:

1 “(1) COMPLIANCE PERIOD.—The term ‘compli-
2 ance period’ means any period during which a do-
3 mestic greenhouse gas regulatory statute is in effect.

4 “(2) CREDIT PERIOD.—The term ‘credit period’
5 means the period beginning on the date of enact-
6 ment of this part and ending on the date that is 5
7 years after that date.

8 “(3) DOMESTIC.—The term ‘domestic’ means
9 within the territorial jurisdiction of the United
10 States.

11 “(4) DOMESTIC GREENHOUSE GAS REGU-
12 LATORY STATUTE.—The term ‘domestic greenhouse
13 gas regulatory statute’ means a Federal statute, en-
14 acted after the date of enactment of this part, that
15 imposes a quantitative limitation on domestic green-
16 house gas emissions.

17 “(5) GREENHOUSE GAS.—The term ‘greenhouse
18 gas’ means—

19 “(A) carbon dioxide;

20 “(B) methane;

21 “(C) nitrous oxide;

22 “(D) hydrofluorocarbons;

23 “(E) perfluorocarbons; and

24 “(F) sulfur hexafluoride.

1 “(6) INTERNATIONAL CONSERVATION CRED-
2 IT.—The term ‘international conservation credit’
3 means an authorization under a domestic green-
4 house gas regulatory statute to emit a quantity of
5 greenhouse gas (measured in metric tons and ex-
6 pressed in terms of carbon dioxide equivalent) that
7 is earned as a result of activities described in section
8 905.

9 “(7) PANEL.—The term ‘Panel’ means the
10 International Conservation Credit Panel established
11 under section 904(b).

12 “(8) PARTICIPANT.—The term ‘participant’
13 means a person that enters into a voluntary action
14 agreement with the United States under this part.

15 “(9) PERSON.—The term ‘person’ includes a
16 governmental entity.

17 “(10) SUSTAINABLE AGRICULTURAL
18 PROJECT.—

19 “(A) IN GENERAL.—The term ‘sustainable
20 agricultural project’ means a project that pro-
21 motes sustainable agriculture.

22 “(B) INCLUSIONS.—The term ‘sustainable
23 agricultural project’ includes a project—

1 “(i) to provide technology that ad-
2 vances the use of sustainable agriculture;
3 or

4 “(ii) to educate the indigenous peoples
5 that live in the area surrounding a carbon
6 sequestration site concerning the use of
7 sustainable agriculture.

8 “(11) SUSTAINABLE AGRICULTURE.—The term
9 ‘sustainable agriculture’ has the meaning given the
10 term in section 1404 of the National Agricultural
11 Research, Extension, and Teaching Policy Act of
12 1977 (7 U.S.C. 3103).

13 “(12) VOLUNTARY ACTION AGREEMENT.—The
14 term ‘voluntary action agreement’ means an agree-
15 ment with the United States entered into under sec-
16 tion 904(a).

17 “SEC. 904. AUTHORITY FOR VOLUNTARY ACTION AGREE-
18 MENTS.

19 “(a) AUTHORITY.—

20 “(1) IN GENERAL.—The President may enter
21 into a legally binding voluntary action agreement
22 with any person under which the United States
23 agrees to provide to the person international con-
24 servation credit for activities by the person described
25 in section 905, which credit shall be available to the

1 person to offset the reductions in greenhouse gas
2 emissions that the person is required to achieve
3 under a domestic greenhouse gas regulatory statute.

4 “(2) REQUIREMENTS.—A voluntary action
5 agreement entered into under paragraph (1) shall
6 meet the requirements specified in sections 905 and
7 906.

8 “(b) IMPLEMENTATION BY PANEL.—

9 “(1) IN GENERAL.—The President shall estab-
10 lish a panel, to be known as the ‘International Con-
11 servation Credit Panel’, to assist in implementation
12 of this part.

13 “(2) MEMBERSHIP.—The Panel shall consist of
14 experts from—

15 “(A) the United States Agency for Inter-
16 national Development;

17 “(B) the Department of Agriculture;

18 “(C) the Department of Energy; and

19 “(D) the Environmental Protection Agen-
20 cy.

21 “(3) DUTIES.—The Panel shall—

22 “(A) determine which projects supported
23 by the United States Agency for International
24 Development are appropriate for receiving con-
25 tributions from participants under this part;

1 “(B) using networks established by the
2 United States Agency for International Devel-
3 opment, match participants to those projects;

4 “(C) determine the quantity of inter-
5 national conservation credit that shall be
6 awarded to participants for activities described
7 in section 905; and

8 “(D) encourage the submission of, and
9 take into consideration, comments on projects
10 that receive contributions from participants
11 under this part by the governments of the for-
12 eign countries in which the projects are carried
13 out.

14 “(c) REGULATIONS.—The President shall promulgate
15 such regulations (including guidelines) as are appropriate
16 to carry out this part.

17 “SEC. 905. ENTITLEMENT TO INTERNATIONAL CONSERVA-
18 TION CREDIT FOR VOLUNTARY ACTION.

19 “(a) CARBON SEQUESTRATION AND SUSTAINABLE
20 AGRICULTURAL PROJECTS.—

21 “(1) IN GENERAL.—Under a voluntary action
22 agreement, a participant shall earn international
23 conservation credit if the participant makes a con-
24 tribution to a carbon sequestration project or sus-
25 tainable agricultural project that—

1 “(A) is carried out in a foreign country;

2 “(B) is supported by the United States
3 Agency for International Development; and

4 “(C) was commenced before the date on
5 which the voluntary action agreement is entered
6 into.

7 “(2) AMOUNT OF CREDIT.—Subject to para-
8 graph (3), a voluntary action agreement shall pro-
9 vide that, for each contribution under paragraph (1),
10 a participant shall be entitled to earn 1 metric ton
11 of international conservation credit for each metric
12 ton of carbon sequestration that the Panel deter-
13 mines results from the contribution.

14 “(3) LIMITATION ON CREDIT FOR SUSTAINABLE
15 AGRICULTURAL PROJECTS.—For each calendar year,
16 not more than 50 percent of the international con-
17 servation credit earned by a participant shall result
18 from contributions to sustainable agricultural
19 projects.

20 “(b) UNITED STATES INITIATIVE FOR JOINT IMPLE-
21 MENTATION.—A voluntary action agreement may provide
22 that a participant shall be entitled to earn international
23 conservation credit for carbon sequestration that—

24 “(1) is not creditable under subsection (a); and

25 “(2) is for a project—

1 “(A) accepted before December 31, 2000,
2 under the United States Initiative for Joint Im-
3 plementation; and

4 “(B) financing for which was provided, or
5 construction of which was commenced, before
6 that date.

7 “(c) RETROSPECTIVE ACTIONS.—

8 “(1) CREDIT.—A voluntary action agreement
9 may provide that a participant shall be entitled to
10 earn 1 metric ton of international conservation cred-
11 it for each metric ton of carbon sequestration for the
12 1991 through 1998 period from actions by the par-
13 ticipant in foreign countries that are—

14 “(A) reported before January 1, 1999,
15 under section 1605 of the Energy Policy Act of
16 1992 (42 U.S.C. 13385); or [*Are you sure that*
17 *this program covers actions in foreign countries?*
18 *You might take a look at 59 Federal Register*
19 *52769.]*

20 “(B) carried out and reported before Janu-
21 ary 1, 1999, under a Federal agency program
22 to implement any other recognized carbon se-
23 questration effort.

24 “(2) VERIFICATION.—

1 “(A) IN GENERAL.—The participant shall
2 provide information sufficient to verify, to the
3 satisfaction of the Panel and in accordance with
4 section 906 and the regulations promulgated
5 under section 904(c), that actions reported
6 under paragraph (1)—

7 “(i) have been accurately reported;

8 “(ii) are not double-counted; and

9 “(iii) represent actual increases in net
10 carbon sequestration.

11 “(B) THIRD-PARTY CERTIFICATION.—In-
12 formation provided under subparagraph (A)
13 shall be accompanied by a certification from a
14 qualified third-party auditor that the informa-
15 tion is accurate.

16 “(d) AWARD OF INTERNATIONAL CONSERVATION
17 CREDIT.—

18 “(1) ANNUAL NOTIFICATION OF CUMULATIVE
19 BALANCES.—After the end of each calendar year,
20 the Panel shall notify each participant of the cumu-
21 lative balance (if any) of international conservation
22 credit earned by the participant under a voluntary
23 action agreement as of the end of the calendar year.

24 “(2) AWARD OF FINAL CREDIT.—Effective at
25 the end of the credit period, a participant shall have

1 a contractual entitlement, to the extent provided in
2 the participant's voluntary action agreement, to earn
3 1 metric ton of international conservation credit for
4 each 1 metric ton that is creditable under sub-
5 sections (a) through (c).

6 **"SEC. 906. MEASUREMENT AND VERIFICATION.**

7 **"(a) IN GENERAL.**—In accordance with the regula-
8 tions promulgated under section 904(c), a voluntary action
9 agreement shall provide that, for each calendar year dur-
10 ing which the voluntary action agreement is in effect, the
11 participant shall submit to the Panel a report on the ac-
12 tivities described in section 905 that were carried out by
13 the participant during the calendar year.

14 **"(b) AVAILABILITY OF REPORTS TO THE PUBLIC.**—
15 Each report under subsection (a) shall be made available
16 to the public.

17 **"(c) CONFIDENTIALITY.**—The regulations promul-
18 gated under section 904(c) shall make appropriate provi-
19 sion for protection of confidential commercial and finan-
20 cial information.

21 **"SEC. 907. TRADING AND POOLING.**

22 **"(a) TRADING.**—A participant may—

23 **"(1)** purchase international conservation credit
24 from, and sell international conservation credit to,
25 any other participant; and

1 “(2) sell international conservation credit to
2 any person that is not a participant.

3 “(b) POOLING.—The regulations promulgated under
4 section 904(c) may permit pooling arrangements under
5 which a group of participants agrees to act as a single
6 participant for the purpose of entering into a voluntary
7 action agreement.

8 “SEC. 908. RELATIONSHIP TO DOMESTIC GREENHOUSE GAS
9 REGULATORY STATUTE.

10 “(a) IN GENERAL.—Subject to subsection (b), a vol-
11 untary action agreement shall not bind the United States
12 to adopt (or not to adopt) any particular form of domestic
13 greenhouse gas regulatory statute.

14 “(b) PROVISION OF CREDIT.—If the United States
15 adopts a domestic greenhouse gas regulatory statute, each
16 participant shall be provided an authorization to emit a
17 number of metric tons of greenhouse gas equal to the
18 quantity of international conservation credit earned by the
19 participant under a voluntary action agreement that is in
20 addition to any otherwise available authorizations of the
21 participant to emit greenhouse gases during the compli-
22 ance period under the domestic greenhouse gas regulatory
23 statute.

1 **"SEC. 909. REPORTS.**

2 “(a) **REPORT BY USAID.**—After the end of each cal-
3 endar year, the Administrator of the United States Agency
4 for International Development shall submit to the Panel
5 a report on the status and results of carbon sequestration
6 projects or sustainable agricultural projects carried out as
7 a result of this part during the preceding calendar year.

8 “(b) **ANNUAL REPORT TO CONGRESS.**—After the end
9 of each calendar year, the Panel shall submit a report to
10 Congress that—

11 “(1) specifies the cumulative balance of inter-
12 national conservation credit potentially earned under
13 all voluntary action agreements as of the end of that
14 calendar year; and

15 “(2) includes the information in the report to
16 the Panel under subsection (a).

17 “(c) **NOTIFICATION TO CONGRESS OF CUMULATIVE**
18 **CREDIT BALANCE.**—Not later than 30 days after making
19 a determination that the cumulative balance of inter-
20 national conservation credit potentially earned under all
21 voluntary action agreements has reached 365,000,000
22 metric tons, the Panel shall notify Congress of the deter-
23 mination.

24 “(d) **AUDIT.**—Not later than 2 years after the date
25 of enactment of this part, the Panel shall—

1 “(1) conduct an audit of the activities carried
2 out under this part; and

3 “(2) submit to Congress a report on the results
4 of the audit.

5 **“SEC. 910. AUTHORIZATION OF APPROPRIATIONS.**

6 “There are authorized to be appropriated to the
7 President such sums as are necessary to carry out this
8 part.”.

Comments from the Environmental Fund

MEMORANDUM

To: Sara Hessenflow, Legislative Assistant for Senator Brownback
From: Elizabeth Thompson, Robert Bonnie, Steve Schwartzman
Date: January 28, 2000
Subject: Comments on the draft International Conservation Credit Bill

General Comments

We very much appreciate the opportunity to comment on the draft legislation. We have several comments on ways we think the draft legislation can be improved. Broadly, it's very important that carbon sequestration projects meet credible standards that provide certainty that GHG benefits are real, that projects contribute to sustainable development and forest conservation, and that the legislation creates meaningful incentive for such projects to occur. Therefore, many of our comments are aimed at establishing standards that will help accomplish these goals. Additionally, we provide editorial and clarifying comments and suggestions. We hope this is helpful.

Section 3: Definitions

There are many definitions here which have no mention in the bill text and can be deleted.

Section 4: Authority for voluntary agreements

Subsection (a)(1) has the correct idea but the language needs to be more precise. The phrase "to be exchanged for domestic greenhouse gas regulation relief on a one-to-one basis" is an important idea. The text needs to make it clear that the President (1) can reward credits for verifiable GHG reductions or sequestration; (2) that such credits have to be in accordance with the terms of this legislation and implementing regulations, and; (3) that each credit is equivalent to one ton of carbon dioxide emissions reduction that can be used towards the participant's future regulatory responsibilities.

Subsection (b) needs to outline the role of this group more clearly. Is it to approve projects? Is it to establish regulations? Is it to conduct an interim review? We suggest the Board also include NASA, for its remote sensing capabilities, and NGOs, to increase transparency. A good model to examine is the Board established by The Tropical Forest Conservation Act (H.R. 2870). That Board provides advice and review on programs, operations and audits associated with forest conservation projects.

Section 5: Entitlement to GHG Reduction Credit for Voluntary Action

Subsection (a)(1) should be changed to "sequesters carbon and/or reduces GHG emissions associated with reduction of deforestation, forest conservation, forest management, and associated activities in foreign countries - or".

Subsection (a)(2) describes sustainable agricultural activities. This section needs to give greater definition as to how such activities will be defined and how those activities will produce tons of GHG reductions. We suggest replacing the current language in (a)(2) with the following:

(2) invests in sustainable agriculture, agroforestry, or technology transfer for forest and rural communities that demonstrably and measurably reduce GHG emissions or sequester carbon on an enduring basis.

Subsection (b)(1)(B) should require that JJI projects meet the project standards described in this legislation.

In Subsection (b)(2)(A), while it may be okay to issue credit after five years, it is important that the GHG benefits created by the project aren't then lost. We suggest that the Board established by the legislation specify regulations to insure that the GHG benefits generated by projects are durable. Alternatively, the legislation could designate that the entity that undertakes the project or, possibly, the project funder, is liable to insure that the credits generated by the project are permanent or long-lasting. We would prefer to see that forest conservation undertaken pursuant to this legislation is permanent – the question, then, is how to guarantee this.

The five year audit outlined in Subsection (b)(2)(B) is a good idea. As with JJI projects, Subsection (d)(1) needs to require that projects meet the standards outlined in the legislation.

Subsection (d)(3) applies third party certification only to “retrospective domestic actions.” We suggest requiring such certification and verification of all projects eligible for credits under this legislation.

We suggest a different approach in Subsection (f)(1). Measuring carbon is expensive. Requiring annual measurements may remove any financial incentive to undertake projects. Even so, while it probably is unrealistic to require carbon measurement every year, it is important to have transparent, periodic reporting on the performance of projects. Therefore, we suggest that the projects submit an annual “estimate of potential greenhouse gas reduction credit.” In addition we suggest that pursuant to section (f)(2), the legislation require an annual report on project activities under the program demonstrating that the projects comply with the eligibility criteria.

In Subsection (f)(3), we again raise the issue of the duration of GHG benefits. From an accounting perspective, the easiest way to deal with this issue (especially in countries that won't have emissions caps in the relatively near future) is to require that projects be permanent in nature. However, the legislation needs to define rules or set up a process to define rules whereby GHG benefits are secured from future deforestation, catastrophic fire, and other factors.

Delete subsection (g). We don't understand the relevance.

Section 7: Sources covered by voluntary actions agreements

We don't see a need for dealing with sources. Suggest deleting this entire section.

Section 8: Measurement and Verification

Subsection (a)(1) requires annual measurement and verification. As noted above, participants should be required to estimate carbon benefits and should demonstrate that projects is abiding by the appropriate standards in an annual report. In addition, remote sensing data might be required to verify large projects; this could require input from NASA. Remeasurement would be required in year 5.

Missing from the draft legislation

The legislation contains no general standards for sequestration projects. We suggest reworking Section 8 so as to include such standards. What appears in Section 8 would be included in the measurement, verification, and transparency portion of the standards. The following is what we suggest as projects standards:

1. Projects require scientifically valid measurement, monitoring and verification, and transparent reporting. Carbon stocks that should be monitored include living biomass carbon, dead biomass carbon, and soil carbon.

Projects must demonstrate that the GHG benefits are additional to that which would have occurred on the absence of the project.

Projects must avoid leakage, mitigate for leakage, or properly account for leakage of GHG benefits in the determination of credits to be awarded to the project.

Projects must require permanent forest protection and conservation. Participants receiving credit for a project must replace tons emitted in case of project failure with reductions or sequestration from another source.

No credits should be awarded for projects that convert a naturally occurring native ecosystem to a non-native ecosystem. Reforestation activities are not creditable unless the tract of land was deforested prior to 1990, and is free of unsettled indigenous land claims.

Projects must contribute to the sustainable development of the region where the project takes place, including developing the project with informed participation of local communities.

Large scale hydroelectric projects and dams are not creditable.

Craig Bill

The Climate Change Energy Policy Response Act

and

The Climate Change Tax Amendments of 1999

A Detailed Explanation

The Climate Change Energy Policy Response Act of 1999

A bill to amend the Energy Policy Act of 1992 to revise the energy policies of the U.S. in order to reduce greenhouse gas emissions, advance global climate science, promote technology development, and increase citizen awareness, and for other purposes.

Section 1. Short Title and Table of Contents.

Section 2. Findings.

Section 3. Definitions.

Title I – Energy Policy Coordination

Sec. 101-

Directs the Secretary of Energy to:

- coordinate federal activities involving climate change issues including scientific research; energy technology and development, and economic analysis of various climate change policy alternatives;
- select climate change policy alternatives for critical analysis;
- ensure that collection and dissemination of all government developed or funded information relating to climate change is timely, balanced, understandable, accurate, sound, and made available to the public; and
- consult with the National Academy of Sciences, the National Academy of Engineering, the National Research Council, and the Environmental Protection Agency.

The Secretary of Energy is to name staff to carry out this legislation. Consulting agencies may detail additional staff to DOE. The Act authorizes no additional staffing positions in any government agency.

Title II – Advancement of Climate Change Science

Sec. 201 – Coordination, Prioritization, and Evaluation of Climate Change Science

Research

This section directs the Secretary of Energy to:

- (with the National Academies of Science and Engineering) coordinate, prioritize, and evaluate federally funded scientific research on climate change conducted by or through federal agencies;
- request the National Research Council to annually recommend measures to effectively carry out all scientific research covered by this legislation; and
- submit to Congress legislative recommendations to more effectively carry out research and public information programs under this legislation, including recommendations to improve peer review processes and grant-making procedures.

This section also provides that the objectives for federal climate change science research are to:

- understand the Earth's capacity to assimilate natural and manmade greenhouse gas emissions;
- evaluate the natural variability of the climate, including such phenomena as El Niño;
- develop, and assess the capabilities of, climate models; and develop a national climate modeling strategy with adequate computational and human resources that are integrated and coordinated across the relevant agencies;
- ensure the integrity of all observational data used to validate models and stabilize the existing climate observational capability;
- identify critical climate variables that are inadequately measured or not measured at all;
- build climate observing requirements into existing ongoing operational programs;
- revamp climate research programs and appropriate climate-critical parts of operational observing programs so as to produce useful long-term data;

- establish a funded activity for the development, implementation, and operation of climate-specific observational programs;
- assess the capability and potential of the United States and North American carbon sequestration, including through crops, forests, soils, oceans, and wetlands; and
- develop and deploy the technology to monitor all relevant national and global data.

Requires DOE to submit to Congress and the President a report on all science activities carried out under this title. The reports are to contain any scientific conclusions, interim status reports, and recommendations for subsequent research and testing that DOE considers appropriate. A draft report must be made available by DOE to appropriate non-governmental organizations for their review no later than August 1 of each year. All reports under this section must be made available to the public through the National Resource Center on Climate Change.

For each of fiscal years 2000 through 2004, such sums as are necessary are authorized to be appropriated for research:

- to assess the ability of natural carbon sinks to adjust to natural variations in climate and greenhouse gas emissions including, crops, grassland, forests, soils, and oceans;
- on natural climate variability;
- to develop and assess the capabilities of climate models;
- to ensure the integrity of data used to validate climate models;
- to develop carbon sinks in the United States (primarily crop and forestry research); and
- to develop and deploy monitoring technology.

Title III – Policy Review and Coordination

Sec. 301 – Domestic and International Assessment of Policies for Addressing the Effects of Greenhouse Gas Emissions

This section provides that within two years after the bill becomes law (and biannually thereafter) DOE, after consultation with each of seven federal agencies, is to prepare an economic analysis of climate change policy alternatives. The Secretary of Energy is to select three or more such policy alternatives for critical analysis only. Each analysis is to look at short term (five years) and long-term (fifty years) implications, and account for changes in various factors, including economic indicators.

Each agency to be consulted is to contribute expertise as appropriate on each policy alternative analysis in the following areas:

- energy supply and demand, and energy price implications;

- agricultural production cost and market implications, including overall impact on rural economies (discrete scenarios including variations in commodity and livestock prices);
- health implications, if any;
- implications for 1) workers, including wages and job opportunities and potential for U.S. firms locating operations abroad; and 2) for consumers in terms of predicted changes to the Consumer Price Index;
- implications on all modes of transportation and the effects of the resulting cost changes on consumers, labor, agriculture and businesses;
- housing costs and urban planning (under different mortgage and construction interest rate scenarios).
- implications for U.S. exports and imports and trade competitiveness.

Status of activities and commitments in other countries

In addition to the foregoing seven economic analyses, DOE is to consult with The Department of State, the Central Intelligence Agency, and the National Security Administration to assess actions taken, or likely to be taken, by each United Nations member country to avoid, reduce, or adapt to climate change. Each such assessment is to analyze political and economic factors present in each country that may impact the assessment. The status of the country's commitment to international agreements relating to climate change, and the projected ability and likelihood of each country committing to binding international agreements with targets or timetables, are to be assessed.

Integration of Policy Alternative Analyses

Within 30 months after enactment, and biannually thereafter, the President, with the advice and assistance of the Secretary of Energy, is to submit to Congress a report analyzing and integrating the combined findings of the report. The conclusion is to contain recommendations of any changes in law, international agreements, or public policy that the President considers to be in the best interest of the United States.

Scientific Effect of Policy Alternatives

The Secretary of Energy is to request the National Academies of Science and Engineering to assess the known scientific effect of each policy alternative chosen for analysis under this Title and its effect on technology development and selection.

Environmental Protection Agency Activities with Climate Change Implications

DOE is to report on the activities of EPA that coincidentally affect actions by the private sector that, in turn, affect greenhouse gas emissions. DOE is to consult with the public and private sectors in preparing this report.

Reporting Flexibility

The Secretary of Energy may suspend one or more of the agency reporting requirements after two reports if it finds that such reports will not likely provide information that substantially supplements earlier reports.

Title IV – Public Right-to-Know**Sec. 401 - Annual Report to the Public**

DOE is to publish an annual report on U.S. investment in climate change activities that includes:

- a description of current, prior year, and proposed spending on climate change categorized by research, regulation, education, and other activities;
- estimates of current and prior year tax credits and deductions claimed by U.S. taxpayers attributable to greenhouse gas emissions reductions;
- tables of spending proposals on climate change submitted by federal agencies to OMB, compared with President's final recommendations to Congress;
- an index of all climate change grantees, cross-referenced by name of institutions and persons carrying out the projects;
- an index of all grant proposals not funded by federal agencies; and
- a list of all persons and their affiliations participating in peer review of climate change grant proposals.

Each such report is to be printed on recycled paper, made public, and posted on the Internet.

Public Comment

DOE is to provide for notice and opportunity for public comment on the report. Such comments are to be catalogued and made readily available to the public in electronic format.

National Resource Center on Climate Change

DOE, in consultation with the National Academy of Science, is to establish a National Resource Center on Climate Change. The Center is to preserve and make publicly available all reports, information, studies or other information available to the federal government on climate change. Reference items may be made available in electronic format only. Public availability of information is subject to laws protecting national defense secrets, intellectual property rights, and privacy rights.

Title V – Accelerated Development and Deployment of Response Technology

Sec. 501 – Review of Federally Funded Energy Technology Research and Development

Requires DOE by October 15 of each year to review any federally funded energy technology research and development activities. The review will assess the status of the energy technology, including lead-time required until deployment, cost, safety, potential barriers to deployment, and other relevant factors.

Requires DOE to establish a technology information clearinghouse to disseminate the results of federally funded energy technology research and development activities. The clearinghouse is to be set up within the National Resource Center on Climate Change, but is not to affect national security secrets or personal property rights.

Sec. 502 – Study of Regulatory Barriers to Rapid Deployment of Greenhouse Gas Emission Reduction Technology

This section requires GAO, in consultation with the Secretary of Commerce and the U. S. Trade Representative, to identify and evaluate regulatory or other barriers to more rapid deployment of technology to reduce greenhouse gas emissions. The scope is both domestic and international. Requires GAO to recommend to Congress any necessary changes in law.

Title VI– International Deployment of Energy Technology to Mitigate Climate Change

Sec. 601 – International Deployment of Energy Technology to Mitigate Climate Change

Pilot Program for Financial Assistance

Requires the Secretary of Energy to create a pilot program to provide financial assistance, subject to available appropriations, for not more than six (6) qualifying, international, energy deployment projects. To qualify, the projects must be built, operated, and used outside the United States and must increase energy efficiency compared to the technology that would otherwise be implemented. The Secretary of Energy, after consultation with the Secretary of State, the Secretary of Commerce and the U.S. Trade Representative, may make the selection based solely on the criteria set forth in Sec. 601.

Financial Assistance (for Qualifying International Energy Deployment Projects)

A U. S. firm undertaking an international energy deployment project which qualifies under the preceding section is eligible for financial assistance in the form of a loan or a loan guarantee. The loan amount would not exceed 75% of total project cost, and the interest rate would equal that for Treasury obligations then issued for periods of comparable maturities.

Equity Investment Insurance (for Firms Selected to Participate in Pilot Project)

Under this section a U.S. firm that enters a binding contract for a qualifying international energy deployment project would, if approved by DOE to be part of the pilot project, be eligible for insurance on investment the firm has in the project.

Coordination with other Programs

Provides that a qualifying international energy deployment project, funded under this title, would not be eligible as a qualifying clean coal technology under Section 415 of the Clean Air Act.

Report and Recommendations

No later than four (4) years after the date of enactment, DOE must submit a report to the President on the results of the pilot projects. After reviewing the report the President is to recommend to Congress that the financial assistance program be continued, expanded, reduced or eliminated.

Authorization of Appropriations

Authorizes appropriations (such sums as are necessary) to fund the programs under this title for fiscal years 2001 - 2004.

Title VII – Optimal Operating Efficiency of Transportation Systems

Sec. 701 – Traffic Congestion Relief Research

Amends Section 502 of title 23, United States Code. Requires DOE to enter into an arrangement with the National Academy of Sciences to conduct a study comparing the effectiveness of various regional approaches for reducing traffic congestion. At a minimum the study is to assess the impact on traffic of: (1) expansion of highway capacity; (2) improvement of traffic operations; and (3) programs for demand management.

Relieving urban congestion without additional right-of-way

Requires DOE to fund a study and prepare a report analyzing highway design concepts for projects to relieve congestion in urban areas without acquisition of additional rights-of-way. For fiscal years 2000 through 2002, \$1,000,000 of the [sum deducted by the Secretary under Section 104(a)] would be available for these studies.

Title VIII – Voluntary Initiatives:

Sec. 801 – Improved and Streamlined Reporting and Certification of Voluntary Measures

Amends the Energy Policy Act of 1992 to improve and streamline reporting and certification of voluntary measures to reduce greenhouse gas emissions.

Revised Reporting Guidelines

Requires DOE (within one year of enactment and every five years thereafter), to revise reporting guidelines to reflect changes made by this legislation. Establishes criteria

for review of the reporting guidelines. Requires that any review pursuant to this section give appropriate weight to (1) the purpose of encouraging voluntary greenhouse gas emission reductions; and (2) the voluntary nature of reporting under this section. Validates reported emissions reductions so long as 1) the report meets then applicable guidelines and 2) reported reductions are not adjusted by Energy Information Administration (EIA).

Forms for accurate reporting

Requires DOE to develop forms for voluntary reporting and to make the forms available to entities wishing to report. Provides that entities reporting emissions reductions certify the accuracy of the report. Information reported by a corporation must be signed by one of its officers. Ensures against multiple certification of the same greenhouse gas emissions reductions: If more than one party has a valid claim to the same reduction, the first person to seek certification of a greenhouse gas emission reduction shall be granted the certification.

Greater participation by small businesses and farms

Requires the Administrator of EIA, in conjunction with the Secretary of Agriculture and Administrator of the SBA, to review and revise the guidelines to facilitate greater participation by small businesses, farms, and other organizations that did not previously participate in voluntary reductions and reporting.

Best practices for estimating reductions

Requires the Administrator of EIA to establish the most reasonably effective practices for estimating greenhouse gas emission reductions under §1605(b). Provides that emission reductions certified prior to the effective date of this section be reviewed, and modified if necessary, to account for any changes implemented by this section.

Sec. 802- Public Awareness Campaign of Voluntary Emission Reductions Certification

Requires EIA to create a public awareness campaign: 1) on the benefits of engaging in voluntary greenhouse gas reduction measures and having the reductions certified and available for use under other incentive programs; and 2) explaining forms and procedures for having reductions certified. USDA and SBA are to implement comparable programs for the agricultural and small business communities.

Sec. 803- State Authority to Encourage Voluntary Energy Initiatives

This section provides that a state is not restricted from continuing to engage in any action, or from implementing any State law, that is in effect at the time this legislation is enacted, if the State determines that the action or law is appropriate for mitigating the financial risks to producers, transmitters, distributors, sellers, buyers, or users of energy or energy services who engage in voluntary steps to reduce greenhouse gas emissions. This provision remains in effect unless specifically and expressly superceded in subsequent legislation.

The Climate Change Tax Amendments of 1999

A Detailed Explanation

A bill to amend the Internal Revenue Code of 1986 to provide incentives for the voluntary reduction of greenhouse gas emissions and to advance global climate science and technology development.

Section 1 designates the short title as the "Climate Change Tax Amendments of 1999."

Section 2 extends on a permanent basis the tax credit for research and development in the case of R & D involving climate change.

In order for a research expense to qualify for the credit, it must:

- have as one of its purposes the reducing or sequestering of greenhouse gases; and
- have been reported to DOE under Sec. 1605(b) of the Energy Policy Act of 1992.

This tax credit applies with respect to amounts incurred after this Act becomes law, and only if the Climate Change Energy Policy Response Act also becomes law.

Section 3 provides for investment tax credits for greenhouse-gas-emission reduction facilities.

Greenhouse Gas Emissions Facility Credit

The amount of the credit would be calculated based upon the amount of greenhouse gas emission reductions reported and certified under section 1605(b) of the Energy Policy Act. The credit would be equal to one-half of the applicable percentage of the qualified investment in a "reduced greenhouse gas emissions facility."

For example, if a taxpayer replaces a coal-fired generator with a more efficient one that reduced greenhouse gas emissions by 18 percent, compared to the retired unit, the taxpayer would be entitled to a tax credit of 9 percent of qualified investment in that "reduced greenhouse gas emissions facility". Such facility is defined as a facility of the taxpayer:

- the construction, reconstruction, or erection of which is completed by the taxpayer, or the facility may be acquired by the taxpayer if the original use of the facility commences with the taxpayer;
- which replaces an existing facility of the taxpayer;
- which reduces greenhouse gas emissions (on a per unit of output basis) as compared to the facility it replaces;

- which uses the same type of fuel as the facility it replaces;
- the depreciation (or amortization in lieu of depreciation) of which is allowable;
- which meets performance and quality standards (if any) jointly prescribed by the Secretaries of Treasury and Energy; and
- are consistent with regulations prescribed under Sec. 1605 (b) of the Energy Policy Act (relating to voluntary reporting of greenhouse gas emission reductions).

Only that portion of the investment attributable to providing production capacity not greater than the production capacity of the facility being replaced qualifies for the credit.

While unit efficiencies could be achieved if the credit were allowed for replacing a unit with another that burned a different fuel, such incentive for fuel shifting does not directly stimulate efficiency technology development for each fuel type. The objective is to improve efficiencies "within a fuel," not to encourage fuel shifting "between fuels."

Qualified Progress Expenditure Credit

With respect to qualified progress expenditures, the amount of the qualified investment for the taxable year shall be increased by the aggregate of each qualified progress expenditure for the taxable year with respect to progress expenditure property. Progress expenditure property is defined as any property being constructed by or for the taxpayer and which it is reasonable to believe will qualify as a reduced greenhouse gas emission facility.

Election

A taxpayer may elect to take the tax credit in such a manner (i.e. as an investment credit, or as qualified progress expenditures) as the Secretary may by regulations prescribe. The election will apply to the taxable year for which it was made and to all subsequent taxable years. Such an election, once made, may not be revoked except with the consent of the Secretary.

Recapture where Facility is Prematurely Disposed of

If the facility is disposed of before the end of the facility's depreciation period (or "useful life" for tax purposes) the taxpayer will be assessed an increase in tax equal to the greenhouse gas emissions facility investment tax credit allowed for all prior taxable years multiplied by a fraction whose numerator is the number of years remaining to fully depreciate the facility to be disposed of, and whose denominator is the total number of years over which the facility would otherwise have been subject to depreciation.

Similar rules apply in the case in which the taxpayer elected credit for progress expenditures and the property thereafter ceases to qualify for such credit.

Effective Date

Amendments made to the Internal Revenue Code apply to property placed in service after the date of enactment of this Act.

Study of Additional Incentives for Voluntary Reduction of Greenhouse Gas Emissions

The Secretary of Energy and the Secretary of Transportation are directed to study, and report upon to Congress along with any recommendations for legislative action, possible additional incentives for and removal of barriers to voluntary non-recoupable expenditures on the reduction of greenhouse gas emissions. An expenditure qualifies if it is voluntary and not recoupable-

- from revenues generated from the investment;
- determined under generally accepted accounting standards;
- under the applicable rate-of-return regulation (in the case of a taxpayer subject to such regulation);
- from any tax or other financial incentive program established under federal, State, or local law; and
- pursuant to any credit-trading or other mechanism established under any international agreement or protocol that is in force.

106TH CONGRESS
1ST SESSION

S. _____

IN THE SENATE OF THE UNITED STATES

Mr. CRAIG introduced the following bill; which was read twice and referred to the Committee on _____

A BILL

To amend the Energy Policy Act of 1992 to revise the energy policies of the United States in order to reduce greenhouse gas emissions, advance global climate science, promote technology development, and increase citizen awareness, and for other purposes.

1 *Be it enacted by the Senate and House of Representa-*
2 *tives of the United States of America in Congress assembled,*

3 **SECTION 1. SHORT TITLE; TABLE OF CONTENTS.**

4 (a) **SHORT TITLE.**—This Act may be cited as the
5 “Climate Change Energy Policy Response Act”.

6 (b) **TABLE OF CONTENTS.**—The table of contents of
7 this Act follows:

- Sec. 1. Short title; table of contents.
- Sec. 2. Findings.
- Sec. 3. Definitions.

TITLE I—ENERGY POLICY COORDINATION

Sec. 101. Responsibility of Department of Energy.

TITLE II—ADVANCEMENT OF CLIMATE CHANGE SCIENCE

Sec. 201. Coordination, prioritization, and evaluation of climate change science research.

TITLE III—COMPREHENSIVE POLICY REVIEW AND ANALYSIS

Sec. 301. Domestic and international assessment of policies for addressing the effects of greenhouse gas emissions.

TITLE IV—PUBLIC RIGHT TO KNOW

Sec. 401. Annual report to public.

**TITLE V—ACCELERATED DEVELOPMENT AND DEPLOYMENT OF
RESPONSE TECHNOLOGY**

Sec. 501. Review of federally funded energy technology research and development.

Sec. 502. Study of regulatory barriers to rapid deployment of emission reduction technology.

**TITLE VI—INTERNATIONAL DEPLOYMENT OF ENERGY
TECHNOLOGY TO MITIGATE CLIMATE CHANGE**

Sec. 601. International deployment of energy technology to mitigate climate change.

**TITLE VII—OPTIMAL OPERATING EFFICIENCY OF
TRANSPORTATION SYSTEMS**

Sec. 701. Traffic congestion relief research.

TITLE VIII—VOLUNTARY INITIATIVES

Sec. 801. Improved and streamlined reporting and certification of voluntary measures.

Sec. 802. Public awareness campaign regarding benefits of certification of voluntary emission reductions.

Sec. 803. State authority to encourage voluntary energy initiatives.

1 SEC. 2. FINDINGS.

2 Congress finds that—

3 (1) to responsibly address climate change issues
4 requires examination of energy policies and prac-
5 tices;

6 (2) global climate change issues have profound
7 scientific, technological, economic, and public policy

1 facets that must be addressed in a comprehensive,
2 integrated fashion;

3 (3) current scientific research, experimentation,
4 and data collection are not adequately focused on
5 answering key questions within the United States or
6 internationally;

7 (4)(A) the lack of a coordinated climate model-
8 ing strategy in the United States is hampering
9 progress in high-end climate modeling activities;

10 (B) the United States lacks the capabilities to
11 perform the requisite climate change modeling sim-
12 ulations and experiments in order to be able to apply
13 existing United States intellectual expertise to im-
14 portant science and policy questions related to cli-
15 mate change; and

16 (C) those deficiencies, among others, limit the
17 ability of the United States to—

18 (i) predict future climate characteristics
19 and assess the results of climate change;

20 (ii) formulate policies that are consistent
21 with national objectives; and

22 (iii) advance most effectively an under-
23 standing of the underlying scientific issues per-
24 taining to climate change and variability;

1 (5) there has been a lack of progress made by
2 Federal agencies responsible for climate observation
3 systems, individually and collectively, in developing
4 and maintaining a credible, integrated climate ob-
5 serving system, consequently limiting the ability of
6 the United States to document and understand cli-
7 mate change adequately;

8 (6)(A) developing and deploying technologies
9 can speed the transition to a lower level of green-
10 house gas emissions in the United States and
11 throughout the world;

12 (B) the pace of technological change in the
13 marketplace is difficult to predict accurately; while
14 breakthroughs in such developments are often incre-
15 mental, capital turnover, consumer acceptance, tech-
16 nological compatibility, economics, and other factors
17 can alter the pace of such change; and

18 (C) such technologies need to be environ-
19 mentally sound, safe, cost-effective, and consumer-
20 friendly;

21 (7)(A) public access to scientific, economic, and
22 public policy information regarding climate change is
23 severely limited;

1 (B) the public's right to know and to be fully
2 informed of all aspects of climate change is not
3 being satisfied; and

4 (C) open and balanced discussion leading to
5 public support for the best environmentally and eco-
6 nomically sound approaches to climate change policy
7 resolution is urgently needed;

8 (8) sufficient scientific questions and public in-
9 terest exist to warrant tangible encouragement and
10 acknowledgment of responsible actions by private en-
11 tities to reduce, avoid, or offset greenhouse gas
12 emissions, even though many scientific, techno-
13 logical, economic, and public policy questions have
14 not yet been resolved;

15 (9) voluntary measures should be encouraged
16 through incentives rather than in anticipation of fu-
17 ture domestic or international regulatory mandates;
18 and

19 (10) greenhouse gas emission improvements can
20 be achieved through voluntary measures even as we
21 answer yet unresolved key questions about global
22 and regional climates.

1 **SEC. 3. DEFINITIONS.**

2 (a) IN GENERAL.—Title XVI of the Energy Policy
3 Act of 1992 is amended by inserting before section 1601
4 (42 U.S.C. 13381) the following:

5 **“SEC. 1600. DEFINITIONS.**

6 “In this title:

7 “(1) ADMINISTRATOR.—The term ‘Adminis-
8 trator’ means the Administrator of the Energy In-
9 formation Administration.

10 “(2) EMISSION REDUCTION.—The term ‘emis-
11 sion reduction’ includes—

12 “(A) avoidance of the emission of a green-
13 house gas;

14 “(B) a limitation on the emission of a
15 greenhouse gas;

16 “(C) sequestration of carbon; and

17 “(D) mitigation for the emission of a
18 greenhouse gas.

19 “(3) ENERGY TECHNOLOGY.—The term ‘energy
20 technology’ means—

21 “(A) a technology to relating to—

22 “(i) the generation or production (in-
23 cluding exploration and discovery) of an
24 energy source; or

“(ii) the transmission, distribution, conservation, or use of energy that could reduce greenhouse gas emissions; and

4 “(B) a technology relating to carbon se-
5 questration, including carbon sequestration
6 through crops, soils, forests, oceans, and wet-
7 lands.

8 “(4) GREENHOUSE GAS.—The term ‘greenhouse
9 gas’ means a gaseous constituent of the atmosphere,
10 natural or anthropogenic, that absorbs and re-emits
11 infrared radiation.”.

(b) TECHNICAL AMENDMENT.—The table of contents of the Energy Policy Act of 1992 (106 Stat. 2776) is amended by inserting before the item relating to section 1601 the following:

"Sec. 1600. Definitions."

16 **TITLE I—ENERGY POLICY**
17 **COORDINATION**

18 SEC. 101. RESPONSIBILITY OF DEPARTMENT OF ENERGY.

19 (a) IN GENERAL.—Section 1603 of the Energy Policy
20 Act of 1992 (42 U.S.C. 13383) is amended—

21 (1) by inserting striking “Within 6 months”
22 and inserting the following:

23 “(a) IN GENERAL.—Within 6 months”; and

24 (2) by adding at the end the following:

1 “(b) ROLE OF SECRETARY.—The Secretary, consist-
2 ent with other Federal law, shall—

3 “(1) coordinate all energy-related activities in-
4 volving climate change issues, including scientific re-
5 search, energy technology and development, and
6 evaluation of effects and implications on energy use,
7 sources, and related activities of various global cli-
8 mate change policies described in this title;

9 “(2) select policies to be assessed under this
10 section and conduct the assessments; and

11 “(3) ensure that—

12 “(A) the collection and dissemination of all
13 information developed and disseminated (includ-
14 ing data and modeling results) relating to cli-
15 mate change issues described in this title is
16 timely, balanced, accurate, and sound; and

17 “(B) the information described in subpara-
18 graph (A) is made available to the public.

19 “(c) STAFF.—

20 “(1) STAFF DIRECTOR.—The Secretary of En-
21 ergy shall designate an appropriate officer of the
22 Department of Energy to function as staff director
23 for the Secretary for functions assigned to the Sec-
24 retary under this title.

25 “(2) STAFF SUPPORT.—

1 “(A) IN GENERAL.—The Secretary of En-
2 ergy may request from the Secretary of Agri-
3 culture, Secretary of Commerce, Secretary of
4 State, and Secretary of Transportation such ad-
5 ditional staff support as the Secretary may re-
6 quire to carry out functions under this title.

7 “(B) PERSONNEL ON DETAIL.—Staff pro-
8 vided under subparagraph (A) shall serve on
9 detail to the Secretary with the approval of the
10 respective agency heads.

11 “(C) NO STAFFING INCREASE.—This sub-
12 section and the other amendments made to this
13 title by the Climate Change Energy Policy Re-
14 sponse Act shall not serve to authorize an in-
15 crease in staffing authority for the Secretary or
16 any such agency head.

17 “(e) CONSULTATION WITH NAS, NAE, NRC, AND
18 EPA.—The Secretary shall consult, as appropriate,
19 with—

20 “(1) the National Academy of Sciences and Na-
21 tional Academy of Engineering;

22 “(2) the National Research Council; and

23 “(3) the Environmental Protection Agency.”.

24 (b) TECHNICAL AMENDMENTS.—

1 (1) The section heading for section 1603 of the
2 Energy Policy Act of 1992 is amended by striking
3 “**DIRECTOR OF**” and inserting “**COORDINATION**
4 **OF**”.

5 (2) The item in the table of contents for the
6 Energy Policy Act of 1992 (42 U.S.C. 13381 et
7 seq.) is amended by striking “Director of” and in-
8 serting “Coordination of”.

9 **TITLE II—ADVANCEMENT OF**
10 **CLIMATE CHANGE SCIENCE**

11 **SEC. 201. COORDINATION, PRIORITIZATION, AND EVALUA-**
12 **TION OF CLIMATE CHANGE SCIENCE RE-**
13 **SEARCH.**

14 (a) **IN GENERAL.**—Title XVI of the Energy Policy
15 Act of 1992 (42 U.S.C. 13381 et seq.) is amended by
16 striking section 1604 and inserting the following:

17 **“SEC. 1604. COORDINATION, PRIORITIZATION, AND EVALUA-**
18 **TION OF CLIMATE CHANGE SCIENCE RE-**
19 **SEARCH.**

20 “(a) **IN GENERAL.**—The Secretary, with the advice
21 and assistance of the National Academy of Sciences and
22 the National Academy of Engineering, shall coordinate,
23 prioritize, and evaluate the Federally funded research con-
24 ducted by or through Federal agencies that, in whole or
25 in part, involves climate change science.

1 “(b) RECOMMENDATIONS TO CARRY OUT RE-
2 SEARCH.—The Secretary shall annually request from the
3 National Research Council recommendations of measures
4 to effectively carry out all scientific research performed
5 under this title, including strengthening of peer review
6 processes and grantmaking procedures.

7 “(c) PLAN FOR COORDINATION.—

8 “(1) IN GENERAL.—Not later than 180 days
9 after the date of enactment of the Climate Change
10 Energy Policy Response Act, the Secretary shall
11 submit to Congress recommendations for legislative
12 and administrative measures to effectively carry out
13 research and public information programs under this
14 title.

15 “(2) SUBJECTS.—Recommendations under
16 paragraph (1) shall include recommendations to im-
17 prove peer review processes and grantmaking proce-
18 dures.

19 “(d) OBJECTIVES OF FEDERAL CLIMATE CHANGE
20 SCIENCE RESEARCH.—

21 “(1) IN GENERAL.—All climate change science
22 research performed under this title—

23 “(A) in the aggregate, shall adequately ad-
24 dress the objectives stated in paragraph (2);
25 and

1 “(B) individually, shall, to the extent prac-
2 ticable, incorporate a focus on those objectives,
3 as appropriate.

4 “(2) OBJECTIVES.—The objectives referred to
5 in paragraph (1) are the objectives of—

6 “(A) understanding the Earth’s capacity to
7 assimilate natural and manmade greenhouse
8 gas emissions;

9 “(B) evaluating the natural variability of
10 the climate, including such phenomena as El
11 Niño;

12 “(C)(i) developing, and assessing the capa-
13 bilities of, climate models; and

14 “(ii) facilitating future climate assessments
15 and our understanding and predictions of cli-
16 mate through formulation of a national state-
17 ment of goals and objectives, followed by appro-
18 priate development of a national climate model-
19 ing strategy that—

20 “(I) includes the provision of adequate
21 computational resources to enhance super-
22 computing capabilities and the provision of
23 adequate human resources; and

24 “(II) is integrated and coordinated
25 across the relevant agencies;

1 “(D) ensuring the integrity of all observa-
2 tional data used to validate models;

3 “(E) stabilizing the existing climate obser-
4 vational capability;

5 “(F) identifying critical climate variables
6 that are inadequately measured or not meas-
7 ured at all;

8 “(G) building climate observing require-
9 ments into existing, ongoing operational pro-
10 grams;

11 “(H) revamping climate research programs
12 and appropriate climate-critical parts of oper-
13 ational observing programs so as to produce
14 truly useful long-term climate data;

15 “(I) establishing a funded activity for the
16 development, implementation, and operation of
17 climate-specific observational programs;

18 “(J) assessing the capability and potential
19 of the United States and North American car-
20 bon sequestration, including carbon sequestra-
21 tion through crops, forests, soils, oceans, and
22 wetlands; and

23 “(K) developing and deploying the tech-
24 nology to monitor all relevant national and
25 global data.

1 “(e) REPORTS.—

2 “(1) IN GENERAL.—Not later than October 1 of
3 each year, the Secretary shall submit to Congress
4 and the President a report on the activities carried
5 out under this section.

6 “(2) CONTENTS.—The report under paragraph
7 (1) shall contain any scientific conclusions, interim
8 status reports, and recommendations for subsequent
9 research and testing that the Secretary considers ap-
10 propriate.

11 “(3) DRAFT REPORT.—A report under para-
12 graph (1) shall be made available in draft form not
13 later than August 1 of each year to appropriate non-
14 governmental organizations with applicable scientific
15 expertise for review before final publication.

16 “(4) PUBLIC AVAILABILITY.—Each report
17 under paragraph (1) shall be made public, including
18 through the National Resource Center on Climate
19 Change established under section 1612.

20 “(f) AUTHORIZATION OF APPROPRIATIONS FOR CER-
21 TAIN CLIMATE CHANGE RESEARCH.—For each of fiscal
22 years 2001 through 2004, there are authorized to be ap-
23 propriated to the Secretary such sums as are necessary
24 for—

1 “(1) research to assess the ability of natural
2 carbon sinks to adjust to natural variations in cli-
3 mate and greenhouse gas emissions including crops,
4 grassland, forests, soils, and oceans;

5 “(2) research on natural climate variability;

6 “(3) research to develop and assess the capa-
7 bilities of climate models;

8 “(4) research to ensure the integrity of data
9 used to validate climate models;

10 “(5) research to develop carbon sinks in the
11 United States, primarily crop and forestry research;
12 and

13 “(6) research to develop and deploy monitoring
14 technology.”.

15 (b) TECHNICAL AMENDMENT.—The table of contents
16 of the Energy Policy Act of 1992 (106 Stat. 2776) is
17 amended by striking the item relating to section 1604 and
18 inserting the following:

“Sec. 1604. Coordination, prioritization, and evaluation of climate change
science research.”.

1 **TITLE III—COMPREHENSIVE**
2 **POLICY REVIEW AND ANALYSIS**

3 **SEC. 301. DOMESTIC AND INTERNATIONAL ASSESSMENT OF**
4 **POLICIES FOR ADDRESSING THE EFFECTS OF**
5 **GREENHOUSE GAS EMISSIONS.**

6 (a) IN GENERAL.—Title XVI of the Energy Policy
7 Act of 1992 (42 U.S.C. 13381 et seq.) is amended by in-
8 serting after section 1604 the following:

9 **“SEC. 1604A. ASSESSMENT OF ALTERNATIVE ENERGY-RE-**
10 **LATED POLICIES FOR ADDRESSING GREEN-**
11 **HOUSE GAS EMISSIONS.**

12 “(a) EVALUATION AND COMPREHENSIVE REPORT.—

13 “(1) DEFINITION OF ECONOMIC INDICATOR.—

14 In this subsection, the term ‘economic indicator’
15 means—

16 “(A) the rate of inflation;

17 “(B) the rate of change in the gross do-
18 mestic product;

19 “(C) the unemployment rate;

20 “(D) interest rates; and

21 “(E) the price and supply availability of
22 fossil fuels (by category and source).

23 “(2) REPORTS BY SECRETARY.—

24 “(A) IN GENERAL.—Not later than 2 years
25 after the date of enactment of the Climate

1 Change Energy Policy Response Act and bian-
2 nually thereafter, the Secretary, after consulta-
3 tion with each department referred to in para-
4 graphs (3) through (10) and the United States
5 Trade Representative, shall submit to Congress
6 and to the President a report containing a criti-
7 cal analysis and assessment of energy-related
8 policies for responding to potential global cli-
9 mate change (including a comparative assess-
10 ment of the policies).

11 “(B) DESIGNATED POLICIES.—The Sec-
12 retary shall select at least 3 energy-related poli-
13 cies for assessment under subparagraph (A).

14 “(C) SHORT-TERM AND LONG-TERM AS-
15 SESSMENTS.—The assessments shall be for the
16 short term (within 5 years following the date of
17 the report) and the long term (within 50 years
18 following the date of the report).

19 “(3) ENERGY SUPPLY AND DEMAND.—

20 “(A) IN GENERAL.—The Secretary shall
21 analyze and assess the energy supply, demand,
22 and price implications for each energy-related
23 policy referred to in paragraph (2)(A).

24 “(B) ACCOUNTING FOR VARIOUS SCE-
25 NARIOS.—Each assessment described in sub-

1 paragraph (A) shall address any energy implica-
2 tions under various scenarios, including changes
3 in economic indicators.

4 “(C) INITIAL DRAFT.—The Energy Infor-
5 mation Administration shall—

6 “(i) prepare the initial draft of each
7 report required under this paragraph; and

8 “(ii) make a copy of the initial draft
9 available to the public.

10 “(4) AGRICULTURE.—

11 “(A) IN GENERAL.—After opportunity for
12 consultation with the Department of Agri-
13 culture, each report by the Secretary shall ana-
14 lyze and assess the agricultural production cost
15 and market implications of each energy-related
16 policy referred to in paragraph (2)(A), includ-
17 ing the overall impact of the policy on rural
18 economies.

19 “(B) ACCOUNTING FOR VARIOUS SCE-
20 NARIOS.—Each assessment described in sub-
21 paragraph (A) shall address any agricultural
22 implications under various scenarios, changes in
23 economic indicators, and in livestock and com-
24 modity prices.

25 “(5) HEALTH.—

1 “(A) IN GENERAL.—After opportunity for
2 consultation with the Department of Health
3 and Human Services, each report by the Sec-
4 retary shall analyze and assess the health impli-
5 cations of each energy-related policy referred to
6 in paragraph (2)(A).

7 “(B) ACCOUNTING FOR VARIOUS SCE-
8 NARIOS.—Each assessment described in sub-
9 paragraph (A) shall address any health implica-
10 tions under various scenarios, including changes
11 in economic indicators.

12 “(6) LABOR.—

13 “(A) IN GENERAL.—After opportunity for
14 consultation with the Department of Labor,
15 each report by the Secretary shall analyze and
16 assess the implications of each policy referred
17 to in paragraph (2)(A) on—

18 “(i) workers, including wages, job op-
19 portunities, and the comparative
20 attractiveness, if any, of locating oper-
21 ations of United States companies abroad;
22 and

23 “(ii) consumers, in terms of projected
24 impacts, if any, on the Consumer Price
25 Index.

1 “(B) ACCOUNTING FOR VARIOUS SCE-
2 NARIOS.—Each assessment described in sub-
3 paragraph (A) shall account for implications
4 under various scenarios, including changes in
5 economic indicators.

6 “(7) TRANSPORTATION.—

7 “(A) IN GENERAL.—After opportunity for
8 consultation with the Department of Transpor-
9 tation, each report by the Secretary shall ana-
10 lyze and assess the impacts, if any, of each pol-
11 icy described in paragraph (2)(A) on all modes
12 of transportation, and the resulting economic
13 effects of such cost changes on consumers,
14 labor, agricultural enterprises, and businesses
15 (including specifically domestic consumers and
16 businesses that are dependent on transpor-
17 tation).

18 “(B) ACCOUNTING FOR VARIOUS SCE-
19 NARIOS.—Each assessment described in sub-
20 paragraph (A) shall address any transportation
21 implications under various scenarios, including,
22 in the case of motor vehicles, technological
23 changes in vehicle design and traffic constraint
24 mitigation.

1 “(C) CONSIDERATIONS.—Each assessment
2 described in subparagraph (A) shall consider
3 such factors as—

4 “(i) vehicle miles traveled;

5 “(ii) the availability of adequate and
6 reliable public transportation within and
7 between cities, States, and regions;

8 “(iii) the commercial use of trucks
9 and other highway motor vehicles for
10 transporting goods and passengers and de-
11 livering services;

12 “(iv) the geographic size and popu-
13 lation of the United States relative to those
14 of other developed countries;

15 “(v) safety;

16 “(vi) environmental laws;

17 “(vii) fuel prices;

18 “(viii) energy conservation; and

19 “(ix) changes in economic indicators.

20 “(8) HOUSING AND URBAN PLANNING.—

21 “(A) IN GENERAL.—After opportunity for
22 consultation with the Department of Housing
23 and Urban Development, each report by the
24 Secretary shall analyze and assess the implica-

1 tions of each policy described in paragraph
2 (2)(A) on housing costs and urban planning.

3 “(B) ACCOUNTING FOR VARIOUS SCE-
4 NARIOS.—Each assessment described in sub-
5 paragraph (A) shall address any housing and
6 urban planning implications under various sce-
7 narios, including variations in mortgage and
8 construction interest rates and changes in eco-
9 nomic indicators.

10 “(9) INTERNATIONAL COMMERCE.—

11 “(A) IN GENERAL.—After opportunity for
12 consultation with the Secretary of Commerce
13 and the United States Trade Representative,
14 each report by the Secretary shall analyze and
15 assess the implications of each policy described
16 in paragraph (2)(A) on United States exports
17 and imports and trade competitiveness.

18 “(B) ACCOUNTING FOR VARIOUS SCE-
19 NARIOS.—Each assessment described in sub-
20 paragraph (A) shall address any international
21 commerce implications under different sce-
22 narios, including changes in economic indica-
23 tors.

24 “(10) ACTIONS BY OTHER NATIONS.—

1 “(A) IN GENERAL.—Each report by the
2 Secretary shall analyze and assess the actions
3 taken, or likely to be taken, and the net aggregate
4 effect of such actions, by each United Nations
5 member country to avoid, reduce, or adapt
6 to potential global climate change.

7 “(B) CONSULTATION.—Each report shall
8 be prepared in accordance with otherwise applicable
9 laws (including regulations) after opportunity
10 for consultation with the Central Intelligence
11 Agency, the National Security Agency,
12 and the Department of State.

13 “(C) ANALYSIS OF POLITICAL AND ECONOMIC
14 FACTORS.—

15 “(i) IN GENERAL.—Each assessment
16 described in subparagraph (A) shall analyze
17 the political and economic factors
18 present in each country that form the basis
19 for the assessment.

20 “(ii) MATTERS TO BE ADDRESSED.—
21 Each assessment shall specifically address—
22

23 “(I) the status of the commitment
24 of each country to any international
25 agreements, treaties, or pro-

1 tocols related to potential global cli-
2 mate change; and

3 “(II) the projected ability of each
4 country to commit to, and the likeli-
5 hood of each country’s committing to,
6 specific quantifiable targets to reduce,
7 within specified timeframes, green-
8 house gas emissions under a legally
9 binding international agreement.

10 “(11) REPORTING FLEXIBILITY.—For biannual
11 reports under this subsection, the Secretary may—

12 “(A) submit individual reports with respect
13 to each paragraph under this subsection; or

14 “(B) submit a combination of 1 or more
15 biannual reports, but only if submitting a com-
16 bination of reports would facilitate public un-
17 derstanding in a timely manner.

18 “(b) COMPREHENSIVE POLICY REPORTS.—

19 “(1) IN GENERAL.—Not later than 30 months
20 after the date of enactment of the Climate Change
21 Energy Policy Response Act, and biannually there-
22 after, the President, with the advice and assistance
23 of the Secretary, shall submit to Congress a report
24 analyzing and integrating the combined findings of
25 the reports required under subsection (a).

1 “(2) CONTENTS.—Each report under para-
2 graph (1) shall include recommendations of any
3 changes in law, international agreements, or public
4 policy that the President considers to be in the best
5 interests of the United States.

6 “(c) NATIONAL ACADEMY OF SCIENCES; NATIONAL
7 ACADEMY OF ENGINEERING.—

8 “(1) IN GENERAL.—Not later than 30 days
9 after the date of enactment of the Climate Change
10 Energy Policy Response Act, the Secretary shall re-
11 quest that, not later than 2 years after the date of
12 enactment of that Act and biannually thereafter, the
13 National Academy of Sciences and the National
14 Academy of Engineering (acting through the Na-
15 tional Research Council) submit to Congress and to
16 the Secretary (for inclusion in the review and report
17 under subsection (c)) a report containing a compara-
18 tive assessment of each policy assessed under sub-
19 section (b), including the known scientific effect of
20 each mechanism on global climate change and the
21 effect of each mechanism on the technology develop-
22 ment and selection.

23 “(2) SHORT-TERM AND LONG-TERM ASSESS-
24 MENTS.—An assessment under paragraph (1) shall

1 be for the short term (the following 5-year period)
2 and for the long term (the following 50-year period).

3 “(d) REPORT ON ACTIONS UNDER EPA JURISDIC-
4 TION.—

5 “(1) IN GENERAL.—Not later than 2 years
6 after the date of enactment of the Climate Change
7 Energy Policy Response Act, and biannually there-
8 after, based on consultations with the Administrator
9 of the Environmental Protection Agency, the Sec-
10 retary shall submit to Congress and the President a
11 report describing the energy supply and demand im-
12 plications of all activities carried out by the Agency
13 that have a coincidental effect on actions by the pri-
14 vate sector that affect greenhouse gas emissions.

15 “(2) PUBLIC CONSULTATION.—In preparing a
16 report under paragraph (1), the Secretary shall con-
17 sult with—

18 “(A) persons in the private sector that are
19 regulated by the Administrator; and

20 “(B) persons in the public sector.

21 “(e) SUSPENSION OF REPORTS.—After a second re-
22 port is made under this section, the Secretary may sus-
23 pend any reporting requirement under subsection (a) for
24 a period of not more than 4 years if the Secretary deter-
25 mines that additional responses to that requirement would

1 not be likely to provide information that substantially sup-
2 plements the earlier reports.”.

3 (b) **TECHNICAL AMENDMENT.**—The table of contents
4 of the Energy Policy Act of 1992 (106 Stat. 2776) is
5 amended by inserting after the item relating to section
6 1604 the following:

“Sec. 1604A. Assessment of alternative policies for addressing greenhouse gas
emissions.”.

7 **TITLE IV—PUBLIC RIGHT TO** 8 **KNOW**

9 **SEC. 401. ANNUAL REPORT TO PUBLIC.**

10 (a) **IN GENERAL.**—Title XVI of the Energy Policy
11 Act of 1992 (42 U.S.C. 13381 et seq.) is amended by add-
12 ing at the end the following:

13 **“SEC. 1610. ANNUAL REPORT TO PUBLIC.**

14 “(a) **REPORT.**—The Secretary, at the time the Presi-
15 dent submits to Congress the budget of the United States
16 Government under section 1105 of title 31, United States
17 Code, shall publish a detailed report that includes, to the
18 maximum extent practicable—

19 “(1) a description of all current fiscal year and
20 prior fiscal year Federal spending on climate change,
21 categorized by research, regulation, education, and
22 other activities;

23 “(2) an estimate of the prior year and current
24 amount of any Federal tax credits or other Federal

1 tax deductions claimed by taxpayers directly attrib-
2 utable to emission reduction activities;

3 “(3) a compendium of all proposed Federal
4 spending related to climate change categorized by re-
5 search, regulation, education, and other activities;

6 “(4) tables detailing all spending recommenda-
7 tions on climate change submitted by Federal agen-
8 cies to the Office of Management and Budget, com-
9 pared with the final recommendations of the Presi-
10 dent;

11 “(5) an alphabetical index of all climate change
12 grantees, cross-referenced by name of institution and
13 persons carrying out the grant project;

14 “(6) an index of all climate change grant pro-
15 posals not funded by Federal agencies; and

16 “(7) a list of all persons, and their institutional
17 affiliations, participating in peer review of climate
18 change grant proposals submitted to Federal agen-
19 cies.

20 “(b) AVAILABILITY OF REPORTS.—A report under
21 subsection (a) shall be—

22 “(1) printed on recycled paper;

23 “(2) made available to the public; and

24 “(3) posted on the Internet.

1 **"SEC. 1611. PUBLIC COMMENT.**

2 "In the case of any report under this title that is to
3 be published, the Secretary shall—

4 “(1) provide to the public notice and oppor-
5 tunity to comment on the contents or quality of the
6 report before it is published; and

7 “(2) receive, catalogue, and make readily avail-
8 able to the public all written public comments on re-
9 ports covered by this section, except that lengthy
10 compilations of public comments may be published
11 in electronic format only.

12 **"SEC. 1612. NATIONAL RESOURCE CENTER ON CLIMATE**
13 **CHANGE.**

14 “(a) IN GENERAL.—The Secretary, in consultation
15 with the National Academy of Sciences, shall maintain a
16 National Resource Center on Climate Change (referred to
17 in this section as the ‘Center’).

18 “(b) FUNCTIONS.—

19 “(1) IN GENERAL.—The Center shall preserve
20 and make available to the public all reports, studies,
21 or other information relating to climate change pro-
22 vided for in this title, provided for in the Climate
23 Change Energy Policy Response Act, or otherwise
24 available to the Federal Government.

1 “(2) REFERENCE ITEMS.—Except as otherwise
2 provided in this title, reference items may be made
3 available in electronic format only.

4 “(c) RELATIONSHIP TO OTHER LAW.—Nothing in
5 this section alters or amends otherwise applicable law re-
6 stricting public access to information, including laws pro-
7 tecting national defense secrets, intellectual property
8 rights, and privacy rights.”.

9 (b) TECHNICAL AMENDMENT.—The table of contents
10 of the Energy Policy Act of 1992 (106 Stat. 2776) is
11 amended by inserting after the item relating to section
12 1609 the following:

 “Sec. 1610. Annual report to public.

 “Sec. 1611. Public comment.

 “Sec. 1612. National Resource Center on Climate Change.”.

13 **TITLE V—ACCELERATED DEVEL-**
14 **OPMENT AND DEPLOYMENT**
15 **OF RESPONSE TECHNOLOGY**

16 **SEC. 501. REVIEW OF FEDERALLY FUNDED ENERGY TECH-**
17 **NOLOGY RESEARCH AND DEVELOPMENT.**

18 (a) IN GENERAL.—Title XVI of the Energy Policy
19 Act of 1992 (42 U.S.C. 13381 et seq.) (as amended by
20 section 401(a)) is amended by adding at the end the fol-
21 lowing:

1 **"SEC. 1613. REVIEW OF FEDERALLY FUNDED ENERGY**
2 **TECHNOLOGY RESEARCH AND DEVELOP-**
3 **MENT.**

4 **"(a) DEPARTMENT OF ENERGY REVIEW OF FEDER-**
5 **ALLY FUNDED ENERGY TECHNOLOGY RESEARCH AND**
6 **DEVELOPMENT.—**

7 **"(1) IN GENERAL.—**The Secretary shall—

8 **"(A)** review annually any federally funded
9 research and development activities carried out
10 on energy technology; and

11 **"(B)** issue a public report by October 15
12 of each year on the results of the review for
13 consideration and use in the preparation of the
14 budget of the United States Government sub-
15 mitted under section 1105 of title 31, United
16 States Code, for the following fiscal year.

17 **"(2) ASSESSMENT OF TECHNOLOGY READI-**
18 **NESS.—**As part of the review of an energy tech-
19 nology, the Secretary shall—

20 **"(A)** assess the status (including the po-
21 tential commercialization) of the technology and
22 any barriers to the deployment of the energy
23 technology; and

24 **"(B)** consider—

25 **"(i)** the length of time it will take for
26 deployment and use of the energy tech-

1 nology so as to have a meaningful impact
2 on emission reductions;

3 “(ii) the cost of deploying the energy
4 technology;

5 “(iii) the safety of the energy tech-
6 nology; and

7 “(iv) other relevant factors.

8 “(b) ENERGY TECHNOLOGY RESEARCH AND DEVEL-
9 OPMENT CLEARINGHOUSE.—

10 “(1) IN GENERAL.—The Secretary shall estab-
11 lish, in the National Resource Center on Climate
12 Change established under section 1614 or by such
13 other means as the Secretary considers appropriate,
14 an information clearinghouse to facilitate the trans-
15 fer and dissemination of the results of federally
16 funded research and development activities being
17 carried out on energy technology.

18 “(2) NO EFFECT ON RESTRICTIONS OR SAFE-
19 GUARDS.—Paragraph (1) has no effect on any re-
20 strictions or safeguards established for national se-
21 curity or the protection of personal property rights
22 (including trade secrets and confidential business in-
23 formation).

24 “(c) AUTHORIZATION OF APPROPRIATIONS FOR
25 JOINT FEDERAL/PRIVATE DEMONSTRATION PRO-

1 GRAMS.—There are authorized to be appropriated to the
2 Secretary for each of fiscal years 2001 through 2004 such
3 sums as are necessary for programs for the demonstration
4 of innovative energy sequestration technologies described
5 in section 1600(3)(B) to be conducted jointly by the Fed-
6 eral Government and private nonprofit or for-profit enti-
7 ties.”.

8 (b) TECHNICAL AMENDMENT.—The table of contents
9 of the Energy Policy Act of 1992 (106 Stat. 2776) (as
10 amended by section 401(b)) is amended by inserting after
11 the item relating to section 1612 the following:

“Sec. 1613. Review of federally funded energy technology research and develop-
ment.”.

12 **SEC. 502. STUDY OF REGULATORY BARRIERS TO RAPID DE-**
13 **PLOYMENT OF EMISSION REDUCTION TECH-**
14 **NOLOGY.**

15 Not later than 270 days after the date of enactment
16 of this Act, the Comptroller General of the United States
17 (in consultation with the Secretary of Commerce and the
18 United States Trade Representative) shall—

19 (1) identify and evaluate regulatory barriers to
20 the more rapid deployment of technology domesti-
21 cally and internationally for greenhouse gas emission
22 reductions (within the meaning of section 1600 of
23 the Energy Policy Act of 1992, as added by section
24 3);

1 (2) recommend to Congress changes in law that
2 would permit more rapid deployment of such tech-
3 nologies; and

4 (3) make such other recommendations as the
5 Comptroller General of the United States considers
6 to be appropriate.

7 **TITLE VI—INTERNATIONAL DE-**
8 **PLOYMENT OF ENERGY TECH-**
9 **NOLOGY TO MITIGATE CLI-**
10 **MATE CHANGE**

11 **SEC. 601. INTERNATIONAL DEPLOYMENT OF ENERGY TECH-**
12 **NOLOGY TO MITIGATE CLIMATE CHANGE.**

13 Section 1608 of the Energy Policy Act of 1992 (42
14 U.S.C. 13386) is amended by striking subsection (l) and
15 inserting the following:

16 “(l) INTERNATIONAL DEPLOYMENT OF ENERGY
17 TECHNOLOGY TO MITIGATE CLIMATE CHANGE.—

18 “(1) DEFINITIONS.—In this subsection:

19 “(A) ENERGY EFFICIENCY.—The term ‘en-
20 ergy efficiency’ means the ratio of the design
21 average annual energy output of a unit of an
22 energy production facility (determined without
23 regard to any cogeneration of steam) to the de-
24 sign average annual heat input of the unit

1 (based on the highest heating value of the fuel
2 used by the unit).

3 “(B) INTERNATIONAL ENERGY DEPLOY-
4 MENT PROJECT.—The term ‘international en-
5 ergy deployment project’ means a project to
6 construct a unit of an energy production facility
7 outside the United States—

8 “(i) the output of which will be
9 consumed outside the United States; and

10 “(ii) the deployment of which will re-
11 sult in greenhouse gas reduction when
12 compared to the technology that would
13 otherwise be implemented through an in-
14 crease in energy efficiency of—

15 “(I) 5 percentage points or more,
16 in the case of a unit placed in service
17 before January 1, 2010;

18 “(II) 7 percentage points or
19 more, in the case of a unit placed in
20 service after December 31, 2009, and
21 before January 1, 2020; or

22 “(III) 10 percentage points or
23 more, in the case of a unit placed in
24 service after December 31, 2019, and
25 before January 1, 2030.

1 “(C) QUALIFYING INTERNATIONAL EN-
2 ERGY DEPLOYMENT PROJECT.—The term
3 ‘qualifying international energy deployment
4 project’ means an international energy deploy-
5 ment that—

6 “(i) is submitted by a United States
7 firm to the Secretary in accordance with
8 procedures established by the Secretary by
9 regulation;

10 “(ii) uses technology that has been
11 successfully developed or deployed in the
12 United States;

13 “(iii) meets the criteria of subsection
14 (k);

15 “(iv) is approved by the Secretary,
16 with notice of the approval being published
17 in the Federal Register; and

18 “(v) complies with such terms and
19 conditions as the Secretary establishes by
20 regulation.

21 “(D) UNITED STATES.—The term ‘United
22 States’, when used in a geographical sense,
23 means the 50 States, the District of Columbia,
24 and territories and possessions of the United
25 States.

1 “(2) PILOT PROGRAM FOR FINANCIAL ASSIST-
2 ANCE.—

3 “(A) IN GENERAL.—Not later than 180
4 days after the date of enactment of the Climate
5 Change Energy Policy Response Act, the Sec-
6 retary shall by regulation provide for a pilot
7 program for financial assistance for qualifying
8 international energy deployment projects.

9 “(B) LIMITATION.—The pilot program
10 shall provide financial assistance, subject to the
11 availability of appropriations, for not more than
12 6 qualifying international energy deployment
13 projects.

14 “(C) SELECTION CRITERIA.—After con-
15 sultation with the Secretary of State, the Sec-
16 retary of Commerce, and the United States
17 Trade Representative, the Secretary shall select
18 projects for participation in the program based
19 solely on the criteria under this title and with-
20 out regard to the country in which the project
21 is located.

22 “(D) FINANCIAL ASSISTANCE.—

23 “(i) IN GENERAL.—A United States
24 firm that undertakes a qualifying inter-
25 national energy deployment project selected

1 to participate in the pilot program shall be
2 eligible to receive a loan or a loan guaran-
3 tee from the Secretary.

4 “(ii) TIMING.—The Secretary may
5 enter into a commitment to make a loan or
6 loan guarantee before the United States
7 firm decides on a binding contract for the
8 construction of a qualifying international
9 energy deployment project.

10 “(iii) RATE OF INTEREST.—The rate
11 of interest of any loan made under clause
12 (i) shall be equal to the rate for Treasury
13 obligations then issued for periods of com-
14 parable maturities.

15 “(iv) AMOUNT.—The amount of a
16 loan or loan guarantee under clause (i)
17 shall not exceed 75 percent of the total
18 cost of the qualified international energy
19 deployment project.

20 “(E) COORDINATION WITH OTHER PRO-
21 GRAMS.—A qualifying international energy de-
22 ployment project funded under this section shall
23 not be eligible as a qualifying clean coal tech-
24 nology under section 415 of the Clean Air Act
25 (42 U.S.C. 7651n).

1 “(F) REPORT.—Not later than 4 years
2 after the date of enactment of the Climate
3 Change Energy Policy Response Act, the Sec-
4 retary shall submit to the President a report on
5 the results of the pilot projects.

6 “(G) RECOMMENDATION.—Not later than
7 60 days after receiving the report under sub-
8 paragraph (F), the President shall submit to
9 Congress a recommendation, based on the re-
10 sults of the pilot projects as reported by the
11 Secretary of Energy, concerning whether the fi-
12 nancial assistance program under this section
13 should be continued, expanded, reduced, or
14 eliminated.

15 “(H) AUTHORIZATION OF APPROPRIA-
16 TIONS.—There are authorized to be appro-
17 priated to carry out this subsection such sums
18 as are necessary for fiscal years 2001 through
19 2004.”.

20 **TITLE VII—OPTIMAL OPERATING**
21 **EFFICIENCY OF TRANSPOR-**
22 **TATION SYSTEMS**

23 **SEC. 701. TRAFFIC CONGESTION RELIEF RESEARCH.**

24 Section 502 of title 23, United States Code, is
25 amended by adding at the end the following:

1 “(h) TRAFFIC CONGESTION RELIEF RESEARCH.—

2 “(1) STUDIES.—

3 “(A) REGIONAL APPROACHES FOR REDUC-
4 ING TRAFFIC CONGESTION.—

5 “(i) IN GENERAL.—The Secretary
6 shall enter into an arrangement with the
7 National Academy of Sciences to conduct a
8 study, and prepare a report comparing, the
9 effectiveness of various regional approaches
10 for reducing traffic congestion.

11 “(ii) REQUIRED ASSESSMENTS.—At a
12 minimum, the study shall assess the im-
13 pact on traffic congestion of—

14 “(I) expansion of highway capac-
15 ity;

16 “(II) improvement of traffic op-
17 erations (including improved incident
18 management associated with traffic
19 accidents and vehicle breakdowns);
20 and

21 “(III) programs for demand
22 management.

23 “(B) HIGHWAY DESIGN CONCEPTS.—

24 “(i) IN GENERAL.—The Secretary
25 shall fund a study analyzing, and prepara-

tion of a report concerning, highway design concepts for projects to relieve congestion in urban areas without acquisition of additional rights-of-way.

“(ii) ENTITY TO CARRY OUT STUDY.—

The study may be carried out and the report prepared—

“(I) by the Department of Transportation;

“(II) by another entity, through an arrangement with the Secretary; or

“(III) by a combination of the entities described in subclauses (I) and (II).

“(2) FEDERAL SHARE.—The Federal share of the cost of the studies required under paragraph (1) shall be 100 percent.

“(3) FUNDING.—

“(A) IN GENERAL.—Notwithstanding any other provision of law, for each of fiscal years 2000 through 2002, \$1,000,000 of the sum deducted by the Secretary under section 104(a) shall be made available to carry out the studies required under paragraph (1).

1 “(B) ALLOCATION OF FUNDS.—Funds
2 made available under subparagraph (A) shall be
3 allocated among the 2 studies at the discretion
4 of the Secretary, except that each study shall be
5 allocated funds sufficient to allow for comple-
6 tion of the study.”.

7 **TITLE VIII—VOLUNTARY** 8 **INITIATIVES**

9 **SEC. 801. IMPROVED AND STREAMLINED REPORTING AND** 10 **CERTIFICATION OF VOLUNTARY MEASURES.**

11 (a) REVISED GUIDELINES UNDER ENERGY POLICY
12 ACT OF 1992.—Section 1605(b) of the Energy Policy Act
13 of 1992 (42 U.S.C. 13385(b)) is amended—

14 (1) by redesignating paragraphs (2) through
15 (4) as paragraphs (3) through (5), respectively; and
16 (2) by inserting after paragraph (1) the follow-
17 ing:

18 “(2) REVISED GUIDELINES.—

19 “(A) IN GENERAL.—Not later than 1 year
20 after the date of enactment of the Climate
21 Change Energy Policy Response Act, the Sec-
22 retary shall revise the guidelines, after notice
23 and opportunity for public comment, to reflect
24 the amendments to this title made by that Act.
25 Thereafter, the Secretary shall review and re-

1 vise the guidelines every 5 years, after notice
2 and opportunity for public comment.

3 “(B) CONTENTS.—The revised guidelines
4 shall—

5 “(i) provide for a random or other
6 verification process using the authorities
7 available to the Secretary under other pro-
8 visions of law;

9 “(ii) include a range of reference
10 cases for reporting project-based activities
11 in all appropriate sectors of the economy
12 (including forestry and electric power gen-
13 eration); and

14 “(iii) address the issues, such as com-
15 parability, that are associated with permit-
16 ting the option of reporting on an entity
17 basis or on an activity or project basis.

18 “(C) RETENTION OF VOLUNTARY REPORT-
19 ING.—Any review under this paragraph shall
20 give appropriate weight to—

21 “(i) the purpose of encouraging vol-
22 untary emission reductions by the private
23 sector; and

24 “(ii) the voluntary nature of reporting
25 under this section.

1 “(D) VALIDITY OF CERTIFICATION.—Ex-
2 cept to the extent that an emission reduction
3 certified in a report under this subsection, not
4 later than 1 year after the date of the report,
5 is adjusted under the verification process under
6 subparagraph (B) or review process under sub-
7 section (d)(2), the emission reduction shall be
8 valid for purposes of this and any other provi-
9 sion of law if the report meets the guidelines as
10 in effect on the date on which the report is
11 made.”.

12 (b) ASSURANCE OF ACCURATE REPORTING.—Section
13 1605(b) of the Energy Policy Act of 1992 (42 U.S.C.
14 13385(b)) (as amended by subsection (a)) is amended by
15 striking paragraph (3) and inserting the following:

16 “(3) REPORTING PROCEDURES.—

17 “(A) IN GENERAL.—In accordance with
18 paragraph (5), the Administrator shall—

19 “(i) develop forms for voluntary re-
20 porting under the guidelines established
21 under paragraph (1); and

22 “(ii) make the forms available to enti-
23 ties wishing to report such information.

24 “(B) CERTIFICATION OF REPORTS.—

1 “(i) IN GENERAL.—A person report-
2 ing under this subsection shall certify the
3 accuracy of the information reported.

4 “(ii) REPORTS BY A CORPORATION.—
5 In the case of information reported by a
6 corporation, the report—

7 “(I) shall be signed by an officer
8 of the corporation; and

9 “(II) shall be subject to section
10 1001 of title 18, United States
11 Code.”.

12 (c) AVOIDANCE OF DUPLICATE REPORTING.—Sec-
13 tion 1605(b) of the Energy Policy Act of 1992 (42 U.S.C.
14 13385(b)) (as amended by subsection (a)) is amended—

15 (1) by redesignating paragraphs (4) and (5) as
16 paragraphs (5) and (6), respectively; and

17 (2) by inserting after paragraph (2) the follow-
18 ing:

19 “(4) AVOIDANCE OF DUPLICATE REPORTING.—

20 “(A) IN GENERAL.—The guidelines under
21 this subsection shall ensure against multiple
22 certification of the same emission reductions.

23 “(B) FIRST TO SEEK CERTIFICATION.—In
24 a case in which—

1 “(i) more than 1 person is directly in-
2 volved in the creation or implementation of
3 an emission reduction measure;

4 “(ii) there is no—

5 “(I) written contractual arrange-
6 ment between the persons that speci-
7 fies which person is entitled to report
8 the emission reduction; or

9 “(II) reference case or other pro-
10 vision of the guidelines that addresses
11 the question which person is entitled
12 to report the emission reduction in the
13 circumstance of the case; and

14 “(iii) the Administrator determines
15 that 2 or more of the persons have equally
16 valid claims to the same emission reduc-
17 tion;

18 the first of the persons to certify the emission
19 reduction in a report under this subsection shall
20 be the only person entitled to report the emis-
21 sion reduction.”.

22 (d) SIMPLIFICATION OF REPORTING.—Section
23 1605(b) of the Energy Policy Act of 1992 (42 U.S.C.
24 13385(b)) (as amended by subsection (c)) is amended by
25 inserting after paragraph (4) the following:

1 “(5) SIMPLIFICATION OF REPORTING.—Not
2 later than 60 days after the date of enactment of
3 the Climate Change Energy Policy Response Act,
4 the Administrator shall by regulation, in consulta-
5 tion with the Secretary of Agriculture and the Ad-
6 ministrator of the Small Business Administration, as
7 appropriate, review and revise the reporting forms
8 and procedures to facilitate greater participation by
9 small businesses, farms, and other organizations
10 that did not extensively participate in voluntary
11 emission reductions and reporting under this sub-
12 section during the first 6 years after the date of en-
13 actment of this Act.”.

14 (e) BEST PRACTICES FOR ESTIMATING EMISSION
15 REDUCTIONS.—Section 1605 of the Energy Policy Act of
16 1992 (42 U.S.C. 13385) is amended by adding at the end
17 the following:

18 “(d) BEST PRACTICES FOR ESTIMATING EMISSION
19 REDUCTIONS.—

20 “(1) ESTABLISHMENT BY THE SECRETARY.—
21 Not later than 180 days after the date of enactment
22 of this subsection, after notice and opportunity for
23 public comment, the Secretary, with the assistance
24 of the Administrator, shall establish the most rea-

1 sonably effective practices for estimating emission
2 reductions under subsection (b).

3 “(2) REVIEW OF PRIOR CERTIFICATIONS.—
4 Emission reductions certified before the date of en-
5 actment of this subsection shall be subject to review
6 by the Secretary and adjustment, in appropriate
7 cases, to account for any change in a practice under
8 this subsection.

9 “(3) CONFORMITY OF PRIOR REPORTED EMIS-
10 SION REDUCTIONS WITH BEST PRACTICES.—In any
11 review under this subsection, the Secretary shall ob-
12 tain the assistance of the Administrator in assessing
13 whether and to what extent any prior reported emis-
14 sion reduction is in conformity with best practices
15 established under paragraph (1).”.

16 **SEC. 802. PUBLIC AWARENESS CAMPAIGN REGARDING BEN-**
17 **EFITS OF CERTIFICATION OF VOLUNTARY**
18 **EMISSION REDUCTIONS.**

19 Section 1605 of the Energy Policy Act of 1992 (42
20 U.S.C. 13385) (as amended by section 801(f)) is amended
21 by adding at the end the following:

22 “(e) PUBLIC AWARENESS PROGRAM.—

23 “(1) IN GENERAL.—The Secretary shall create
24 and implement a public awareness program to edu-
25 cate all appropriate persons (especially farmers and

1 small businesses) in all regions of the United States
2 of—

3 “(A) the direct benefits of engaging in vol-
4 untary emission reduction measures and having
5 the emission reductions certified under this sec-
6 tion and available for use under other incentive
7 programs; and

8 “(B) the forms and procedures for having
9 emission reductions certified under this section.

10 “(2) SPECIAL AGRICULTURAL AND SMALL BUSI-
11 NESS OUTREACH.—The Secretary of Agriculture,
12 with respect to farmers, and the Administrator of
13 the Small Business Administration, with respect to
14 small businesses, shall assist the Secretary in creat-
15 ing and implementing the public awareness program
16 under paragraph (1).”.

17 **SEC. 803. STATE AUTHORITY TO ENCOURAGE VOLUNTARY**
18 **ENERGY INITIATIVES.**

19 (a) IN GENERAL.—Title XVI of the Energy Policy
20 Act of 1992 is amended by striking section 1606 (106
21 Stat. 3003) and inserting the following:

22 **“SEC. 1606. STATE AUTHORITY TO ENCOURAGE VOL-**
23 **UNTARY ENERGY INITIATIVES.**

24 “(a) IN GENERAL.—Notwithstanding any other pro-
25 vision of Federal law regarding the production, trans-

1 mission, distribution, sale, or use of energy or of energy
2 services, a State is not prohibited or restricted from con-
3 tinuing to engage in any action, or from implementing any
4 State law (including a regulation) in effect on the date
5 of enactment of the Climate Change Energy Policy Re-
6 sponse Act, if the appropriate State authority finds that
7 the action or law is appropriate for mitigating the finan-
8 cial risks to producers, transmitters, distributors, sellers,
9 buyers, or users of energy or energy services that engage
10 in voluntary steps to reduce greenhouse gas emissions.

11 “(b) COORDINATION WITH LATER ENACTED LAW.—
12 This section shall remain in effect notwithstanding any
13 Federal law, including any Federal law enacted after the
14 date of enactment of this section, unless the later law spe-
15 cifically refers to this section and expressly states that this
16 section is superseded.”.

17 (b) TECHNICAL AMENDMENT.—The table of contents
18 of the Energy Policy Act of 1992 (106 Stat. 2776) is
19 amended by striking the item relating to section 1606 and
20 inserting the following:

“Sec. 1606. State authority to encourage voluntary energy initiatives.”.

SRES 98 IS

105th CONGRESS

1st Session

S. RES. 98

Expressing the sense of the Senate regarding the conditions for the United States becoming a signatory to any international agreement on greenhouse gas emissions under the United Nations Framework Convention on Climate Change.

IN THE SENATE OF THE UNITED STATES

June 12, 1997

Mr. BYRD (for himself, Mr. HAGEL, Mr. HOLLINGS, Mr. CRAIG, Mr. INOUE, Mr. WARNER, Mr. FORD, Mr. THOMAS, Mr. DORGAN, Mr. HELMS, Mr. LEVIN, Mr. ROBERTS, Mr. ABRAHAM, Mr. MCCONNELL, Mr. ASHCROFT, Mr. BROWNBACK, Mr. KEMPTHORNE, Mr. THURMOND, Mr. BURNS, Mr. CONRAD, Mr. GLENN, Mr. ENZI, Mr. INHOFE, Mr. BOND, Mr. COVERDELL, Mr. DEWINE, Mrs. HUTCHISON, Mr. GORTON, Mr. HATCH, Mr. BREAU, Mr. CLELAND, Mr. DURBIN, Mr. HUTCHINSON, Mr. JOHNSON, Ms. LANDRIEU, Ms. MIKULSKI, Mr. NICKLES, Mr. SANTORUM, Mr. SHELBY, Mr. SMITH of Oregon, Mr. BENNETT, Mr. FAIRCLOTH, Mr. FRIST, Mr. GRASSLEY, Mr. ALLARD, and Mr. MURKOWSKI) submitted the following resolution; which was referred to the Committee on Foreign Relations

RESOLUTION

Expressing the sense of the Senate regarding the conditions for the United States becoming a signatory to any international agreement on greenhouse gas emissions under the United Nations Framework Convention on Climate Change.

Whereas the United Nations Framework Convention on Climate Change (in this resolution referred to as the 'Convention'), adopted in May 1992, entered into force in 1994 and is not yet fully implemented;

Whereas the Convention, intended to address climate change on a global basis, identifies the former Soviet Union and the countries of Eastern Europe and the Organization For Economic Co-operation and Development (OECD), including the United States, as 'Annex I Parties', and the remaining 129 countries, including China, Mexico, India, Brazil, and South Korea, as 'Developing Country Parties';

Whereas in April 1995, the Convention's 'Conference of the Parties' adopted the so-called 'Berlin Mandate';

Whereas the 'Berlin Mandate' calls for the adoption, as soon as December 1997, in Kyoto, Japan, of a protocol or another legal instrument that strengthens commitments to limit greenhouse gas emissions by Annex I Parties for the post-2000 period and establishes a negotiation process called the 'Ad Hoc Group on the Berlin Mandate';

Whereas the 'Berlin Mandate' specifically exempts all Developing Country Parties from any new commitments in such negotiation process for the post-2000 period;

Whereas although the Convention, approved by the United States Senate, called on all signatory parties to adopt policies and programs aimed at limiting their greenhouse gas (GHG) emissions, in July 1996 the Undersecretary of State for Global Affairs called for the first time for 'legally binding' emission

limitation targets and timetables for Annex I Parties, a position reiterated by the Secretary of State in testimony before the Committee on Foreign Relations of the Senate on January 8, 1997;

Whereas greenhouse gas emissions of Developing Country Parties are rapidly increasing and are expected to surpass emissions of the United States and other OECD countries as early as 2015;

Whereas the Department of State has declared that it is critical for the Parties to the Convention to include Developing Country Parties in the next steps for global action and, therefore, has proposed that consideration of additional steps to include limitations on Developing Country Parties' greenhouse gas emissions would not begin until after a protocol or other legal instrument is adopted in Kyoto, Japan in December 1997;

Whereas the exemption for Developing Country Parties is inconsistent with the need for global action on climate change and is environmentally flawed; and

Whereas the Senate strongly believes that the proposals under negotiation, because of the disparity of treatment between Annex I Parties and Developing Countries and the level of required emission reductions, could result in serious harm to the United States economy, including significant job loss, trade disadvantages, increased energy and consumer costs, or any combination thereof: Now, therefore, be it

Resolved, That it is the sense of the Senate that--

(1) the United States should not be a signatory to any protocol to, or other agreement regarding, the United Nations Framework Convention on Climate Change of 1992, at negotiations in Kyoto in December 1997, or thereafter, which would--

(A) mandate new commitments to limit or reduce greenhouse gas emissions for the Annex I Parties, unless the protocol or other agreement also mandates new specific scheduled commitments to limit or reduce greenhouse gas emissions for Developing Country Parties within the same compliance period, or

(B) would result in serious harm to the economy of the United States; and

(2) any such protocol or other agreement which would require the advice and consent of the Senate to ratification should be accompanied by a detailed explanation of any legislation or regulatory actions that may be required to implement the protocol or other agreement and should also be accompanied by an analysis of the detailed financial costs and other impacts on the economy of the United States which would be incurred by the implementation of the protocol or other agreement.

SEC. 2. The Secretary of the Senate shall transmit a copy of this resolution to the President.

END

David Garman
Senator Murkowski
February 23, 1999

Draft Guiding Principles for Climate Legislation

- While there are significant uncertainties surrounding the science of climate change, human activities do contribute to increasing concentrations of carbon dioxide in the atmosphere, which in turn may contribute to global climate change. Therefore, it is prudent that we develop no-regrets ways to manage carbon.
- The characteristics of carbon dioxide and the physical nature of the atmosphere are such that the successful stabilization of carbon dioxide concentrations must be a long-term effort undertaken on a global basis.
- Narrowly applied, short-term targets such as those contained in the Kyoto Protocol are ineffective and largely symbolic.
 - Emissions reductions achieved through a Kyoto-like approach will not make a perceptible difference in climate or carbon stabilization time frames.
 - Moreover, short-term approaches will engender economic distortion and inefficiency by driving premature turnover of capital stock. Increased energy costs, GDP decline, and job loss will likely result.
- Therefore, the emphasis should be on the long term technologies and practices that can be developed, refined, and deployed in an orderly manner not only in the U.S., but around the world.
- To manage carbon over the long term, we should:
 - develop and encourage new and existing technologies to avoid emissions of carbon dioxide (i.e., promote alternative energy; maintain/expand existing lower carbon emissions sources such as nuclear, hydroelectric, and clean coal technology);
 - develop and encourage new technologies and practices to remove and sequester carbon dioxide from the atmosphere (i.e., no till/low till agriculture, alternative forest management practices);
 - develop and encourage new technologies to remove and sequester carbon dioxide from emissions streams (i.e., research, development and demonstration of carbon "scrubber" technology);
 - Promote the export of these technologies abroad.
 - Address the tax/regulatory barriers that prevent or inhibit voluntary reductions in greenhouse gas emissions.
 - Strengthen and refine the Voluntary Reporting Program established by section 1605(b) of the Energy Policy Act of 1992.

Jeremy - 228-2717

Chris
still changing

March 6, 1999 DRAFT

OUTLINE OF "CLIMATE CHANGE RESPONSE ACT OF 1999"

Findings:

Questions of science, technology, & economics require integrated resolution.

Research is not coordinated or focused on the right questions.

Technology (current and emerging) can speed transition to a cleaner environment.

Public access to information and involvement in policy development is inadequate.

Acknowledgment & encouragement of "voluntary action" is warranted.

I. CERTIFICATION OF VOLUNTARY ACTIONS

Amendments to Energy Policy Act Sec. 1605 (b):

Accuracy of reported information must be certified.

When multiple parties claim the same reduction the first person directly involved in the greenhouse gas (GHG) emission reduction who files gets the certification.

Emission reductions certified under 1605(b) are transferable.

EIA shall promulgate "most reasonable practices" for estimating GHG emission reductions; old filings shall be updated to conform to new best estimating practices.

EIA shall conduct a public awareness program on the benefits of voluntary reductions and the benefits of certification.

Within 60 days, EIA, working in consultation with USDA and SBA, shall conduct a Small Business and Enforcement Act review of the Section 1605 (b) reporting opportunities for farmers and small businesses, and propose new reporting forms, processes, and programs to make reporting by small businesses and farmers streamlined, inexpensive, and easy to file.

USDA and SBA shall provide information about Section 1605(b) to the agricultural and small business communities, respectively, and such information shall include information about the review and all proposed changes to farmers and small businesses. USDA and SBA shall also provide instructions on how to comment on the proposed changes in the reporting program.

Over five years EIA shall revise 1605(b) guidelines with public input.

State authority to foster voluntary actions by utilities - Federal Power Act amendments

Notwithstanding any other law, states may take the following actions to encourage voluntary utility actions to reduce emissions:

1. maintain rate-of-return regulation for utility's to recover cost of measures that reduce GHG emissions;
2. authorize and fund energy conservation programs; and
3. provide state tax relief.

These provisions shall remain in force unless subsequently enacted law specifically cites these sections as having been repealed.

II. POLICY OPTIONS REVIEW AND COORDINATION

Amend Energy Policy Act of 1992, Sec. 1604, to strengthen policy option review:

Establish the Interagency Taskforce on Climate Issues (ITCI) to be comprised of the Secretaries of State, Agriculture, Commerce, Transportation, Housing and Urban Development, and Energy, and the Director of the National Research Council (NRC). ITCI shall:

1. coordinate all federal activities involving climate issues including scientific research, technology development, and evaluation of effects and implications of various climate control policy options as provided for in this section;

2. advise the President on the selection (not less than three) of policy options to be assessed pursuant to this section;
3. oversee the collection and dissemination of all government information relating to climate issues as provided in this Act.

Require President, acting through ITCI, to submit biannual reports to Congress analyzing and integrating the reports provided for below; such reports to include recommendations of changes in law, international agreements, or public policy, in the best interest of the U.S.

Require each of the following Departments to submit biannual reports to Congress containing short and long term comparative assessment of different policy mechanisms for mitigating GHG emissions; each Department to assess effects on factors within their respective purviews, as follows:

1. Dept. of Energy to assess energy supply and demand implications of different GHG emission mitigation options, including retail competition in the electric industry;
2. Dept. of Agriculture to assess agricultural production cost and market implications of different GHG emission mitigation options, accounting for implications under different scenarios including changes in livestock and commodity prices;
3. Dept. of Labor to assess impacts on workers (wages, jobs, competitiveness) and on consumers (impact on CPI);
4. Dept. of Transportation on transportation costs (reporting scenarios include changes in vehicle technology and traffic constraint mitigation);
5. Dept. of HUD on housing costs and urban planning; and
6. Dept. of Commerce on exports and imports; provided that each such report shall take into account potential variations in leading economic indicators and fluctuations in imported energy prices and availability.

Require State Dept. to report biannually on actions taken, or likely to be taken, and the net effect of such actions, by each UN member country, assessing each country's compliance with international agreements and the projected likelihood of future commitments and compliance.

Require NAS and NAE (acting through NRC) to comparatively assess scientific and technological implications of each policy option assessed by the other agencies pursuant to this section, including the known scientific effect of each option on global climate and the effect of each option on technology development and selection.

III. ACCELERATED TECHNOLOGY DEVELOPMENT AND DEPLOYMENT

Energy Technology R&D incentives

Establish annual ITCI review of federally funded technology; assess marketability and barriers to deployment.

Consistent with national security and property rights protection, establish information transfer process on all energy technology developments; provide for identification of deployment barriers.

Make permanent the R&D tax credit for technologies that mitigate GHG; require reporting of qualifying projects to NRC.

Incentives for carbon sink technology R&D

Establish annual review of federal programs that support carbon sequestration, including crops, soil, forests, oceans, and wetlands.

Assess barriers to progress, including on federally managed lands.

Establish information transfer process on all sink developments.

Establish joint private/federal sink technology demonstrations.

Incentives for domestic utilization of improved technology

Expand investment tax credit to include GHG mitigation technology.

Make the investment tax credit technology neutral.

Have GAO evaluate regulatory barriers to rapid deployment and recommend any relevant changes in law.

Provide that EPA may grant exemptions from conflicting air quality requirements to foster rapid deployment of improved technology.

IV. INTERNATIONAL DEPLOYMENT OF ENERGY-EFFICIENT TECHNOLOGY

V. OPTIMAL TRANSPORTATION EFFICIENCY - CONGESTION MITIGATION

VI. ADVANCEMENT OF CLIMATE SCIENCE

Roles of National Research Foundation and National Academies of Science & Engineering

ITCI, with the advice and assistance of the NAS and NAE shall coordinate, prioritize, and evaluate federally funded research on climate change.

NRC, acting through NAS, shall recommend measures to effectively carry out all scientific research in this bill including strengthening of peer review processes and grant-making procedures.

Topics eligible for appropriated research funding under this Act shall include, but not be limited to, one or more of the following:

1. understanding Earth's capacity to assimilate natural and man-made GHGs;
2. evaluating natural climate variability;
3. developing and assessing capabilities of climate models;
4. ensuring integrity of data used to validate models;
5. assessing U.S. carbon sinks, and
6. developing and deploying monitoring technology.

ITCI shall provide annual reports on all activities carried out under this section, including any scientific conclusions, interim status, and recommendations for follow-on research; and to complete independent science assessment for distribution to all IPCC participants by July 1, 2000.

Discrete programs are authorized to:

1. assess ability of natural sinks to adjust to variations in climate and GHG emissions;
2. invest in global monitoring technology;
3. develop climate modeling technology;
4. develop man-made carbon sinks (crop and forestry R&D);

VII. PUBLIC RIGHT TO KNOW

Amend Energy Policy Act of 1992 (Title XVI) as follows:

Require President to publish an annual report that includes:

1. Current and prior year spending on climate change, broken down by research, regulation, education, and other activities;
2. amounts of prior and current year tax credits claimed under this Act;
3. all proposed spending on climate change broken down by research, regulation, education, and other activities;
4. tables detailing spending recommendations submitted by agencies to OMB compared with the President's final recommendations;
5. estimated future budgetary impacts of all tax provisions related to climate change (broken down by currently enacted and proposed);
6. lists of all climate change grantees, rejected grant proposals, and persons participating in peer review of grant applications relating to climate change; (provide that such reports by the President be made

widely available to the public).

For each report prepared pursuant to this Act the publisher shall 1) conduct an open forum for members of the public to comment and 2) publish all written comments and the transcript of the live forum.

ITCI (acting through the NAS) shall maintain a national resource center on climate change to make available to the public all reports, studies, or other information provided for in this Act (subject to national security and property and privacy rights considerations).

Any scientific data, reports, or conclusions provided by any agent of the U.S. to international bodies for evaluation initiatives, including the UN IPCC process, shall be provided to the National Research Council, to the National Climate Change Resource Center for publication, and to the Congress.

VIII. FEDERAL TAX INCENTIVES

R & D tax credit permanently enacted for R & D investment that reduces or mitigates GHG emissions; provided that such qualifying R & D projects are reported to NSF.

Conversion of a facility that emits greenhouse gases with a facility that emits a reduced amount of greenhouse gases shall qualify the owner to a [25 or 50%] tax credit [equal to the replacement cost of the facility multiplied by the percentage reduction of GHG emissions] attributable to the new facility. [Define "facility" as any plant, capital, or equipment or machine that emits greenhouse gases.]

Early actions taken before the enactment of this section which were reported under Section 1605(b) of the Energy Policy Act (as amended by this Act) shall be entitled to a tax credit to the extent that the early action was not recoupable under generally accepted accounting standards or rate-of-return regulation.

April 6, 1999

DRAFT: NOT FOR CIRCULATION

A BILL

To establish an integrated research, development, and demonstration program,
improve technologies,

advance policies, and stimulate markets in order to promote the greater use
of bioenergy, and for other purposes.

Be it enacted by the Senate and House of Representatives of the
United States of America in Congress assembled,

SECTION 1. SHORT TITLE.

This Act may be cited as the "Bioenergy Integration and Organization
Act".

SEC. 2. DEFINITION.

For purposes of this Act—

(1) "bioenergy" means any power, fuel, and chemical products
derived from biomass;

(2) "biomass" means any organic matter which is available on a
renewable basis, including agricultural crops and agricultural wastes
and residues, wood and wood wastes and residues, animal wastes and
residues, municipal wastes, and aquatic plants; and

(3) "Secretaries" means the Secretary of Energy and the
Secretary of Agriculture.

SEC. 3. FINDINGS.

The Congress finds that—

(1) bioenergy from the Nation's farms, forests, pulp and paper
mills, and landfills already have demonstrated success in the

marketplace,

(2) more successful integration and penetration of bioenergy into the marketplace will yield a number of significant benefits, including reducing U.S. dependence on foreign oil imports and enhancing energy security; revitalizing rural areas with new markets and revenue streams; reducing emissions of pollutants, such as NOX and SOX, into the environment; providing greater choices of fuel sources for electric power, transportation fuels, and industrial and commercial products; and decreasing greenhouse gas emissions; and

(3) to help achieve these benefits an integrated research, development, and demonstration program is necessary to stimulate new and innovative technologies and products, reduce the time required for improved concepts to enter the marketplace, and promote greater use of bioenergy. **[ALTERNATIVES: 1. Subparagraphs (2) and (3) only or 2. No Findings at all.]**

TITLE I-- BIOENERGY RESEARCH, DEVELOPMENT, AND DEMONSTRATION.
SEC. 101. INTEGRATED BIOENERGY RESEARCH, DEVELOPMENT, AND
DEMONSTRATION..

(a)(1) The Secretaries, in collaboration with the private sector, national laboratories, universities, and others, shall develop a strategic vision and appropriate detailed technology implementation plans to help guide a national-level, integrated Bioenergy Initiative.

(2) The Secretaries, in consultation with other Federal agencies, shall coordinate a research, development, and demonstration program to--

(A) increase the production, variety, and quality of biomass

feedstock;

(B) improve the technologies for using biomass to produce energy, animal feeds, fertilizer, and other useful products; and

(C) increase the diversity and use of products produced using biomass.

(3) In support of the program established under paragraph (2), the Secretaries shall create a permanent interagency council to coordinate activities between the Department of Energy and the Department of Agriculture.

(4) The Secretaries shall employ those programs in existence on the date of enactment of this Act at the Department of Energy and the Department of Agriculture that the Secretaries determine would help achieve the purposes of the program set forth in paragraph (2).

(b) The program under subsection (a)(2) shall—

(1) assess biomass-related policies and programs at the Federal, regional, State, and international levels;

(2) analyze the market potential for biomass feedstocks and biomass products and the expected performance of biomass-related technologies;

(3) develop plans, in consultation with the advisory committee established under section 104, for research, technology development, interim goals, policy actions, market enhancing mechanisms, and other activities to carry out this program;

(4) provide assistance to industry, government agencies, non-governmental organizations, academia, and national laboratories to carry out the program;

(5) coordinate biomass and bioenergy research and development, including fundamental bioscience, with relevant research on other renewable energy and fossil fuel technologies;

(6) support development of economically viable biomass feedstocks, such as crops, trees, waste, and residues;

(7) encourage the collection of agricultural and forestry wastes and residues for use as biomass feedstocks;

(8) develop innovative and economically viable technologies and systems for using biomass feedstocks and bioenergy;

(9) encourage expansion of markets for biomass feedstocks and biomass products, including international markets, by removing or reducing market barriers; encouraging Federal procurement of biomass feedstocks and products; establishing quality, performance, and safety standards; promoting consumer labeling and education; and other methods;

(10) undertake other activities to achieve the purposes of the program set out in subsection (a)(2).

(c) In order to carry out the program established by this Act, the Secretaries may--

(1) evaluate a new or improved technology, including basic research on energy technologies, that could advance or contribute to furthering the purposes of the program; and

(2) use grant agreements, procurement contracts, or cooperative agreements (as those terms are used in chapter 63 of title 31, United States Code).

(d) The Secretaries shall not carry out any activities under this section

that unnecessarily duplicate activities carried out elsewhere by the Federal Government or industry.

SEC. 102. DEMONSTRATIONS.

(a) The Secretaries may conduct a demonstration of a technology if the Secretaries determine that the technology is likely to assist in achieving the purposes of this Act and that such a demonstration would help determine and promote the commercial feasibility of the technology.

(b) The Secretaries shall require a commitment from non-Federal sources for any demonstration conducted under this section.

SEC. 103. INFORMATION TRANSFER.

(a) The Secretaries shall adopt procedures to transfer to the public, non-profit, and private sectors, including States, communities, farms, industry, and consumers, in accordance with applicable laws, the information obtained and technologies developed as a result of research and demonstrations conducted under this Act and to provide these sectors information on the benefits of using biomass feedstocks and biomass products.

(b) In carrying out this subsection, the Secretaries may employ workshops, publications, conferences, databases, electronic communications, and other methods of transferring information.

SEC. 104. ADVISORY COMMITTEE.

(a) The Secretaries shall establish a committee to—

(1) advise the Secretaries on methods to facilitate consultation and partnerships among the Secretaries and farmers, industry, consumers, and other interested groups and individuals;

(2) advise the Secretaries concerning activities that would help

achieve the goals of the program;

(3) review and evaluate program activities; and

(4) advise the Secretaries concerning program goals and methods to achieve them.

(b) The committee shall be composed of members appointed by the Secretaries from the public, non-profit, and private sectors, including States, communities, farms, industry, academia, and consumers, with an interest in the program.

SEC. 105. REPORT.

One year after the enactment of this Act and each year afterwards, the Secretaries shall submit to Congress a report on the status and progress of the program authorized under this title.

SEC. 106. AUTHORIZATION OF APPROPRIATIONS.

There is authorized to be appropriated for activities under this Act a total of \$ ____ for fiscal years ___, to remain available until expended.

TITLE II—EXPANSION OF EXISTING AUTHORITIES.

SEC. 201. AGRICULTURAL EXTENSION SERVICE MISSION AND BIOENERGY.

Section 207 of the Agricultural Marketing Act of 1946 (7 U.S.C. 1626) is amended by inserting "including any fuel or energy" after "thereof,".

[Adds this phrase to the definition of "agricultural product," which the Department of Agriculture is required to market.]

SEC. 202. EXPEDITED PROCEDURES FOR BIOMASS AND BIOENERGY LOANS.

[Establish expedited procedures for processing Farmers Home Administration

and Small Business Administration loans for biomass-and-bioenergy-related purposes. Also include longer amortization times.]

SEC. 203. RURAL UTILITIES SERVICE BIOMASS LOANS.

[Require the Department of Agriculture's Rural Utilities Service to dedicate a portion of its loans for bioenergy projects built by electric cooperatives.]

SEC. 204. FEDERAL AGENCIES BIOENERGY GOAL.

Part 3 of title V of the National Energy Conservation Policy Act (42 U.S.C. 8251-8259) is amended by inserting after section 550 the following:

"SEC. 550A. BIOENERGY GOAL.

"(a) Definition.—For purposes of this section, 'bioenergy' means any power, fuel, and chemical products derived from organic matter that is available on a renewable basis, including agricultural crops, wastes, and residues; wood and wood wastes and residues; animal wastes and residues; municipal wastes; and aquatic plants.

"(b) Bioenergy Goal.—Each agency head shall ensure that beginning October 1, 2005, a minimum of ___ percent of the products the agency purchases each fiscal year, and rising incrementally by an additional ___ percent per fiscal year thereafter to a minimum of __ percent by October 1, 2015, are bioenergy-related products.

"(c) One year after the enactment of this Act and each year afterwards, the Secretary shall submit to Congress a report on the status and progress of the program authorized under this section."

TITLE III-- INCENTIVES TO ACCELERATE MARKET INTRODUCTION OF BIOENERGY.

SEC. 301. INVESTMENT TAX CREDIT FOR BIOENERGY FACILITIES.

[Tax credits for bioenergy facilities for harvest, conversion, and fuel

distribution.]

SEC. 302. EXTENSION AND AMENDMENT OF PRODUCTION TAX CREDIT
FOR BIOMASS-TO-ELECTRIC AND BIOMASS-TO-SYNGAS.

(a) QUALIFIED FACILITIES INCLUDE ALL BIOMASS FACILITIES.--

(1) IN GENERAL.--Subparagraph (B) of section 45(c)(1) of the Internal Revenue Code of 1986 (relating to credit for electricity produced from certain renewable resources) is amended to read as follows--

(2) BIOMASS DEFINED.--Paragraph (2) of section 45(c) is amended to read as follows:

“(2) BIOMASS.--The term ‘biomass’ means--

“(A) any organic material from a plant which is planted exclusively for purposes of being used at a qualified facility to produce electricity, and

“(B) any solid, nonhazardous, cellulosic waste material--

“(i) which is segregated from other waste materials and which is derived from--

“(I) any of the following forest-related resources: mill residues, precommercial thinnings, slash, and brush, but not including old-growth timber,

“(II) urban sources, including waste pallets, crates, and dunnage, manufacturing and construction wood wastes, and landscape or right-of-way tree trimmings, but not including

unsegregated municipal solid waste (garbage), or

(3) in paragraph (3), striking "1999" and inserting "2004".

(b) The amendment made by this section shall apply to production after the date of the enactment of this Act.

SEC. 303. INVESTMENT TAX CREDIT TO BIOMASS FARMERS.

[Provide an investment tax credit to farmers for dedicated biomass-to-energy crops.]

SEC. 304. EXPANDED TAX EXEMPT FINANCING.

[(1) Expand tax exempt financing to allow access by cooperatives (electric cooperatives and farmer cooperatives) to tax exempt bonds for biomass and bioenergy related projects, and

(2) modify tax exempt financing to offer bonds for biomass energy development in a restructured electric market by public power.]

THE WHITE HOUSE

Climate Briefing

1) Admin Priority

2) Politics - attacked

- Our response - insurance
- costs of inaction
- Not just Kyoto

3) Our Plan

- Diplo

- Domestic

- energy effc - "that's climate"

- renewables - (" ")

- technology - jobs (" ")

- Bio fuels (" ")

4) Groups

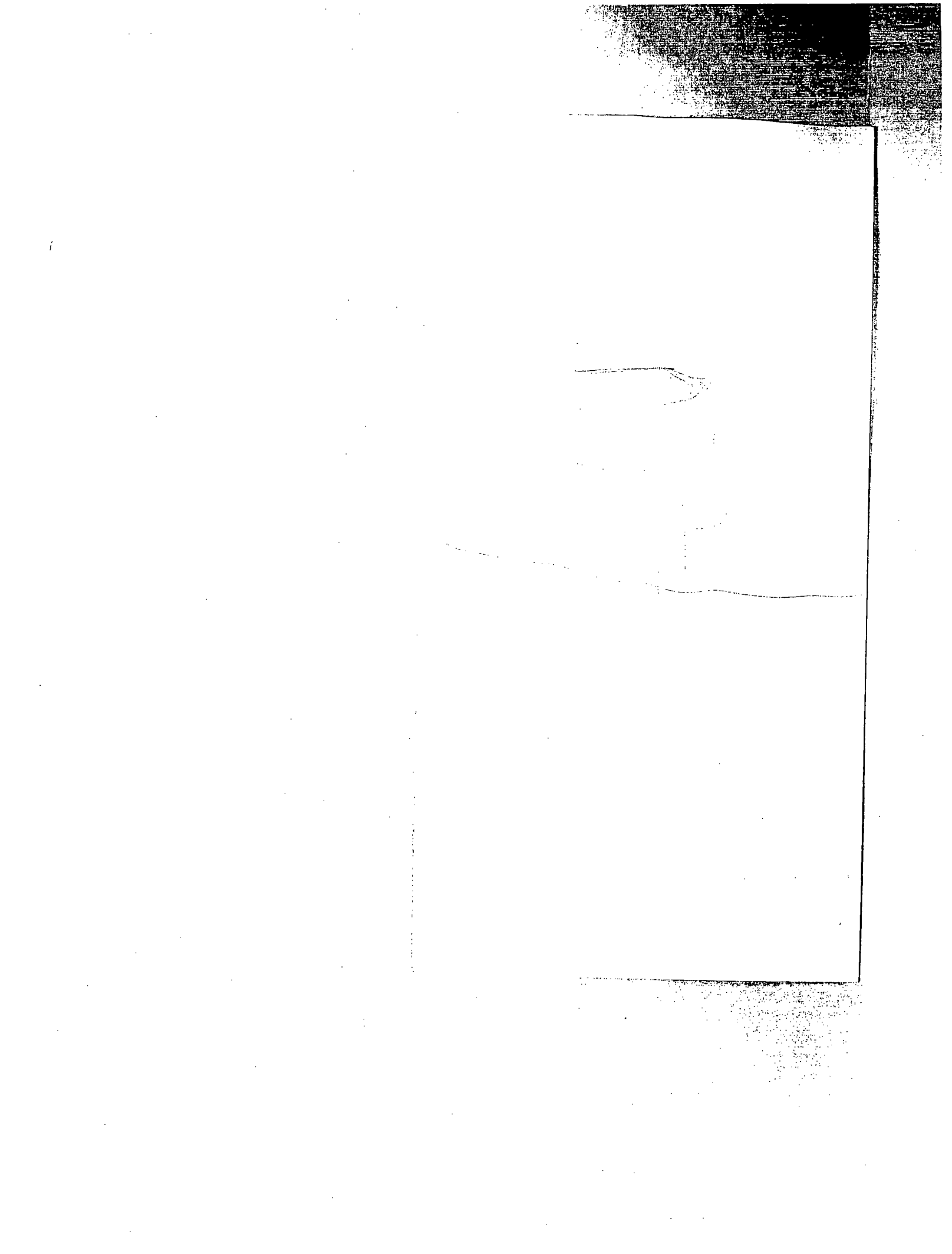
- Industry - coal

- Ag/forestry

- Enviro

5) Murkowski

6) Early Credit



UNDERSTANDING THE MURKOWSKI "ENERGY AND CLIMATE POLICY ACT"

Senator Frank Murkowski (R-AK) is circulating a draft bill on climate change. While the bill has several positive features, including a recognition that climate change is a real problem that must be addressed, overall this proposed legislation does little to advance this important issue.

- ***The bill does not address climate change today but rather leaves the problem to our children.*** The bill is premised on the notion that we can put off efforts to reduce greenhouse gas emissions for many years. The bill focuses U.S. climate change policies on long-term technology R&D. However, narrowly focused long-term technology R&D is not sufficient to meet the challenges of climate change and would simply leave this serious problem for our children to address.
- ***The bill does not represent a comprehensive strategy to address climate change.*** Both long-term technology R&D and technology deployment are essential to a balanced, cost-effective climate change strategy. For example, technology deployment is particularly important in the building and industrial sectors where two-thirds of the greenhouse gas pollution in 2010 will be caused by equipment that is purchased between now and then. Existing deployment programs, such as Energy Star and Greenlights, are achieving emission reductions today. This bill does nothing to strengthen and expand these efforts.
- ***The bill does not give businesses real credit for sound environmental management.*** The bill fails to give businesses credit for actions that reduce emissions today and fails to protect them against penalty under future greenhouse gas reduction programs. Instead, the bill offers only unspecified public "recognition" for such efforts. Businesses should be able to take action today to lower costs, improve profits and reduce emissions without fear of being disadvantaged at a later time.
- ***The bill does nothing new to address global warming.*** The bill purports to address the issue of climate change by creating a new office at DOE and authorizing funds for long-term technology R&D. However, the Energy Policy Act of 1992 already created a Director of Climate Protection at the Department. Furthermore, the government already enters into agreements with industry to conduct creative and useful long-term technology R&D -- for example through DOE's Industries of the Future program -- without the cumbersome process prescribed in the draft bill.

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MEETING THE CHALLENGE OF GLOBAL CLIMATE CHANGE

MARCH 1999

Global climate change is one of our greatest environmental challenges. The great weight of scientific authority suggests that this problem is real and that the threats it poses -- such as increasingly frequent and severe storms and droughts, potential increases in respiratory and infectious diseases, and rising sea levels -- are too serious to ignore. In essence, we need to take out an insurance policy with reasonably priced premiums.

That is why Clinton Administration is working hard at home and abroad to meet the challenge of climate change. Domestically, we are working to implement the President's balanced, reasonable plan of win-win initiatives to reduce greenhouse gas emissions. Internationally, we are continuing efforts to fill in key details of the Kyoto Protocol and to encourage the meaningful participation of developing countries in efforts to address global warming.

THE SCIENCE OF CLIMATE CHANGE

Greenhouse gases in nature trap heat from the sun to keep the Earth's temperature an estimated 60 degrees Fahrenheit warmer than it would be absent such gases, thus sustaining our existence on the planet.

As a result of the burning of fossil fuels and deforestation, the concentration of carbon dioxide, or CO₂ (the principal greenhouse gas), has increased 30% since preindustrial times. If we continue on a business-as-usual trajectory, this concentration is expected to reach almost twice current levels by 2100 -- a level not seen in 50 million years. Climate models project that this will lead to an increase global temperature of about 2 to 6 degrees Fahrenheit. By way of comparison, the last ice age was only about 9 degrees Fahrenheit colder than today.

Over the past year, new data from tree rings, ice melts, boreholes, and satellites have reinforced the broad scientific consensus that global warming is well underway. Studies have shown that the 20th century has been the warmest century in the past 1200 years; the 1990s have been the warmest decade in that period; and 1997 and 1998 have been the warmest years.

POTENTIAL IMPACTS OF CLIMATE CHANGE

Scientists predict a range of likely effects from global warming:

- **Human health.** Warmer temperatures are projected to increase fatalities from heat stress of the kind that killed 400 in Chicago in 1995 and expand the geographic ranges for diseases like malaria and dengue fever. The incidence of asthma and other respiratory illnesses, particularly among children and the elderly, is expected to increase from the additional smog caused by warmer temperatures.
- **Extreme weather.** As temperatures increase, so does the rate of evaporation. This acceleration of the hydrologic cycle is projected to increase the frequency and intensity of extreme weather events such as floods and droughts. Last year's El Nino offered us a window on the type of extreme weather that global warming may bring -- droughts and

floods in Texas, drought-driven fires in Indonesia, Florida and Mexico, and devastating floods in China and Bangladesh.

- ***Sea level rise.*** Scientists project that sea level will rise by an additional 6 to 37 inches by 2100. A 20-inch rise could inundate 7,000 square miles of the U.S. coastline, with Florida and the Gulf Coast at greatest risk. Changes in rain and snowfall could affect water supplies and water quality, posing threats to irrigation, fisheries, and drinking supplies.
- ***Agricultural impacts.*** Given the requisite time and resources to adapt, total world food production is not expected to be altered substantially by climate change. However, changes in growing seasons, water availability, soil moisture, and precipitation are expected to cause significant regional shifts in food productivity, with decreases in food production in many of the world's poorest regions.
- ***Damage to natural ecosystems.*** During the next century, the geographical range of forests is expected to move several hundred miles north at a pace that exceeds the ability of many tree species to migrate. The Northeast United States may lose its beech trees and sugar maples. Western conifer forests will likely shrink.

PRESIDENT CLINTON'S DOMESTIC PLAN

In October 1997, President Clinton outlined an environmentally and economically sound plan for reducing U.S. greenhouse gas emissions. This plan emphasizes win-win initiatives designed to cut emissions by increasing energy efficiency; developing new, cleaner energy technologies; working with industry and others to promote sensible solutions; and relying on market-based mechanisms to ensure cost-effective reductions.

- ***Tax incentives and R&D.*** The President's plan includes the **Climate Change Technology Initiative** -- a vigorous program of tax incentives and investments aimed at increasing energy efficiency and spurring the broader use of renewable energy. The FY 1999 appropriations represented a 25% increase for these programs over the prior year. The President's FY 2000 budget proposes a still more accelerated effort.
 - The **tax incentive package** contains \$3.6 billion over five years (\$383 million for FY 2000) for consumers who purchase energy efficient products and for producers of energy from renewable sources. Highlights include: a tax credit of up to \$2,000 for energy efficient new homes; a 10-20% credit for selected energy efficient products for homes and buildings; a credit of up to \$2000 for rooftop solar systems; a credit of up to \$4000 for qualifying electric, fuel cell or hybrid vehicles; extension of the current 1.5 cent/kilowatt hour tax credit for the production of electricity from wind and biomass; an expansion of the biomass credit to cover additional sources of biomass; and a 1.0 cent/kilowatt hour tax credit for cofiring coal and biomass in power plants.
 - The **investment package** contains nearly \$1.4 billion in FY 2000 to research, develop, and deploy clean energy technologies for the four major carbon-emitting sectors of the

economy -- buildings, transportation, industry, and electricity. This represents a 34 percent increase over the amount appropriated in FY 1999. Highlights include: increased funding for the *Partnership for a New Generation of Vehicles*, a government-industry effort to develop cars that get up to three times the fuel efficiency of today's cars; the *Partnership for Advancing Technology in Housing*, which aims 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; and research partnerships for key renewable energy technologies, such as solar, wind, bioenergy, photovoltaics, and geothermal energy.

- ***Clean Air Partnership Fund.*** The President's FY 2000 budget also proposes \$200 million for the creation of a new Clean Air Partnership Fund to support state, local, tribal, and private efforts to reduce both greenhouse gas emissions and ground-level air pollutants. Through grants to state and local governments the Fund will help finance projects that go beyond legal requirements and enable communities to achieve clean air goals sooner. It will also stimulate cost-effective pollution control strategies, spur technological innovation, and leverage substantial non-Federal investment in improved air quality.
- ***Industry consultations.*** The President's plan also involves building partnerships with key energy-intensive industries to develop sector-by-sector initiatives to cut emissions. These partnerships are identifying opportunities for working together to remove barriers to the development and widespread use of energy efficient technologies and practices.
- ***Electricity restructuring.*** Another core element of the President's plan involves restructuring the electricity industry in such a way as to reduce greenhouse gas emissions while saving consumers millions on their energy bills. The Administration's restructuring proposal would introduce competition to provide a profit incentive for generators to produce more electricity with less fuel and to improve energy efficiency. It also includes a renewable portfolio standard to increase the use of electricity from renewable sources and a Public Benefits Fund to spur greater investment in energy efficiency and renewables.
- ***Federal energy use and procurement.*** The President's plan seeks to substantially reduce the Federal government's own greenhouse gas emissions by improving the energy efficiency of Federal facilities and activities and reforming procurement practices. These actions are important in their own right, since the Federal government is the nation's largest single energy user, but they also set an important example for the private sector.
- ***Credit for Early Action.*** The Administration is working closely with industry and Congress on legislation to reward companies taking early, voluntary action to reduce their greenhouse gas emissions or increase carbon sequestration.
- ***Domestic emissions trading.*** The President has proposed a domestic emissions trading system to begin by 2008. Emissions trading would achieve a national greenhouse gas target at the lowest possible cost. The U.S. has used emissions trading successfully to reduce the pollution that causes acid rain -- exceeding environmental objectives at about 50% the

expected cost.

- ***Scientific research.*** The Administration is continuing its strong support for the U.S. Global Change Research Program. This program provides a strong science foundation for policy decisions as it furthers our understanding of human and naturally induced changes in the Earth's environment and assesses the likely consequences of global warming. A new research project, the *Carbon Cycle Initiative*, will seek to deepen our understanding of carbon "sinks," such as forests and farmlands.

DIPLOMATIC AGENDA

U.S. leadership ensured that the international climate change agreement reached at Kyoto, Japan in December 1997, brought the power of the free market to bear in protecting the global environment. The Protocol includes strong, realistic emissions reduction targets and U.S. proposals for flexible, market-based mechanisms to achieve them.

- ***Emissions targets.*** The flexibility the U.S. negotiated into the emissions targets include a multi-year time frame (2008-2012), giving our economy and our technologies more time to adapt; differentiated targets for developed countries; coverage of all six greenhouse gases and of so-called "sinks" -- activities that absorb carbon dioxide, such as afforestation, reforestation, and better forestry and agricultural conservation practices.
- ***Flexible market mechanisms.*** The Protocol includes key market mechanisms that will provide companies with real flexibility in how they achieve emissions reductions, including international emissions trading and the Clean Development Mechanism (CDM). Trading among countries that have taken on targets can dramatically cut the cost of reducing emissions. The CDM will allow U.S. companies to gain low-cost emissions credits through emissions-cutting, clean technology projects undertaken in developing countries.
- ***Meaningful participation by developing countries.*** President Clinton has called for more meaningful participation on the part of key developing countries in reducing greenhouse gas emissions. He has made clear that he will not submit the Kyoto Protocol to the Senate until such participation is achieved.

At the November 1998 UN climate change conference in Buenos Aires, the parties agreed to a two-year timetable for filling in the key details of the Kyoto Protocol in areas such as emissions trading. Buenos Aires also saw a significant breakthrough on the issue of developing country participation as Argentina and Kazakhstan became the first developing countries to announce their intention to take on a binding emissions target for the 2008-2012 time period.

ECONOMIC COST OF KYOTO

The Administration's economic analysis of the Kyoto Protocol concludes that the cost to the United States of meeting our Kyoto target for reducing greenhouse gases should be modest. Even without counting the impact of domestic policies or the benefits of acting to mitigate climate change,

estimates derived from economic modeling suggest an emissions price in the range of \$14 to \$23 per ton of greenhouse gases. In 2010, that would translate into an increase of \$70 to \$110 per year for an average family's energy bill. This increase, however, would be substantially offset by the decline in electricity prices resulting from restructuring the electricity industry, as the Administration and others have proposed.

Noted economists have estimated the environmental, health, and economic costs of global warming projected to occur over the next century to be 1% of GDP or more -- over \$80 billion a year in today's dollars. In the short term, the ancillary benefits of reducing greenhouse gas emissions -- such as reduced air pollution -- could produce savings equal to one quarter of the costs of meeting our Kyoto target.

CONCLUSION

For the past 25 years, efforts to protect the environment, whether by cleaning our air and water, eliminating acid rain or closing the ozone hole, have been repeatedly assailed as a threat to our economy. Yet today we have the cleanest environment in a generation and the strongest economy in a generation. President Clinton's balanced approach to the challenge of climate change will allow us to grow the economy and protect the environment at the same time.

INDUSTRY AND CLIMATE CHANGE

April 1999

There is a growing awareness in the business community that the threats posed by climate change are real and a number of companies are stepping forward to assume leadership roles in efforts to address the problem. The Clinton Administration is working to facilitate these efforts through a range of voluntary programs, as well as its support for rewarding firms that act early to reduce greenhouse gas emissions (ghg) emissions.

Growing Awareness and Support From Business. While some companies with large fossil fuel interests remain opposed to taking action on climate, many companies are starting to take real actions to cut their ghg emissions. In the past year alone:

British Petroleum pledged in September, 1998 to reduce its ghg emissions 10% below 1990 levels by 2010 across its global operations and to ramp up its solar business to \$1 billion in sales by 2007. The company later extended its pledge to include its newly acquired subsidiary, **Amoco**.

Royal Dutch Shell pledged to cut its global ghg emissions by 10% by 2002 and maintain that level of reduction through 2010. It will also spend \$500 million over the next 5 years on developing a new renewable energy business.

United Technologies -- producers of Otis elevators, Carrier air conditioners, Pratt & Whitney engines and Sikorsky helicopters -- announced a plan to cut emissions by improving energy efficiency 25% per unit of production by 2010.

IBM announced goals to improve energy efficiency by 4%/year and to reduce ghg emissions.

The new **Pew Center on Climate Change** launched a \$5 million campaign to build support for responsible action on climate change. **Boeing, Dupont, Shell, Weyerhaeuser** and some 17 other major corporations joined the Center's *Business Environmental Leadership Council*, endorsing the concept that "enough is known about the science and environmental impacts of climate change for us to take actions to address its consequences."

Government-Industry Partnerships. A number of voluntary government-industry partnerships are supporting efforts to reduce emissions, including:

Partnership for a New Generation of Vehicles, a partnership with the **auto industry** to develop cars that get up to three times the fuel efficiency of today's cars;

Partnership for Advancing Technology in Housing, a partnership with the **building industry** to develop and deploy housing technologies to make new homes 50% more energy efficient and to retrofit 15 million existing homes to make them 30% more energy efficient within a decade; and,

Industries of the Future, a cooperative research program with the nation's most energy-intensive industries -- such as **aluminum, glass, chemicals, forest products, mining, petroleum refining, and steel** -- to develop energy efficient technologies.

Credit for Early Action. In this year's State of the Union address in January, President Clinton reiterated his commitment to providing credit to companies that take early, voluntary action to reduce ghg emissions or increase carbon sequestration. We look forward to working with Congress and stakeholders to formulate a fair and workable program that rewards real environmental gain.

CLIMATE CHANGE AND THE COAL SECTOR

Highlights of Administration's Efforts

1. Coal's Value in America's Energy Future

Coal plays an important role in the nation's energy portfolio. The Administration's National Energy Strategy makes clear the importance of maintaining a diverse energy supply -- including coal, which now fuels 54% of U.S. power generation. Equally important is the need to ensure that the environmental impacts of energy production are addressed -- meaning that in climate terms, we are committed to ensuring that the coal our nation consumes is used in the cleanest, most efficient way.

Our efforts to address climate change provide incentives to the private sector to be more energy-efficient and to produce products that are less greenhouse gas intensive. While we recognize that the nation's climate response will have some effects on coal, our analysis shows that an economically efficient policy framework will minimize those impacts. In fact, our analysis of robust international emissions trading shows coal use growing slightly above 1995 levels, although its share of total U.S. energy consumption declines as renewables, gas and efficiency technologies meet growth needs. Thus, the Administration expects coal to play a strong role in America's energy mix for many years to come.

2. Administration Vision for Coal in Climate Mitigation.

The Administration supports policies that meet the nation's climate objectives while avoiding an undue burden on coal and coal mining communities. These efforts include both international and domestic initiatives.

International Policy Architecture

The Administration's international policy combines serious environmental targets with maximum economic flexibility. As described above, the flexibility measures included in the Kyoto Protocol -- a full suite of six major greenhouse gases, sinks, international emissions trading, joint implementation, the Clean Development Mechanism and multi-year emissions targets -- will all work to bring down domestic costs and consequently reduce the impact on coal. "Maximum flexibility" has been our priority for multiple reasons: it represents good environmental, science, energy and economic policy. For every dollar invested, our nation can achieve the maximum environmental gain in ways consistent with sound science and with minimal disruption of energy markets.

make my explicit -- savings abroad allow dirt here.

Department of Energy's Research, Development and Deployment Programs

R&D programs. The Administration recognizes that a solid research and development program is needed to develop even more advanced technologies for using the nation's abundant supply of coal. Our FY2000 budget proposes \$122 million for advanced coal technology programs that will help drive down costs and increase penetration of advanced technologies in the power sector. DOE's advanced coal program ("Vision 21") aims to double current power generation efficiencies within the next 10 - 15 years while keeping electricity costs 10% - 20% below those of today's plants. We see particular promise -- growing out of the Clean Coal Technology program -- in "Integrated Gasification Combined Cycle" power generation and "Pressurized Fluidized Bed Combustion." DOE continues to develop improved components for these technologies.

Sequestration. DOE is also engaged in research and development on sequestration technologies that can absorb and hold waste carbon gases from coal combustion (e.g. in depleted oil and gas reserves or in the deep ocean). When combined with ultra-high efficiency coal burning techniques, proper sequestration could make coal benign in climate terms. Sequestration R&D at DOE is growing, with \$13 million in FY99 and \$29 million proposed for FY2000.

7
Industries of the Future: The Mining Industry. In 1998, the DOE Office of Industrial Technology launched an "Industries of the Future" collaborative with mining companies. It is seeking to bring the entire industry together behind their leaders' common vision of energy, economic and environmental improvements they seek by the year 2020. To achieve that vision, the industry will develop a technology roadmap that can be used to target public and private investment toward strategies to achieve their vision. This follows similar initiatives with aluminum, steel, forest products and others that have proven extremely valuable in improving R&D partnerships. These programs are slated for increased funding in the Climate Change Technology Initiative -- up from \$58 million in FY 99 to \$74.0 million in our FY2000 request.

Interior Department's Plans for Increased Sequestration in Abandoned Mine Land Reclamation.

One promising area for improved carbon management relates to reforestation of mined lands to mitigate carbon. The Department of Interior's Office of Surface Mining began in 1998 to focus more on carbon mitigation in the mined land reclamation programs. In essence, this could be accomplished by promoting techniques that enhance carbon uptake of trees planted on these sites. There are important employment and community development advantages to this approach, as the dollars spent and jobs created in reclamation work flow to directly into communities that have been heavily coal dependent, where the mining is completed and workers are unemployed. Coal and electric power companies support this program as an important vehicle for achieving low cost reductions through sinks.

The funding profile for this program is improving. OSM collects fees from mining companies totaling about \$300 million per year. Much to the consternation of industry, they only spend about \$200 million per year -- the rest used for budget offsets. In recent years, OSM received modest increases (about \$2 million in FY99). In the FY 2000 budget, the Administration proposed an increase of \$25 million with plans to ramp it up by \$25 million in each of the following 3 years so that it will be allowed to invest all that is collected.

Congressional Action on Credit for Early Action

The current Chafee-Mack-Lieberman bill to provide credit for early action could be another important way of providing incentives to business for low cost carbon mitigation. The President highlighted his support for passing bipartisan legislation in this regard as part of his State of the Union message. While we have not reached policy conclusions on the details of the legislation, we plan to engage seriously in the most constructive way possible. We want to work closely with the Senate to get a bill passed this Congress. We are also working closely with industry and environmental groups to ensure that this is a workable program with high environmental integrity.

3. Examining Coal-Related Tax Incentives

The Administration's FY2000 tax proposal includes two primary provisions that could work to the benefit of the coal industry: an incentive for combined heat and power worth an estimated \$300 million over 3 years, and an incentive for coal biomass co-firing, biomass and wind energy worth an estimated \$300 million over 5 years.

The Administration has met with industry groups advocating tax incentives aimed at clean coal technology and advanced coking technologies. At this stage, we have not completed review and consultation on these proposals. We intend to continue the dialogue with coal groups, electric utilities, steel firms and labor organizations to explore these and other ideas.

4. Transition Assistance

The President has committed to provide transition assistance to workers or communities that may be adversely effected by climate mitigation efforts. The Administration is committed to work closely with labor groups and communities to explore ways that government can help in situations where there may be dislocations.

Murkowski Climate Change Bill

- First and most important, we are gratified to see that, in this bill, Senators Murkowski and Hagel recognize that climate change is a serious issue that needs to be addressed. This is progress.
- And we welcome the bill's emphasis on promoting the research, development and diffusion of technologies to reduce or sequester the greenhouse gases that cause global warming.
- At the same time, the bill shouldn't 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, including:
 - ▶ 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 the next year."
 - ▶ a five-year package of tax incentives to encourage the purchase of clean energy products;
 - ▶ 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 also 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.
- In short, we welcome the additional authorization, 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 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.
- Regarding the Kyoto Protocol, there appears to be a good deal of confusion. 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.

S. 882

IN THE SENATE OF THE UNITED STATES

MR. MURKOWSKI for himself, MR. HAGEL, MR. BYRD, MR. CRAIG, MR. ROBERTS, MR. GRAMS, MR. HUTCHINSON, MR. ENZI, AND MR. SMITH (OF OREGON) introduced the following bill; which was read twice and referred to the Committee on _____

A BILL

To strengthen provisions in the Energy Policy Act of 1992 and the Federal Nonnuclear Energy Research and Development Act of 1974 with respect to potential Climate Change.

1 *Be it enacted by the Senate and House of Representatives of the United*
2 *States of America in Congress assembled,*

3 **SECTION 1. SHORT TITLE.**

4 This Act may be cited as the “Energy and Climate Policy Act of 1999.”

5 **SEC. 2. FINDINGS AND PURPOSES.**

6 (a) FINDINGS.—Congress finds that—

7 (1) Although there are significant uncertainties surrounding the
8 science of climate change, human activities may contribute to increasing
9 global concentrations of greenhouse gases in the atmosphere, which in
10 turn may ultimately contribute to global climate change beyond that
11 resulting from natural variability;

1 (2) the characteristics of greenhouse gases and the physical nature of
2 the climate system require that any stabilization of atmospheric
3 greenhouse gas concentrations must be a long-term effort undertaken on a
4 global basis;

5 (3) since developing countries will constitute the major source of
6 greenhouse gas emissions early in the 21st century, all nations must share
7 in an effective international response to potential climate change;

8 (4) environmental progress and economic prosperity are interrelated;

9 (5) effective greenhouse gas management efforts depend on the
10 development of long-term, cost-effective technologies and practices that can
11 be developed, refined, and deployed commercially in an orderly manner in
12 the United States and around the world;

13 (6) in its present form as signed by the Administration, the Kyoto
14 Protocol to the United Nations Framework Convention on Climate Change
15 fails to meet the minimum conditions of Senate Resolution 98, 105th
16 Congress, which was adopted by the Senate on July 25 1997 by a vote of 95-0;

17 (7) The President has not submitted the Kyoto Protocol to the Senate
18 for debate and advice and consent to ratification under Article II, Section 2,
19 clause 2 of the United States Constitution and has indicated that the
20 Administration has no intention to do so in the foreseeable future, or to
21 implement any portion of the Kyoto Protocol prior to its ratification in the
22 Senate.

23 (b) PURPOSE.—The purpose of this Act is to strengthen provisions of the
24 Energy Policy Act of 1992 (42 U.S.C. 13381 et seq.) and the Federal Nonnuclear

1 Energy Research and Development Act of 1974 (42 U.S.C. 5901 et seq.) to—

2 (1) further promote voluntary efforts to reduce or avoid greenhouse
3 gas emissions and improve energy efficiency;

4 (2) focus Department of Energy efforts in this area; and

5 (3) authorize and undertake a long-term research, development, and
6 demonstration program to—

7 (A) develop new and enhance existing technologies that reduce
8 or avoid anthropogenic emissions of greenhouse gases;

9 (B) develop new technologies that could remove and sequester
10 greenhouse gases from emissions streams; and

11 (C) develop new technologies and practices to remove and
12 sequester greenhouse gases from the atmosphere.

13 **SEC. 3. OFFICE OF GLOBAL CLIMATE CHANGE.**

14 Section 1603 of the Energy Policy Act of 1992 (42 U.S.C. 13383) is amended—

15 (1) in the section heading, by striking “**DIRECTOR OF CLIMATE**
16 **PROTECTION**” and inserting “**OFFICE OF GLOBAL CLIMATE**
17 **CHANGE**”; and

18 (2) by striking the first sentence and inserting the following:

19 “(a) **ESTABLISHMENT.**—There is established by this Act in the Department of
20 Energy an Office of Global Climate Change.

21 “(b) **FUNCTION.**—The Office shall serve as a focal point for coordinating for
22 the Secretary and Congress all departmental issues and policies regarding
23 climate change and related matters.

24 “(c) **DIRECTOR.**—The Secretary shall appoint a director of the Office, who—

1 “(1) shall be compensated at no less than level IV of the Executive
2 Schedule;

3 “(2) shall report to the Secretary; and

4 “(3) at the request of the Committees of the Senate and House of
5 Representatives with appropriation and legislative jurisdiction over
6 programs and activities of the Department of Energy, shall report to
7 Congress on the activities of the Office.”;

8 (3) in the second sentence, by striking “The Director” and inserting
9 the following:

10 “(d) DUTIES.—The Director”; and

11 (4) in subsection (c) (as designated by paragraph (2)), by striking
12 paragraphs (2) and (3) and inserting the following:

13 “(2) participate, in cooperation with other federal agencies, in the
14 development and monitoring of domestic and international policies for their
15 effects of any kind on climate change globally and domestically and on the
16 generation, reduction, avoidance, and sequestration of greenhouse gases;

17 “(3) develop and implement a balanced, scientifically sound,
18 nonadvocacy educational and informative public awareness program on—

19 “(A) potential global climate change, including any known
20 adverse and beneficial effects on the United States and the economy of
21 the United States and the world economy, taking into consideration
22 whether those effects are known or expected to be temporary, long-
23 term, or permanent; and

24 “(B) voluntary means and measures to mitigate or minimize

1 significant adverse effects and, where appropriate, to adapt, to the
2 greatest extent practicable, to climate change;

3 “(4) provide, consistent with applicable provisions of law (including
4 section 1605 (b)(3)), public access to all information on climate change,
5 effects of climate change, and adaptation to climate change;

6 “(5) promote and cooperate in the research, development,
7 demonstration, and diffusion of environmentally sound, cost-effective and
8 commercially practicable technologies, practices and processes that avoid,
9 sequester, control, or reduce anthropogenic emissions of greenhouse gases
10 not controlled by the Montreal Protocol for all relevant economic sectors,
11 including, where appropriate, the transfer of environmentally sound, cost-
12 effective and commercially practicable technologies, practices, and
13 processes developed with Federal funds by the Department of Energy or any
14 of its facilities and laboratories to interested persons in the United States
15 and to developing country Parties to the United Nations Framework
16 Convention on Climate Change, and Parties thereto with economies in
17 transition to market-based economies, consistent with, and subject to, any
18 applicable Federal law, including patent and intellectual property laws,
19 and any applicable contracts, and taking into consideration the provisions
20 and purposes of section 1608; and

21 “(6) have the authority to participate in the planning activities of
22 relevant Department of Energy programs.”.

23 **SEC. 4. NATIONAL INVENTORY AND VOLUNTARY REPORTING OF**
24 **GREENHOUSE GASES.**

1 (a) Section 1605 of the Energy Policy Act of 1992 (42 U.S.C. 13385) is
2 amended—

3 (1) by amending the second sentence of subsection (a) to read as
4 follows—

5 “The Administrator of the Energy Information Administration
6 shall annually update and analyze such inventory using available
7 data, including beginning in calendar year 2001, information
8 collected as a result of voluntary reporting under subsection (b). The
9 inventory shall identify for calendar year 2001 and thereafter the
10 amount of emissions reductions attributed to those reported under
11 subsection (b).”

12 (2) by amending subsection (b)(1)(B) and (C) to read as follows—

13 “(B) annual reductions or avoidance of greenhouse gas emissions
14 and sequestration and carbon fixation achieved through any measures,
15 including agricultural activities, cogeneration, appliance efficiency, energy
16 efficiency, forestry activities that increase carbon sequestration stocks
17 (including the use of forest products), fuel switching, management of
18 grasslands and drylands, manufacture or use of vehicles with reduced
19 greenhouse gas emissions, methane recovery, ocean seeding, use of
20 renewable energy, chlorofluorocarbon capture and replacement, and power
21 plant heat rate improvement; and”

22 “(C) reductions in, or avoidance of, greenhouse gas emissions
23 achieved as a result of voluntary activities domestically, or internationally,
24 plant or facility closings, and State or Federal requirements.”

1 (3) by striking in the first sentence of subsection (b)(2) the word
2 “entities” and inserting “persons or entities” and in the second sentence of
3 such subsection, by inserting after “Persons” the words “or entities”;

4 (4) by inserting in the second sentence of subsection (b)(4) the words
5 “persons or” before “entity”; and

6 (5) by adding after subsection (b)(4) the following new paragraphs—

7 “(5) RECOGNITION OF VOLUNTARY REDUCTIONS OR AVOIDED EMISSIONS OF
8 GREENHOUSE GASES.—In order to encourage and facilitate new and increased
9 voluntary efforts on a continuing basis, particularly by persons and entities in the
10 private sector, to reduce global emissions of greenhouse gases, including
11 voluntary efforts to limit, control, sequester, and avoid such emissions, the
12 Secretary shall promptly develop and establish, after an opportunity for public
13 comment of at least 60 days, a program of giving annual public recognition,
14 beginning not later than January 31, 2001, to all reporting persons and entities
15 demonstrating, pursuant to the voluntary collections and reporting guidelines
16 issued under this section, voluntarily achieved greenhouse gases reductions,
17 including such information reported prior to the enactment of this paragraph.
18 Such recognition shall be based on the information certified, subject to 18 U.S.C.
19 1001, by such persons or entities for accuracy as provided in paragraph 2 of this
20 subsection. At a minimum such recognition shall annually be published in the
21 Federal Register.

22 “(6) CHANGES IN GUIDELINES TO IMPROVE ACCURACY AND RELIABILITY.—

23 The Secretary of Energy, through the Administrator of the Energy Information
24 Administration, shall conduct a review, which shall include an opportunity for

1 public comment, of what, if any, changes should be made to the guidelines
2 established under this section regarding the accuracy and reliability of
3 greenhouse gas reductions and related information reported under this section.
4 Any such review shall give considerable weight to the voluntary nature of this
5 section and to the purpose of encouraging voluntary greenhouse gas emission
6 reductions by the private sector. Changes to be reviewed shall include the need
7 for, and the appropriateness of—

8 “(A) a random or other verification process using the authorities
9 available to the Administrator under other provisions of law;

10 “(B) a range of reference cases for reporting of project-based activities
11 in sectors, including, but not limited to, the measures specified in
12 subparagraph (1)(B) of this subsection, and the inclusion of benchmark and
13 default methodologies for use in the reference cases for ‘greenfield’
14 projects; and

15 “(C) provisions to address the possibility of reporting, inadvertently or
16 otherwise, of some or all of the same greenhouse gas emissions reductions
17 by more than one reporting entity or person and to make corrections where
18 necessary.

19 The review should consider the costs and benefits of any such changes, the
20 impacts on encouraging participation in this section, including by farmers and
21 small businesses, and the need to avoid creating undue economic advantages or
22 disadvantages for persons or entities of the private sector. The review should
23 provide, where appropriate, a range of reasonable options that are consistent with
24 the voluntary nature of this section and that will help further the purposes of this

1 section. The review should be available in draft form for public comment of at
2 least 45 days before it is submitted to the Committee on Energy and Natural
3 Resources of the Senate and the Committee on Commerce of the House of
4 Representatives. Such submittal should be made by December 31, 2000. If the
5 Secretary, in consultation with the Administrator, finds, based on the study
6 results, that such changes are likely to be beneficial and cost effective in
7 improving the accuracy and reliability of reported greenhouse gas reductions and
8 related information, are consistent with the voluntary nature of this section, and
9 furthers the purposes of this section, the Secretary shall propose and promulgate,
10 consistent with such finding, such guidelines, together with such findings. In
11 carrying out the provisions of this paragraph, the Secretary shall consult with the
12 Secretary of Agriculture and the Administrator of the Small Business
13 Administration to facilitate greater participation by small business and farmers
14 in this subsection for the purpose of addressing greenhouse gas emission
15 reductions and reporting such reductions.”.

16 (6) in subsection (c), by inserting “the Secretary of the Department of
17 Agriculture, the Secretary of the Department of Commerce, the
18 Administrator of the Energy Information Administration, and” before “the
19 Administrator”.

20 (b) The Secretary shall revise, after opportunity for public comment, the
21 guidelines issued under section 1605(b) of the Energy Policy Act of 1992 to reflect
22 the amendments made to such section 1605(b) by subsection (a)(2) through (4) of
23 this section not later than 18 months after the date of enactment of this Act. Such
24 revised guidelines shall specify their effective date.

(c) The provisions of subsection (a)(5) and (6) of this section shall be effective on the date of enactment of this Act.

**SEC 5. CLIMATE TECHNOLOGY RESEARCH, DEVELOPMENT AND
DEMONSTRATION PROGRAM.**

Subtitle B of title XXI of the Energy Policy Act of 1992 (42 U.S.C. 13471) is amended by adding the following new subsection—

**“SEC. 2120. CLIMATE TECHNOLOGY RESEARCH, DEVELOPMENT AND
DEMONSTRATION PROGRAM.**

“(a) **PURPOSE.**—The purpose of this section is to direct the Secretary to further the goals of development and commercialization of technologies, through widespread application and utilization of which will assist in stabilizing global concentrations of greenhouse gases, by the conduct of a long-term research, development, and demonstration program undertaken with selected industry participants or consortia.

“(b) **PROGRAM.**—The Secretary, in consultation with the Advisory Board established under section 2302, shall establish a long-term Climate Technology Research, Development, and Demonstration Program, in accordance with sections 3001 and 3002.

“(c) **PROGRAM OBJECTIVES.**—The program shall foster—

“(1) development of new technologies and the enhancement of existing technologies that reduce or avoid anthropogenic emissions of greenhouse gases and improve energy efficiency;

“(2) development of new technologies that are able to remove and sequester greenhouse gases from emissions streams; and

1 “(3) development of new technologies and practices to remove and
2 sequester greenhouse gases from the atmosphere.

3 “(d) PROGRAM PLAN.—

4 “(1) INITIAL PLAN.—Not later than 180 days after the date of
5 enactment of this section, the Secretary, in consultation with appropriate
6 representatives of industry, institutions of higher education, Department of
7 Energy national laboratories, and professional and technical societies,
8 shall prepare and submit to the Congress a 10-year program plan to guide
9 activities under this section.

10 “(2) BIENNIAL UPDATE.—The Secretary shall biennially update and
11 resubmit the program plan to the Congress.

12 “(e) PROPOSALS.—

13 “(1) SOLICITATION.—Not later than one year after the date of submittal
14 of the 10-year program plan, and consistent with section 3001 and 3002, the
15 Secretary shall solicit proposals for conducting activities consistent with the
16 10-year program plan and select one or more proposals not later than 180
17 days after such solicitation.

18 “(2) QUALIFICATIONS.—In order for a proposal to be considered by the
19 Secretary, an applicant shall provide evidence that the applicant has in
20 existence—

21 “(A) the technical capability to enable it to make use of existing
22 research support and facilities in carrying out its research objectives;

23 “(B) a multi-disciplinary research staff experienced in—

24 “(i) energy generation, transmission, distribution and

1 end-use technologies; or

2 “(ii) technologies or practices able to sequester, avoid, or
3 capture greenhouse gas emissions; or

4 “(iii) other directly related technologies or practices;

5 “(C) access to facilities and equipment to enable the conduct of
6 laboratory-scale testing or demonstration of technologies or related
7 processes undertaken through the program.

8 “(3) PROPOSAL CRITERIA.—Each proposal shall—

9 “(A) demonstrate the support of the relevant industry by
10 describing—

11 “(i) how the relevant industry has participated in
12 deciding what research activities will be undertaken;

13 “(ii) how the relevant industry will participate in the
14 evaluation of the applicant’s progress in research and
15 development activities; and

16 “(iii) the extent to which industry funds are committed to
17 the applicant’s submission;

18 “(B) have a commitment for matching funds from non-Federal
19 sources, which shall consist of—

20 “(i) cash; or

21 “(ii) as determined by the Secretary, the fair market
22 value of equipment, services, materials, appropriate
23 technology transfer activities, and other assets directly related
24 to the proposal’s cost;

1 “(C) include a single-year and multi-year management plan
2 that outline how the research and development activities will be
3 administered and carried out;

4 “(D) state the annual cost of the proposal and a breakdown of
5 those costs; and

6 “(E) describe the technology transfer mechanisms that the
7 applicant will use to make available research results to industry and
8 to other researchers.

9 “(4) CONTENTS OF PROPOSALS.—A proposal under this subsection
10 shall include—

11 “(A) an explanation of how the proposal will expedite the
12 research, development, demonstration, and commercialization of
13 technologies capable of—

14 “(i) reducing or avoiding anthropogenic emissions of
15 greenhouse gases;

16 “(ii) removing and sequestering greenhouse gases from
17 emissions streams; or

18 “(iii) removing and sequestering greenhouse gases from
19 the atmosphere.

20 “(B) evidence of consideration of whether the unique
21 capabilities of Department of Energy national laboratories warrant
22 collaboration with those laboratories, and the extent of the
23 collaboration proposed;

24 “(C) a description of the extent to which the proposal includes

1 collaboration with relevant industry or other groups or
2 organizations;

3 “(D) evidence of the ability of the applicant to undertake and
4 complete the proposed project;

5 “(E) evidence of applicant’s ability to successfully introduce the
6 technology into commerce, as demonstrated by past experience and
7 current relationships with industry; and

8 “(F) a demonstration of continued financial commitment
9 during the entire term of the proposal from all industrial sectors
10 involved in the technology development.

11 “(f) SELECTION OF PROPOSALS.—From the proposals submitted, the Secretary
12 shall select for funding one or more proposals that—

13 “(1) will best result in carrying out needed research, development,
14 and demonstration related to technologies able to assist in the stabilization
15 of global greenhouse gas concentrations through one or more of the
16 following approaches—

17 “(A) improvement in the performance of fossil-fueled energy
18 technologies;

19 “(B) development of greenhouse gas capture and sequestration
20 technologies and processes;

21 “(C) cost reduction and acceleration of deployment of renewable
22 resource and distributed generation technologies;

23 “(D) development of an advanced nuclear generation design;

24 and

1 “(E) improvement in the efficiency of electrical generation,
2 transmission, distribution, and end use;”

3 “(F) design and use of —

4 “(i) closed-loop multi-stage industrial processes that
5 minimize raw material consumption and waste streams;

6 “(ii) advanced co-production systems (such as coal-based
7 chemical processing and biomass fuel processing); and

8 “(iii) recycling and industrial-ecology programs
9 integrating energy efficiency.

10 “(2) represent research and development in specific areas identified
11 in the program plan developed biennially by the Secretary and submitted to
12 Congress under subsection (c);

13 “(3) demonstrate strong industry support;

14 “(4) ensure the timely transfer of technology to industry; and

15 “(5) otherwise best carry out this section.

16 “(g) ANNUAL PROGRESS REPORTS.—The Director of the Office of Science and
17 Technology, in consultation with the Director of the Office of Management and
18 Budget, shall prepare and submit an annual report to Congress that—

19 “(1) certifies that the program objectives are adequately focused, peer-
20 reviewed and merit-reviewed, and not unnecessarily duplicative with the
21 science and technology research being conducted by other Federal agencies
22 and agents, and

23 “(2) states whether the program as conducted in the prior year
24 addresses an adequate breadth and range of technologies and solutions to

1 address anthropogenic climate change, including—

2 “(A) capture and sequestration of greenhouse gas emissions;

3 “(B) development of photovoltaic, high-efficiency coal, advanced
4 nuclear, and fuel cell generation technologies;

5 “(C) cost reduction and acceleration of deployment of renewable
6 resource and distributed generation technologies; and

7 “(D) improvement in the efficiency of electrical generation,
8 transmission, distribution, and end use;

9 “(h) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be
10 appropriated to carry out this section \$200,000,000 for each of fiscal years 2001
11 through 2010, to remain available until expended. This authorization is
12 supplemental to existing authorities and shall not be construed as a cap on the
13 Department of Energy’s Research, Development and Demonstration programs”.

14 **SEC. 6. COMPREHENSIVE PLAN AND IMPLEMENTING PROGRAM FOR**
15 **ENERGY RESEARCH, DEVELOPMENT, AND DEMONSTRATION.**

16 Section 6 of the Federal Nonnuclear Energy Research and Development Act
17 of 1974 (42 U.S.C. 5905) is amended—

18 (1) in subsection (a)—

19 (A) in paragraph (2), by striking “and” at the end;

20 (B) in paragraph (3) by striking the period at the end and
21 inserting “; and”; and

22 (C) by adding at the end the following:

23 “(4) solutions to the effective management of greenhouse gas
24 emissions in the long term by the development of technologies and practices

1 designed to—

2 “(A) reduce or avoid anthropogenic emissions of greenhouse
3 gases;

4 “(B) remove and sequester greenhouse gases from emissions
5 streams; and

6 “(C) remove and sequester greenhouse gases from the
7 atmosphere.”; and

8 (2) in subsection (b)—

9 (A) in paragraph (2), by striking “subsection (a)(1) through (3)”
10 and inserting “paragraphs (1) through (4) of subsection (a); and

11 (B) in paragraph (3)--

12 (i) in subparagraph (R), by striking “and” at the end;

13 (ii) in subparagraph (S), by striking the period at the end
14 and inserting “; and”; and

15 (iii) by adding at the end the following:

16 “(T) to pursue a long-term climate technology strategy
17 designed to demonstrate a variety of technologies by which
18 stabilization of greenhouse gases might be best achieved, including—

19 “(i) the accelerated commercial demonstration of low-
20 cost and high efficiency photovoltaic power systems;

21 “(ii) advanced clean coal technology;

22 “(iii) advanced nuclear power plant designs;

23 “(iv) fuel cell technology development for cost-effective
24 application in residential, industrial and transportation

1 applications;

2 “(v) low cost carbon sequestration practices and
3 technologies including biotechnology, tree physiology, soil
4 productivity and remote sensing;

5 “(vi) hydro and other renewables;

6 “(vii) electrical generation, transmission and
7 distribution technologies and end use technologies; and

8 “(viii) bio-energy technology.”

9 **SEC. 7. DEFINITIONS**

10 For the purpose of this Act and the provisions of the Energy Policy Act of
11 1992 (42 U.S.C 13381, et seq.) and the provisions of the Federal Nonnuclear Energy
12 Research and Development Act of 1974 (42 U.S.C. 5901, et seq.) which statutes are
13 amended by this Act, these terms are defined as follows:

14 “(1) AGRICULTURAL ACTIVITY.—The term ‘agricultural activity’ means
15 livestock production, cropland cultivation, biogas recovery and nutrient
16 management.

17 “(2) CLIMATE CHANGE.—The term ‘climate change’ means a change of
18 climate which is attributed directly or indirectly to human activity which is
19 in addition to natural climate variability observed over comparable time
20 periods.

21 “(3) CLIMATE SYSTEM.—The term ‘climate system’ means the totality
22 of the atmosphere, hydrosphere, biosphere and geosphere and their
23 interactions.

24 “(4) GREENHOUSE GASES.—The term ‘greenhouse gases’ means those

1 gaseous constituents of the atmosphere, both natural and anthropogenic,
2 that absorb and re-emit infrared radiation.

3 “(5) GREENHOUSE GAS REDUCTION.—The term ‘greenhouse gas
4 reduction’ means 1 metric ton of greenhouse gas (expressed in terms of
5 carbon dioxide equivalent) that is voluntarily certified to have been achieved
6 under section 1605 of the Energy Policy Act of 1992 (42 U.S.C. 13385).

7 “(6) GREENHOUSE GAS SEQUESTRATION.—The term ‘greenhouse gas
8 sequestration’ means extracting one or more greenhouse gases from the
9 atmosphere or an emissions stream through a technological process
10 designed to extract and isolate those gases from the atmosphere or an
11 emissions stream; or the natural process of photosynthesis that extracts
12 carbon dioxide from the atmosphere and stores it as carbon in trees, roots,
13 stems, soil, foliage, or durable wood products.

14 “(7) FOREST PRODUCTS.—The term ‘forest products’ means all
15 products or goods manufactured from trees.

16 “(8) FORESTRY ACTIVITY.—

17 “(A) IN GENERAL.—The term ‘forestry activity’ means any
18 ownership or management action that has a discernible impact on
19 the use and productivity of forests.

20 “(B) INCLUSIONS.—Forestry activities include, but are not
21 limited to, the establishment of trees on an area not previously
22 forested, the establishment of trees on an area previously forested if a
23 net carbon benefit can be demonstrated, enhanced forest
24 management (e.g., thinning, stand improvement, fire protection,

1 weed control, nutrient application, pest management, other
2 silvicultural practices), forest protection or conservation if a net
3 carbon benefit can be demonstrated, and biomass energy (using
4 wood, grass or other biomass in lieu of fossil fuel).

5 “(C) EXCLUSIONS.—The term ‘forest activity’ does not include
6 a land use change associated with—

7 “(i) an act of war; or

8 “(ii) an act of nature, including floods, storms,
9 earthquakes, fires, hurricanes, and tornadoes.

10 “(9) MANAGEMENT OF GRASSLANDS AND DRYLANDS.—The term
11 ‘management of grasslands and drylands’ means seeding, cultivation, and
12 nutrient management.

13 “(10) OCEAN SEEDING.—The term ‘ocean seeding’ means adding
14 nutrients to oceans to enhance the biological fixation of carbon dioxide.”.

Energy and Climate Policy Act of 1999

Goal:

To meaningfully address potential climate change issues by shifting the focus from narrowly applied, short term emissions reductions targets (such as those found in the Kyoto Protocol) to a long term, technology-based, global effort.

but the two are not inconsistent

Key Features of this bill:

Establishes a new research, development and demonstration program (\$200 million federal per year for the next ten years plus private sector cost share of not less than 20% for R&D and 50% of demonstration/commercialization) to foster the development of new technologies that:

- avoid or reduce emissions of carbon dioxide (i.e., alternative energy technologies, energy efficiency technologies, advanced clean coal, advanced nuclear, etc.);
- remove and sequester carbon dioxide from the atmosphere and emissions streams;

Promotes voluntary efforts to reduce carbon emissions by expanding and strengthening the voluntary reporting guidelines and reporting procedures under section 1605 of the Energy Policy Act of 1992.

Establishes greater accountability and responsibility for climate change and related matters within the Department of Energy by establishing a statutory Office of Global Climate Change.

more government!

This bill does not...

... provide tax incentives to push technologies into the marketplace;

However, there will be opportunities to explore those options in the context of the next tax bill.

...provide "credit for early action."

In the absence of Senate ratification of the Kyoto Protocol, we believe it is premature to award credit against a future cap imposed by an unratified treaty.

How about limits imposed by a future Act of Congress?

106TH CONGRESS
1ST SESSION

S. _____

IN THE SENATE OF THE UNITED STATES

MR. MURKOWSKI, for himself and _____, introduced the following bill;
which was read twice and referred to the Committee on _____

A BILL

To strengthen provisions in the Energy Policy Act of 1992 and the Energy
Research and Development Act of 1974 with respect to potential Climate Change.

1 *Be it enacted by the Senate and House of Representatives of the United*
2 *States of America in Congress assembled,*

3 **SECTION 1. SHORT TITLE.**

4 This Act may be cited as the "Energy and Climate Policy Act of 1999."

5 **SEC. 2. FINDINGS AND PURPOSES.**

6 (a) FINDINGS.—Congress finds that—

7 (1) Although there are significant uncertainties surrounding the
8 science of climate change, human activities appear to contribute to
9 increasing concentrations of carbon dioxide in the atmosphere, which in
10 turn may contribute to global climate change beyond that resulting from
11 natural variability;

1 (2) the characteristics of carbon dioxide and the physical nature of the
2 atmosphere require that the successful stabilization of atmospheric carbon
3 dioxide concentrations must be a long-term effort undertaken on a global
4 basis; .

5 (3) since developing countries will constitute the major source of
6 greenhouse gas emissions early in the 21st century, all nations must share
7 in an effective international response to potential climate change;

8 (4) narrowly-applied, short-term targets for emissions reductions
9 such as those contained in the Kyoto Protocol to the Framework Convention
10 on Climate Change would not, even if achieved, make a meaningful
11 difference in climate or carbon stabilization time frames;

12 (5) narrowly-applied, short-term approaches will likely result in
13 economic distortions and inefficiencies by requiring the premature
14 turnover of capital stock;

15 (6) environmental progress and economic prosperity are interrelated;

16 (7) effective carbon management efforts depend on the development of
17 long term technologies and practices that can be developed, refined, and
18 deployed in an orderly manner in the United States and around the world;

19 (8) the Kyoto Protocol to the Framework Convention on Climate
20 Change fails to meet the advice criteria of Senate Resolution 98, 105th
21 Congress, which passed in 1997;

22 (9) The President has not submitted the Kyoto Protocol to the Senate
23 for debate and advice and consent under article II of the Constitution.

24 (b) PURPOSES.—The purposes of this Act are to strengthen provisions of the

1 Energy Policy Act of 1992 (42 U.S.C. 13381 et seq.) and the Federal Nonnuclear
 2 Energy Research and Development Act of 1974 (42 U.S.C. 5901 et seq.) to—

3 (1) further promote voluntary efforts to reduce carbon emissions over
 4 the near term;

5 (2) focus Department of Energy efforts in this area; and

6 (3) authorize and undertake a long term research, development and
 7 demonstration program to—

8 (A) develop new and enhance existing technologies that reduce
 9 or avoid anthropogenic emissions of carbon dioxide;

10 (B) develop new technologies that could remove and sequester
 11 carbon dioxide from emissions streams;

12 (B) develop new technologies and practices to remove and
 13 sequester carbon dioxide from the atmosphere

Note: After the above “Findings and Purposes,” the bill will consist of language to affect the changes to existing law as outlined on the following pages. For purposes of this discussion draft, it is easier for all to evaluate this proposal in terms of its effect on existing language. There are:

- *Amendments to Title XVI of the Energy Policy Act of 1992*
- *Amendments to Title XXI of the Energy Policy Act of 1992*
- *Amendments to the Federal Nonnuclear Energy Research and Development Act of 1974.*

Existing law in plain text.
 Proposed deletions are ~~struck~~.
 Proposed additions are **bold**.

Amendments to Title XVI of the Energy Policy Act of 1992
(42 U.S.C. 13381 et seq.)

SEC. 1603. ~~DIRECTOR OF CLIMATE PROTECTION~~ OFFICE OF GLOBAL CLIMATE CHANGE

~~Within 6 months after October 24, 1992, the Secretary shall establish, within the Department of Energy, a Director of Climate Protection (in this section referred to as the 'Director').~~ **There is established within the Department of Energy an 'Office of Global Climate Change' for the purpose of having within the Department a focal point for coordinating for the Secretary of Energy and the Congress all Departmental issues and policies of climate change and related matters. The Secretary of Energy shall appoint a director of such office (hereinafter referred to in this Title as the 'Director') who shall be compensated at level IV of the Executive Schedule and who shall report to the Secretary and, at the request of the Committees of the Senate and House of Representatives with appropriation and legislative jurisdiction over programs and activities of the Department of Energy, periodically to the Congress about these and any related activities. The Director shall—**

(1) in the absence of the Secretary, serve as the Secretary's representative for interagency and multilateral policy discussions of global climate change, including the activities of the Committee on Earth and Environmental Sciences as established by the Global Change Research Act of 1990 (Public Law 101-606) [15 U.S.C. 2921 et seq.] and the Policy Coordinating Committee Working Group on Climate Change;

(2) ~~monitor~~ **participate**, in cooperation with other Federal agencies, **in the development and monitoring of domestic and international policies for their effects of any kind on climate change globally and domestically and on the generation and reduction of greenhouse gases; and**

(3) **develop and implement a balanced, scientifically sound, non-advocacy educational and informative public awareness program on global climate change, including any known adverse and beneficial effects on the**

*Tell people
how we are
screwing them*

United States and its economy (as well as globally), taking into consideration whether such effects are known or expected to be temporary, long-term, or permanent and on voluntary means and measures to mitigate or minimize significant adverse effects and, where appropriate, to adapt, to the greatest extent possible, to climate change;

(4) provide, consistent with applicable provisions of law, including section 1605(b)(3) of this title, public access to all information on climate change and its effects and on adaptation to climate change;

(5) promote and cooperate in the development, application, and diffusion of environmentally sound, cost-effective and commercially practicable technologies, practices and processes that prevent, control, or reduce anthropogenic emissions of greenhouse gases not controlled by the Montreal Protocol for all relevant economic sectors, including, where appropriate, the transfer, with or without compensation, of environmentally sound, cost-effective and commercially practicable technologies, practices, and processes developed with Federal funds by the Department of Energy or any of its facilities and laboratories to interested persons in the United States and to developing country Parties to the Framework Convention on Climate Change, consistent with, and subject to, any applicable federal law, including patent and intellectual property laws, and any applicable contracts, and taking into consideration the provisions and purposes of section 1608 of this title; and

(3) (6) have the authority to participate in the planning activities of relevant Department of Energy programs.

For the purposes of this title, the terms “climate change” and “greenhouse gases” shall have the same meaning as they have in Article 1 of the Framework Convention on Climate Change and the term “greenhouse gas reduction” shall mean one metric ton of greenhouse gas (expressed in terms of carbon dioxide equivalent) that is voluntarily certified to have been achieved under section 1605 of this title.

Sec. 1604. ASSESSMENT OF ALTERNATIVE POLICY MECHANISMS FOR ADDRESSING GREENHOUSE GAS EMISSIONS

Not later than 18 months after October 24, 1992, the Secretary shall transmit a report to Congress containing a comparative assessment of alternative policy mechanisms for reducing the generation of greenhouse gases. Such assessment shall include a short-run and long-run analysis of the social, economic, energy, environmental, competitive, and agricultural costs and benefits, including costs and benefits for jobs and competition, and the practicality of each of the following policy mechanisms:

(1) Various systems for controlling the generation of greenhouse gases, including caps for the generation of greenhouse gases from major sources and emissions trading programs.

(2) Federal standards for energy efficiency for major sources of greenhouse gases, including efficiency standards for power plants, industrial processes, automobile fuel economy, appliances, and buildings, and for emissions of methane.

(3) Various Federal and voluntary incentives programs.

SEC. 1605. NATIONAL INVENTORY AND VOLUNTARY REPORTING OF GREENHOUSE GASES.

(a) NATIONAL INVENTORY.—Not later than one year after October 24, 1992, the Secretary, through the Energy Information Administration, shall develop, based on data available to, and obtained by, the Energy Information Administration, an inventory of the national aggregate emissions of each greenhouse gas for each calendar year of the baseline period of 1987 through 1990. The Administrator of the Energy Information Administration shall annually update and analyze such inventory using available data **including information collected as a result of voluntary reporting under subsection (b). The inventory shall identify the amount of emissions attributed to those reported under subsection (b).** This subsection

does not provide any new data collection authority.

(b) VOLUNTARY REPORTING.—

(1) ISSUANCE OF GUIDELINES.—Not later than 18 months after October 24, 1992, the Secretary shall, after opportunity for public comment, issue guidelines for the voluntary collection and reporting of information on sources of greenhouse gases. Such guidelines shall establish procedures for the accurate voluntary reporting of information on—

(A) greenhouse gas emissions—

(i) for the baseline period of 1987 through 1990; and

(ii) for subsequent calendar years on an annual basis;

(B) annual reductions of greenhouse gas emissions and carbon fixation achieved through any measures, including fuel switching, ~~forest management practices, forestry activities, carbon sequestration, use of forest products,~~ tree planting, **agricultural activities, management of grasslands, ocean seeding,** use of renewable energy, manufacture or use of vehicles with reduced greenhouse gas emissions, appliance efficiency, energy efficiency, methane recovery, cogeneration, chlorofluorocarbon capture and replacement, and power plant heat rate improvement;

(C) reductions in **domestic** greenhouse gas emissions achieved as a result of—

(i) voluntary reductions;

(ii) plant or facility closings; and

(iii) State or Federal requirements; ~~and~~

(D) an aggregate calculation of greenhouse gas emissions by each reporting **person or** entity.

(E) **allocation of greenhouse gas emissions reductions between reporting entities that may be subject to duplicate reporting; and**

(F) **reduction in non-U.S. greenhouse gas emissions as a result of voluntary reductions.**

Such guidelines shall also establish procedures for taking into account the differential radiative activity and atmospheric lifetimes of each greenhouse gas.

(2) **REPORTING PROCEDURES.**—The Administrator of the Energy Information Administration shall develop forms for voluntary reporting under the guidelines established under paragraph (1), and shall make such forms available to entities wishing to report such information. **Persons or entities** reporting under this subsection shall certify the accuracy of the information reported **subject to the penalties for making materially false statements to federal agencies covered under 18 U.S.C. 1001.** In addition, an entity reporting under this subsection shall also **certify the accuracy of the reported information consistent with the requirements for information provided to the Securities and Exchange Commission, including responsibilities for authorized officers of the entity.**

(3) **CONFIDENTIALITY.**—Trade secret and commercial or financial information that is privileged or confidential shall be protected as provided in section 552(b)(4) of title 5.

(4) **ESTABLISHMENT OF DATA BASE.**—Not later than 18 months after October 24, 1992, the Secretary, through the Administrator of the Energy Information Administration, shall establish a data base comprised of information voluntarily reported under this subsection. Such information may be used by the reporting entity **or person** to demonstrate **certified** achieved reductions of greenhouse gases.

(5) **RECOGNITION OF ACHIEVED VOLUNTARY REDUCTIONS.**—The Administrator of the Energy Information Administration shall certify in writing to the reporting person or entity

(A) the total amount of the greenhouse gas emissions reductions achieved;

(B) the allocation to the entity reporting of any greenhouse gas emissions subject to duplicate reporting; and

(C) that the emissions reductions meet the guidelines.

(c) **CONSULTATION.**—In carrying out this section, the Secretary shall consult, as appropriate, with the Secretary of the Department of Agriculture, the Secretary of the Department of Interior, the Administrator of the National Oceanic and Atmospheric Administration, and the Administrator of the Environmental Protection Agency.

(d) **DEFINITIONS.**—As used in this section—

(1) the term “forestry activities” means any ownership or management action that has a discernible impact on the use and productivity of forests. Exclusive of this definition are all land use changes associated with acts of war and nature including floods, storms, earthquakes, fires, hurricanes and tornadoes. Forestry activities include, but are not limited to, establishment of a tree crop on an area from which it has always or very long been absent, establishment of forest, naturally or artificially, on an area previously in forest cover, thinnings, stand improvement, fire protection, weed control, nutrient application, pest management, wildlife activity management, inventory management, or other general silvicultural practices.

(2) the term “forest products” means the initial primary product or good manufactured from trees, including, but not limited to, lumber, plywood, veneer, or structural and composite panels.

(3) the term “agricultural activities” means livestock production, cropland cultivation, biogas recovery and nutrient management.

(4) the term “management of grasslands” means seeding, cultivation, and nutrient management.

(5) the term “ocean seeding” means adding nutrients to oceans to enhance the biological fixation of carbon dioxide.

(6) the term “greenhouse gas” means carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride.

(7) the term “person” means a United States Citizen or resident alien.

(8) the term “entity” means a United States Corporation, partnership, association, a state, municipality, or political subdivision of a state, or any agency, department or instrumentality of the United States.

(9) the term “carbon sequestration” means extracting carbon dioxide from the atmosphere through the process of photosynthesis and storing it in the form of roots, stems, soil or foliage; or through a technological process designed to extract and isolate carbon dioxide from the atmosphere or an emissions stream for a period of not less than X years.

Amendments to Title XXI of the Energy Policy Act of 1992
(42 U.S.C. 13381 et seq.)

Title XXI, subtitle B of the Energy Policy Act of 1992 (42 U.S.C. 13471) is amended by adding a new section 2120 to read as follows:

SEC. 2120. CLIMATE TECHNOLOGY RESEARCH, DEVELOPMENT AND DEMONSTRATION PROGRAM

(a) **PURPOSE.**—The purpose of this section is to direct the Secretary to further the goals of development and commercialization of technologies whose widespread application and utilization will assist in stabilizing concentrations of atmospheric carbon dioxide by the conduct of a long term, 10-year research, development and demonstration program undertaken with selected industry participants or consortia.

(b) **PROGRAM DIRECTION.**—The Secretary, in consultation with the Advisory Board established under section 2302, shall establish a long term, 10-year Climate Technology Research, Development and Demonstration Program, in accordance with section 3001 and 3002 of this Act. Such program shall foster—

(1) development of new and the enhancement of existing technologies that reduce or avoid anthropogenic emissions of carbon dioxide;

(2) development of new technologies that are able to remove and sequester carbon dioxide from emissions streams; and

(3) development of new technologies and practices to remove and sequester carbon dioxide from the atmosphere.

(c) **PROGRAM PLAN.**—Within 180 days after the date of enactment of this Act, the Secretary, in consultation with appropriate representatives of industry, institutions of higher education, Department of Energy national laboratories, and professional and technical societies, shall prepare and submit to the Congress a 10-year program plan to guide activities under this section. The Secretary shall biennially update and resubmit the program plan to the Congress.

(d) **PROPOSALS.**—

(1) **SOLICITATION.**—Within 6 months after the date of enactment of this Act, the Secretary shall solicit and select a proposal for conducting activities consistent with the 10-year program plan. In order for a proposal to be considered by the Secretary, the applicant shall have in existence and evidence in the proposal at the time the proposal is submitted the following qualifications:

(A) the technical capability to enable it to make use of existing research support and facilities in carrying out the research objectives of the program plan referenced in subsection (c) of this section;

(B) a multi-disciplinary research and management staff experienced across the range of electricity generation technologies, technologies able to avoid carbon dioxide emissions, technologies able to capture and sequester atmospheric carbon dioxide or carbon dioxide emissions, or other directly related technologies; and

(C) access to facilities and equipment to enable the conduct of laboratory scale testing or demonstration of technologies or related processes undertaken through the program.

(2) **PROPOSAL CRITERIA.**— Each proposal shall—

(A) demonstrate the support of relevant industry by describing—

(i) how industry has participated in deciding what research activities will be undertaken;

(ii) how industry will participate in the evaluation of the applicant's progress in research and development activities; and

(iii) the extent to which industry funds are committed to the applicant's submission;

(B) have a commitment for matching funds from non-Federal sources, which shall consist of—

(i) cash, or

(ii) as determined by the Secretary, the fair market value of equipment, services, materials, appropriate technology transfer activities, and other assets directly related to the proposal's cost;

(C) include a single and multi-year management plan that outlines how the research and development activities will be administered and carried out;

(D) state the annual cost of the proposal and a breakdown of those costs;

(E) describe the technology transfer mechanisms the applicant will use to make available research results to industry and to other researchers; and

(F) evidence the existence of programs or cooperative arrangements with relevant industry to insure technology transfer and the demonstration of technologies.

(3) CONTENTS OF PROPOSALS.— Proposals submitted under this subsection shall include—

(A) an explanation of how the proposal will expedite the research, development, demonstration, and commercialization of

technologies capable of—

- (i) reducing or avoiding anthropogenic emissions of carbon dioxide;
- (ii) removing and sequestering carbon dioxide from emissions streams; and
- (iii) removing and sequestering carbon dioxide from the atmosphere.

(B) evidence of consideration of whether the unique capabilities of Department of Energy national laboratories warrants collaboration with such laboratories, and the extent of such collaboration proposed;

(C) a description of the extent to which the proposal includes collaboration with relevant industry or other groups or organizations;

(D) evidence of the ability of the applicant to undertake and complete the proposed project;

(E) evidence of applicant's ability to successfully introduce the technology into commerce as demonstrated by past experience and current relationships with relevant industry; and

(F) a demonstration of continued financial commitment during the entire term of the proposal from all industrial sectors involved in the technology development.

(e) **SELECTION OF PROPOSALS.**—From the proposals submitted, the Secretary shall select a proposal for funding. The Secretary shall select a proposal that—

(1) will best result in carrying out needed research, development and demonstration related to technologies able to stabilize carbon emissions in one or more of the following general areas—

(A) improvement in the performance of fossil-fueled power generation technologies;

(B) development of carbon-capture and carbon sequestration

technologies and processes;

(C) cost reduction and acceleration of deployment of renewable resource and distributed generation technologies;

(D) development of an advanced nuclear generation design; and

(E) design and utilization of closed-loop multi-stage industrial processes that minimize raw material consumption and waste streams, advanced co-production systems (e.g. coal-based chemical processing and biomass fuel processing), and recycling and industrial-ecology programs integrating energy efficiency.

(2) demonstrate existing mechanisms and methods available to the applicant to enable the applicant to provide for the transfer of technology to industry for commercial deployment;

(3) represent research and development in specific areas identified in the program plan developed biennially by the Secretary and submitted to the Congress pursuant to subsection 2120(c);

(4) demonstrate strong industry support; and

(5) otherwise best carry out the purpose of this section.

(f) ANNUAL PROGRESS REPORTS.—The Director of the Office of Science and Technology, in consultation with the Director of the Office of Management and Budget, shall prepare and deliver an annual report to Congress certifying that the program objectives are adequately focused, peer-and merit-reviewed, and not unnecessarily duplicative with the science and technology research being conducted by other federal agencies and agents. Such report shall address whether the program as conducted in the prior year addresses an adequate breadth and range of technologies and solutions to anthropogenic climate change, including but not limited to the capture and sequestration of carbon emissions and the development of photovoltaic, high-efficiency coal, advanced nuclear, and fuel cell generation technologies, and the capture and sequestration of atmospheric carbon dioxide.

(g) AUTHORIZATION OF APPROPRIATION.—There are authorized to be appropriated to the Secretary for carrying out this section \$200,000,000 for each of fiscal years 2001 to and including 2011, with such sums to remain available until expended.

Amendments to the Federal Nonnuclear
Energy Research and Development Act of 1974
(42 U.S.C.5901 et. seq.)

**Sec. 5905. COMPREHENSIVE PLAN AND IMPLEMENTING PROGRAM FOR
ENERGY RESEARCH, DEVELOPMENT AND DEMONSTRATION**

(a) TRANSMISSION TO CONGRESS.—

Pursuant to the authority and directions of this chapter and the Energy Reorganization Act of 1974 (Public Law 93-438) [42 U.S.C. 5801 et seq.], the Department of Energy Organization Act (42 U.S.C. 7101 et seq.), and titles XX through XXIII of the Energy Policy Act of 1992 [42 U.S.C. 13401 et seq., 13451 et seq., 13501 et seq., 13521 et seq.], the Secretary, in consultation with the Advisory Board established under section 2302 of the Energy Policy Act of 1992 [42 U.S.C. 13522], shall transmit to the Congress, on or before June 30, 1975, a comprehensive plan for energy research, development, and demonstration. This plan shall be appropriately revised annually as provided in section 5914(a) of this title. Such plan shall be designed to achieve—

(1) solutions to immediate and short-term (the period up to 5 years after submission of the plan or its annual revision) energy supply system and associated environmental problems;

(2) solutions to middle-term (the period from 5 years to 10 years after submission of the plan or its annual revision) energy supply system and associated environmental problems;~~and~~

(3) solutions to long-term (the period beyond 10 years after submission of the plan or its annual revision) energy supply system and associated environmental problems, ~~and~~

(4) solutions to the effective management of atmospheric carbon dioxide concentrations in the long term by the development of technologies designed to reduce or avoid anthropogenic emissions of carbon dioxide, to remove and sequester carbon dioxide from emissions streams and to remove and sequester carbon dioxide from the atmosphere.

(b) PURPOSES; SCOPE OF PROGRAM.—

(1) Based on the comprehensive energy research, development, and demonstration plan developed under subsection (a) of this section, the Secretary, in consultation with the Advisory Board established under section 2302 of the Energy Policy Act of 1992 [42 U.S.C. 13522], shall develop and transmit to the Congress, on or before June 30, 1975, a comprehensive nonnuclear energy research, development, and demonstration program to implement the nonnuclear research, development, and demonstration aspects of the comprehensive plan. Such program shall be updated and transmitted to the Congress annually as part of the report required under section 5914 of this title.

(2) This program shall be designed to achieve solutions to the energy supply and associated environmental problems in the immediate and short-term, middle-term, and long-term time intervals described in subsection (a)(1) through ~~(3)~~ (4) of this section. In formulating the nonnuclear aspects of this program, the Secretary, in consultation with the Advisory Board established under section 2302 of the Energy Policy Act of 1992 [42 U.S.C. 13522], shall evaluate the economic, environmental, and technological merits of each aspect of the program.

(3) The Secretary shall assign program elements and activities in specific nonnuclear energy technologies, to the short-term, middle-term, and long-term time intervals, and shall present full and complete justification for these assignments and the degree of emphasis for each. These program elements and activities shall include, but not be limited to, research, development, and demonstrations designed--

(A) to advance energy conservation technologies, including but not limited to--

- (i) productive use of waste, including garbage, sewage, agricultural wastes, and industrial waste heat;
- (ii) reuse and recycling of materials and consumer products;
- (iii) improvements in automobile design for increased efficiency and lowered emissions, including investigation of the full range of alternatives to the internal combustion engine and systems of efficient public transportation; and
- (iv) advanced urban and architectural design to promote efficient energy use in the residential and commercial sectors, improvements in home design and insulation technologies, small thermal storage units and increased efficiency in electrical appliances and lighting fixtures;

(B) to accelerate the commercial demonstration of technologies for producing low-sulfur fuels suitable for boiler use;

(C) to demonstrate improved methods for the generation, storage, and transmission of electrical energy through

- (i) advances in gas turbine technologies, combined power cycles, the use of low British thermal unit gas and, if practicable, magnetohydrodynamics;
- (ii) storage systems to allow more efficient load following, including the use of inertial energy storage systems; and
- (iii) improvement in cryogenic transmission methods;

(D) to accelerate the commercial demonstration of technologies for producing substitutes for natural gas, including coal gasification:

Provided, That the Secretary shall invite and consider proposals from potential participants based upon Federal assistance and participation in the form of a joint Federal-industry corporation, and recommendations pursuant to this clause shall be accompanied by a report on the viability of using this form of Federal assistance or participation;

(E) to accelerate the commercial demonstration of technologies for producing syncrude and liquid petroleum products from coal: Provided, That the Secretary shall invite and consider proposals from potential participants based upon Federal assistance and participation through guaranteed prices or purchase of the products, and recommendations pursuant to this clause shall be accompanied by a report on the viability of using this form of Federal assistance or participation;

(F) in accordance with the program authorized by the Geothermal Energy Research, Development, and Demonstration Act of 1974 (Public Law 93-410) [30 U.S.C. 1101 et seq.], to accelerate the commercial demonstration of geothermal energy technologies;

(G) to demonstrate the production of syncrude from oil shale by all promising technologies including in situ technologies;

(H) to demonstrate new and improved methods for the extraction of petroleum resources, including secondary and tertiary recovery of crude oil;

(I) to demonstrate the economics and commercial viability of solar energy for residential and commercial energy supply applications in accordance with the program authorized by the Solar Heating and Cooling Act of 1974 (Public Law 93-409) [42 U.S.C. 5501 et seq.];

(J) to accelerate the commercial demonstration of environmental control systems for energy technologies developed pursuant to this chapter;

(K) to investigate the technical and economic feasibility of tidal power for supplying electrical energy;

(L) to commercially demonstrate advanced solar energy technologies in accordance with the Solar Research, Development, and Demonstration Act of 1974 (Public Law 93-473) [42 U.S.C. 5551 et seq.];

(M) to determine the economics and commercial viability of the production of synthetic fuels such as hydrogen and methanol;

(N) to commercially demonstrate the use of fuel cells for central station electric power generation;

(O) to determine the economics and commercial viability of in situ coal gasification;

(P) to improve techniques for the management of existing energy systems by means of quality control; application of systems analysis, communications, and computer techniques; and public information with the objective of improving the reliability and efficiency of energy supplies and encourage the conservation of energy resources;

(Q) to improve methods for the prevention and cleanup of marine oil spills;

(R) to implement the Renewable Energy and Energy Efficiency Technology Competitiveness Act of 1989 (42 U.S.C. 12001 et seq.); and

(S) to implement titles XX through XXIII of the Energy Policy Act of 1992 [42 U.S.C. 13401 et seq., 13451 et seq., 13501 et seq., 13521 et seq.].

(T) to pursue a long-term climate technology strategy designed to demonstrate a portfolio of energy generation technologies by which stabilization of atmospheric carbon dioxide concentrations might be best achieved including the accelerated commercial demonstration of low-cost and high efficiency photovoltaic power systems; advanced clean coal technology; advanced nuclear power plant designs; fuel cell or equivalent high efficiency, minimally-polluting distributed power technology for cost-effective residential and transportation activities; and low-cost carbon sequestration technologies and practices.

(c) COMPREHENSIVE ENVIRONMENT AND SAFETY PROGRAM.—

Based upon the comprehensive plan developed under subsection (a) of this section, the Secretary, in consultation with the Advisory Board established under section 2302 of the Energy Policy Act of 1992 [42 U.S.C. 13522], shall develop and transmit to the Congress, on or before September 1, 1978, a comprehensive environment and safety program to insure the full consideration and evaluation of all environmental, health, and safety impacts of each element, program, or initiative contained in the nuclear and nonnuclear energy research, development,

and demonstration plans. Such program shall be updated and transmitted to the Congress annually as part of the report required under section 5914 of this title.

###

[date]

Senator Robert Kerrey
United States Senate
Washington, D.C. 20515

Dear Senator Kerrey:

Thank you for your May ___, 1999 letter requesting the Department of Energy's views on S.882, the Energy and Climate Policy Act of 1999. [The Department's basic view is that there are [many?] positive aspects of this bill. At the same time, however, we think it is important to realize that, as currently written, the bill cannot be seen as a substitute for either the Kyoto Protocol or the broad range of Administration policies already in place to address climate change. Allow me to elaborate on this fundamental point.]

First, we are encouraged to see that the sponsors of this bill, Senators Murkowski and Hagel, now recognize that the threat of climate change is serious and needs to be addressed. This is real progress and we commend them for their contribution to the debate.

Second, we also welcome the bill's recognition of the importance of promoting long-term research and development of technologies to reduce or sequester greenhouse gases. As you know, the Administration is already working in partnership with the private sector to accelerate the development and deployment of energy efficient technologies and renewable energy. Importantly, however, these efforts include *both* medium and long-term research, as well as more immediate "win-win" deployment programs such as Energy Star Products, Energy Star Buildings, Green Lights, and the President's Million Solar Roofs initiative. We feel this balance between near and long term efforts is important and appropriate.

Third, the Department welcomes the statements by Senators Murkowski and Hagel that their bill's proposed \$200 million R&D authorization program would be in addition to Federal efforts already underway to address climate change. As you know, Congress appropriated over \$1 billion for these programs in FY 1999, and the Administration has requested nearly \$1.4 billion for FY 2000. The real question now for Congress is how much is it willing to appropriate for these clean energy efforts that not only reduce greenhouse gas emissions, but that are also good for business, good for consumers, good for U.S. competitiveness, and good for our energy security.

Fourth, we note that this bill would not give businesses real, bankable credit for taking early action to reduce greenhouse gas emissions. We believe that businesses deserve such credit and we are prepared to work with Congress and stakeholders on a fair and workable program that rewards real environmental gain.

Fifth, we think it important to make clear that this bill -- focusing almost exclusively, as it does, on long-term R&D -- cannot be seen as a substitute for the broad range of policies and activities already underway to address climate change. In addition to the research program discussed

above, these efforts include: a five year package of tax incentives to encourage the purchase of clean energy products; a bill to restructure the electricity industry; a set of working partnerships with key energy-intensive sectors including autos, home building, steel, chemicals, and forest products; a \$1.7 billion scientific research program to improve our understanding of the forces that shape the Earth's climate. A serious, comprehensive climate change policy needs to address all of these areas.

Sixth, the bill's sponsors have stated repeatedly that the United States should abandon the Kyoto Protocol and that their legislation is offered as a substitute for the Protocol. We fundamentally disagree with this approach. Let me clearly reiterate what the Administration has repeatedly stated: the Kyoto Protocol is a work in progress. Thanks largely to U.S. leadership, the treaty embodies a market-based approach that will get us the most environmental gain for each available dollar, mark or yen. But is also a treaty that still needs more work. In particular, there needs to be greater participation by developing countries in efforts to address climate change and we are currently engaged in a vigorous diplomatic effort towards this end. Until we secure such participation, the Administration has made clear it won't submit the Protocol for ratification. It is in the best interests of the United States to continue with this process.

In summary, we believe that the United States should keep working on diplomatic front to complete the Kyoto Protocol so that it can be ratified, and keep working on domestic front on steps to promote energy efficient technologies and practices that not only reduce net greenhouse gas emissions, but that also provide economic and environmental benefits to American consumers. [We welcome S. 882 insofar it contributes to this process.]

Again, thank you for your interest in this important issue and we look forward to working with the Energy Committee and other interested Senators on this legislation as well as other efforts to address the challenge of climate change.

Sincerely yours,

Bill Richardson
Secretary of Energy



U.S. Senator Ron Wyden



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COMMENTS:

FOREST RESOURCES FOR THE ENVIRONMENT AND ECONOMY ACT DISCUSSION DRAFT (5/28/99)

The Forest Resources for the Environment and Economy Act will provide up to \$25 million per year in federal funding for state revolving loan programs modeled after Oregon's Forest Resource Trust. State programs (including Oregon's Trust) will be eligible to receive federal funding, provided that the state provides at least 25% in matching funds after the first year. Other states are encouraged to build similar programs. Under the Act, states will provide loans to private landowners for tree planting and other forest management actions that increase carbon storage and provide a positive impact on watershed and habitat protection.

The Forest Resources for the Environment and Economy Act will...

- *Take cost-effective steps to combat global warming* -- Forestry projects funded under the program must increase the amount of carbon stored on the land (in trees, foliage, soil, etc.) above what would happen under current land use. In addition to removing greenhouse gases from the atmosphere, the Act will demonstrate forests' critical role in mitigating global warming and help ensure that forestry interests are represented in future global warming programs.
- *Protect watersheds, fisheries, and wildlife habitats* by funding projects such as tree planting of riparian areas. Landowners that decide not to harvest their land do not have to repay the loan, and the loan can be satisfied by entering the land into a conservation easement.
- *Provide forestry jobs* by funding tree planting and other forestry projects and by creating a new demand for forestry workers to monitor and verify carbon storage in the field. Funds can be used by landowners to pay contractors as well as their own employees.
- *Provide future timber resources on private lands* -- timber grown under the program can be harvested, in which case proceeds from the harvest must be used to pay back the loan, with interest. The government does not acquire any land under the Act. Landowners can receive loans to provide 100% of the up-front capital needed for reforestation or forest management projects. The contract can be terminated by the landowner at any time by repaying the loan. The landowner is protected from any losses due to fire, infestation, or other uncontrollable events. Loans can also be used for projects to increase biomass for energy feedstocks in order to increase use of renewable, carbon-neutral energy sources.
- *Put State Foresters in charge* -- If a state chooses to participate in the program, the state receives federal funding that the State Forester loans to private landowners. Within the criteria and objectives of the Act, the State Forester has flexibility in determining the loan arrangements that best satisfy the needs of landowners.
- *Provide assistance from the U.S. Forest Service* -- The federal program is administered by the U.S. Forest Service, who will provide guidance and assistance to states and certify that state loan programs are eligible to receive funding. The Forest Service will also

work to establish federal guidelines for accurate monitoring and verification of carbon storage in forests.

- *Leverage private and state funding* -- The Act encourages companies to provide funding to a state program in exchange for verified carbon credits. The Act also requires any state that participates in the program to match 25% of the funding provided to the state after the first year.
- *Compound the federal investment over time* -- The Act capitalizes state revolving loan programs that will grow over time with interest and be reinvested in additional projects.
- *Add to existing forestry assistance programs* -- The revolving loan program is an additional federal vehicle for assisting private landowners, complementing existing cost-share programs, such as Stewardship Incentives Program and the Forestry Incentives Program. Federal forestry assistance to private landowners has declined by more than half over the last decade, while the need to increase private forested lands is stronger than ever due to declining harvests on federal lands and additional environmental concerns such as the possibility of global warming.
- *Fund projects that wouldn't happen without the program* -- Under the Act, loans are provided for projects that maximize environmental benefit above and beyond current land uses and forest management practices. Loans are only eligible to owners of less than 5,000 acres of forest land because the loans are designed to overcome capital constraints of small to medium sized landowners. The Act prohibits funding of projects already required by local, state, or federal laws. To prevent perverse incentives, the Act prohibits funding for projects on lands that are harvested after enactment.
- *Prohibit double dipping for federal funds* -- Loans can not be issued for projects on lands that already receive federal assistance.
- *Lead the way for increasing carbon storage on federal lands* -- The Act directs the Forest Service to report to Congress on options to increase carbon storage on federal lands.

(3) have the authority to participate in the planning activities of relevant Department of Energy programs.

42 USC 13334.

SEC. 1604. ASSESSMENT OF ALTERNATIVE POLICY MECHANISMS FOR ADDRESSING GREENHOUSE GAS EMISSIONS.

Not later than 18 months after the date of the enactment of this Act, the Secretary shall transmit a report to Congress containing a comparative assessment of alternative policy mechanisms for reducing the generation of greenhouse gases. Such assessment shall include a short-run and long-run analysis of the social, economic, energy, environmental, competitive, and agricultural costs and benefits, including costs and benefits for jobs and competition, and the practicality of each of the following policy mechanisms:

(1) Various systems for controlling the generation of greenhouse gases, including caps for the generation of greenhouse gases from major sources and emissions trading programs.

(2) Federal standards for energy efficiency for major sources of greenhouse gases, including efficiency standards for power plants, industrial processes, automobile fuel economy, appliances, and buildings, and for emissions of methane.

(3) Various Federal and voluntary incentives programs.

42 USC 13385.

SEC. 1605. NATIONAL INVENTORY AND VOLUNTARY REPORTING OF GREENHOUSE GASES.

(a) **NATIONAL INVENTORY.**—Not later than one year after the date of the enactment of this Act, the Secretary, through the Energy Information Administration, shall develop, based on data available to, and obtained by, the Energy Information Administration, an inventory of the national aggregate emissions of each greenhouse gas for each calendar year of the baseline period of 1987 through 1990. The Administrator of the Energy Information Administration shall annually update and analyze such inventory using available data. This subsection does not provide any new data collection authority.

(b) **VOLUNTARY REPORTING.**—

(1) **ISSUANCE OF GUIDELINES.**—Not later than 18 months after the date of the enactment of this Act, the Secretary shall, after opportunity for public comment, issue guidelines for the voluntary collection and reporting of information on sources of greenhouse gases. Such guidelines shall establish procedures for the accurate voluntary reporting of information on—

(A) greenhouse gas emissions—

(i) for the baseline period of 1987 through 1990; and

(ii) for subsequent calendar years on an annual basis;

(B) annual reductions of greenhouse gas emissions and carbon fixation achieved through any measures, including fuel switching, forest management practices, tree planting, use of renewable energy, manufacture or use of vehicles with reduced greenhouse gas emissions, appliance efficiency, energy efficiency, methane recovery, cogeneration, chlorofluorocarbon capture and replacement, and power plant heat rate improvement;

(C) reductions in greenhouse gas emissions achieved as a result of—

(i) voluntary reductions;

(ii) plant or facility closings; and

(iii) State or Federal requirements; and

(D) an aggregate calculation of greenhouse gas emissions by each reporting entity.

Such guidelines shall also establish procedures for taking into account the differential radiative activity and atmospheric lifetimes of each greenhouse gas.

(2) **REPORTING PROCEDURES.**—The Administrator of the Energy Information Administration shall develop forms for voluntary reporting under the guidelines established under paragraph (1), and shall make such forms available to entities wishing to report such information. Persons reporting under this subsection shall certify the accuracy of the information reported.

(3) **CONFIDENTIALITY.**—Trade secret and commercial or financial information that is privileged or confidential shall be protected as provided in section 552(b)(4) of title 5, United States Code.

(4) **ESTABLISHMENT OF DATA BASE.**—Not later than 18 months after the date of the enactment of this Act, the Secretary, through the Administrator of the Energy Information Administration, shall establish a data base comprised of information voluntarily reported under this subsection. Such information may be used by the reporting entity to demonstrate achieved reductions of greenhouse gases.

(c) **CONSULTATION.**—In carrying out this section, the Secretary shall consult, as appropriate, with the Administrator of the Environmental Protection Agency.

SEC. 1606. REPEAL.

Title III of the Energy Security Act (42 U.S.C. 7361 et seq.) is hereby repealed.

SEC. 1607. CONFORMING AMENDMENT.

The Secretary, through the Trade Promotion Coordinating Council, shall develop policies and programs to encourage the export and promotion of domestic energy resource technologies, including renewable energy, energy efficiency, and clean coal technologies, to developing countries.

SEC. 1608. INNOVATIVE ENVIRONMENTAL TECHNOLOGY TRANSFER PROGRAM.

(a) **ESTABLISHMENT OF PROGRAM.**—The Secretary, through the Agency for International Development, and in consultation with the interagency working group established under section 256(d) of the Energy Policy and Conservation Act (in this section referred to as the "interagency working group"), shall establish a technology transfer program to carry out the purposes described in subsection (b). Within 150 days after the date of the enactment of this Act, the Secretary and the Administrator of the Agency for International Development shall enter into a written agreement to carry out this section. The agreement shall establish a procedure for resolving any disputes between the Secretary and the Administrator regarding the implementation of specific projects. With respect to countries not assisted by the Agency for International Development, the Secretary may enter into agreements with other appropriate Federal agencies. If the Secretary and the Administrator, or the Secretary and an agency described in the previous sentence, are unable to

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*Discussion
Draft*106TH CONGRESS
1ST SESSION**S.** _____

IN THE SENATE OF THE UNITED STATES

Mr. WYDEN introduced the following bill; which was read twice and referred
to the Committee on _____

A BILL

To amend the Energy Policy Act of 1992 to assess opportunities to sequester carbon on national forests derived from the public domain and to facilitate voluntary and accurate reporting of forest projects that reduce atmospheric carbon dioxide concentrations, and for other purposes.

1 *Be it enacted by the Senate and House of Representa-*
2 *tives of the United States of America in Congress assembled,*

3 **SECTION 1. SHORT TITLE.**

4 This Act may be cited as the "Forest Resources for
5 the Environment and the Economy Act".

6 **SEC. 2. FINDINGS AND PURPOSES.**

7 (a) FINDINGS.—Congress finds that—

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1 (1) the Federal Government should increase the
2 forest carbon storage on public land while pursuing
3 existing statutory objectives, but insufficient infor-
4 mation exists on the opportunities, costs, and im-
5 pacts of changes in public land management to in-
6 crease carbon storage;

7 (2) important environmental benefits to na-
8 tional forests in the United States can be achieved
9 through cooperative forest projects that enhance
10 fish, wildlife, and other resources on public or pri-
11 vate land located in national forest watersheds;

12 (3) forest projects also provide economic bene-
13 fits, including—

14 (A) employment and income that con-
15 tribute to the sustainability of rural commu-
16 nities; and

17 (B) future supplies of forest products;

18 (4) monitoring and verification of forest carbon
19 storage can also provide a new source of employment
20 in rural communities; and

21 (5) sustainable production of biomass energy
22 feedstocks provides a renewable source of energy
23 that can reduce carbon dioxide emissions and im-
24 prove the energy security of the United States by di-
25 versifying energy fuels.

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1 (b) PURPOSES.—The purposes of this Act are—

2 (1) to increase forest carbon sequestration in
3 the United States;

4 (2) to improve the health of national forests de-
5 rived from the public domain;

6 (3) to enhance wildlife and fishery habitats;

7 (4) to reduce water pollution;

8 (5) to provide employment and income to rural
9 communities;

10 (6) to provide new sources of forest products;
11 and

12 (7) to increase use of renewable biomass energy
13 and improve the energy security of the United
14 States.

15 **SEC. 3. DEFINITIONS.**

16 In this Act:

17 (1) **CARBON STORAGE.**—The term “carbon
18 storage” means the quantity of carbon sequestered
19 from the atmosphere and stored in forest carbon res-
20 ervoirs or forest products.

21 (2) **FOREST CARBON RESERVOIR.**—The term
22 “forest carbon reservoir” means the quantity of car-
23 bon stored in trees, roots, soils, or other biomass.

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1 (3) FOREST LAND.—The term “forest land”
2 means land for which the natural condition is forest
3 cover.

4 (4) FORESTRY ACTIVITY.—The term “forestry
5 activity” means a forest management action that in-
6 creases carbon storage.

7 (5) NATIONAL FOREST WATERSHED.—The term
8 “national forest watershed” means a watershed in
9 which any part of a national forest is situated.

10 (6) PRIME RATE.—The term “prime rate”, with
11 respect to a loan from a revolving loan fund, means
12 a rate of interest that does not exceed the rate of
13 interest on outstanding marketable obligations of the
14 United States of a maturity comparable to that of
15 the loan.

16 (7) REFORESTATION.—

17 (A) IN GENERAL.—The term “reforest-
18 ation” means the natural or artificial establish-
19 ment of forest on an area previously with forest
20 cover.

21 (B) INCLUSIONS.—The term “reforest-
22 ation” includes—

23 (i) planned replanting;

24 (ii) reseeding; and

25 (iii) managed natural regeneration.

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1 (8) REVOLVING LOAN FUND.—The term “re-
2 volving loan fund” means a State revolving loan
3 fund established under section 5.

4 (9) SECRETARY.—The term “Secretary” means
5 the Secretary of Agriculture, acting through the
6 Chief of the Forest Service.

7 (10) SEQUESTRATION.—The term “sequestra-
8 tion” means the action of vegetable matter in—

9 (A) extracting carbon dioxide from the at-
10 mosphere through photosynthesis;

11 (B) converting the carbon dioxide to car-
12 bon; and

13 (C) storing the carbon in the form of roots,
14 stems, soil, or foliage.

15 **SEC. 4. CARBON MANAGEMENT AND STORAGE ON FEDERAL**
16 **LAND.**

17 (a) DEFINITIONS.—Title XVI of the Energy Policy
18 Act of 1992 is amended by inserting before section 1601
19 (42 U.S.C. 13381) the following:

20 **“SEC. 1600. DEFINITIONS.**

21 **“In this title:**

22 **“(1) CARBON SAVINGS.—The term ‘carbon sav-**
23 **ings’ means the quantity of carbon storage resulting**
24 **from forestry activities.**

1 “(2) CARBON STORAGE.—The term ‘carbon
2 storage’ means the quantity of carbon sequestered
3 from the atmosphere and stored in forest carbon res-
4 ervoirs or forest products.

5 “(3) CARBON STORAGE PROGRAM.—The term
6 ‘carbon storage program’ means the program estab-
7 lished by the Secretary of Agriculture under section
8 5 of the Forest Resources for the Environment and
9 the Economy Act, to provide assistance through
10 State revolving loan funds.

11 “(4) FOREST CARBON RESERVOIR.—The term
12 ‘forest carbon reservoir’ means the quantity of car-
13 bon stored in trees, roots, soils, or other biomass.

14 “(5) FORESTRY ACTIVITY.—The term ‘forestry
15 activity’ means a forest management action that in-
16 creases carbon storage.

17 “(6) SEQUESTRATION.—The term ‘sequestra-
18 tion’ means the action of vegetable matter in—

19 “(A) extracting carbon dioxide from the at-
20 mosphere through photosynthesis;

21 “(B) converting the carbon dioxide to car-
22 bon; and

23 “(C) storing the carbon in the form of
24 roots, stems, soil, or foliage.”.

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1 (b) CARBON MANAGEMENT ON FEDERAL LAND.—
2 Section 1604 of the Energy Policy Act of 1992 (42 U.S.C.
3 13384) is amended—

4 (1) by inserting “(a) REPORT.—” before
5 “Not”; and

6 (2) by adding at the end the following:

7 “(b) CARBON MANAGEMENT ON FEDERAL LAND.—

8 “(1) IN GENERAL.—Not later than 1 year after
9 the date of enactment of this subsection, after con-
10 sultation with appropriate Federal agencies, the Sec-
11 retary of Agriculture shall report to Congress on—

12 “(A) the quantity of carbon contained in
13 the forest carbon reservoir on national forests
14 derived from the public domain; and

15 “(B) the potential to increase that quan-
16 tity through forestry activities.

17 “(2) CONTENTS.—The report shall include an
18 assessment of any impacts of forestry activities on
19 timber harvests, wildlife habitat, recreation, forest
20 health, and other statutory objectives of national for-
21 est management.”.

22 (c) MONITORING AND VERIFICATION OF CARBON
23 STORAGE.—Section 1605(b) of the Energy Policy Act of
24 1992 (42 U.S.C. 13385(b)) is amended by adding at the
25 end the following:

1 “(5) GUIDELINES ON REPORTING, MONITORING,
2 AND VERIFICATION OF CARBON STORAGE FROM FOR-
3 ESTRY AND AGRICULTURAL PROJECTS.—

4 “(A) IN GENERAL.—Not later than 18
5 months after the date of enactment of this
6 paragraph, the Secretary of Agriculture, in con-
7 sultation with the State Foresters and appro-
8 priate Federal agencies, shall—

9 “(i) review the guidelines established
10 under paragraph (1) that address proce-
11 dures for the accurate voluntary reporting
12 of greenhouse gas sequestration from for-
13 estry activities and agricultural activities;
14 and

15 “(ii) make recommendations to the
16 Secretary of Energy for amendment of the
17 guidelines.

18 “(B) PUBLIC COMMENT.—The Secretary
19 of Agriculture shall provide an opportunity for
20 public comment on—

21 “(i) the guidelines established under
22 paragraph (1) that address procedures for
23 the accurate voluntary reporting of green-
24 house gas sequestration from forestry ac-
25 tivities and agricultural activities; and

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1 “(ii) proposed recommendations for
2 amendment of the guidelines (before the
3 recommendations are made final).

4 “(C) ACCURATE PRACTICES.—The rec-
5 ommendations shall include guidelines on accu-
6 rate practices for monitoring and verification of
7 carbon storage from forestry activities and agri-
8 cultural activities.

9 “(D) CARBON STORAGE.—The rec-
10 ommendations shall include guidelines to States
11 for reporting, monitoring, and verifying carbon
12 storage in the carbon storage program.

13 “(E) AMENDMENT OF GUIDELINES.—Not
14 later than 180 days after receiving the rec-
15 ommendations from the Secretary of Agri-
16 culture, the Secretary of Energy shall revise the
17 guidelines established under paragraph (1) to
18 include the recommendations.

19 “(6) MONITORING OF CARBON STORAGE PRO-
20 GRAMS BY PARTICIPATING STATES.—

21 “(A) IN GENERAL.—Each State that par-
22 ticipates in the carbon storage program shall, in
23 accordance with the guidelines issued under
24 paragraph (1), monitor and verify carbon sav-
25 ings achieved under the program.

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1 “(B) REPORTS.—

2 “(i) STATES.—Each State shall report
3 annually to the Secretary of Agriculture on
4 the results of the carbon storage program.

5 “(ii) SECRETARY OF AGRICULTURE.—
6 The Secretary of Agriculture shall report
7 annually to Congress on the results of the
8 carbon storage program, including an as-
9 sessment of the effectiveness of monitoring
10 and verification.

11 “(C) REPORTING OF CARBON SAVINGS.—

12 “(i) IN GENERAL.—For each project
13 under the carbon storage program funded
14 with funds provided by nongovernmental
15 organizations or businesses, for each year
16 in which the carbon savings are realized
17 from the project, the State shall submit to
18 the nongovernmental organizations or busi-
19 nesses and the Secretary of Agriculture a
20 report that—

21 “(I) states the quantity of carbon
22 savings realized; and

23 “(II) includes the data used to
24 monitor and verify the carbon savings.

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1 “(ii) GUIDELINES.—The carbon sav-
2 ings shall be calculated, monitored, and
3 verified according to guidelines issued by
4 the Secretary of Agriculture.

5 “(iii) REVIEW BY THE SECRETARY OF
6 AGRICULTURE.—The Secretary of Agri-
7 culture shall—

8 “(I) review each report under
9 clause (i) to verify compliance with
10 the guidelines under clause (ii); and

11 “(II)(aa) if the report is in com-
12 pliance, certify that the report is in
13 compliance, notify the State, and sub-
14 mit a copy of the certified report to
15 the Secretary; or

16 “(bb) if the report is not in com-
17 pliance, notify the State and the non-
18 governmental organizations or busi-
19 nesses of any corrections that are
20 needed for certification.

21 “(iv) INCLUSION IN INVENTORY.—The
22 Secretary shall include the reports under
23 clause (i) in the inventory maintained
24 under subsection (a), except that any re-
25 port submitted directly by a person shall

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1 supersede the report submitted by the Sec-
2 retary of Agriculture.”.

3 **SEC. 5. CARBON STORAGE AND WATERSHED RESTORATION**
4 **PROGRAM.**

5 (a) NATIONAL FOREST WATERSHED RESTORATION
6 COOPERATIVE AGREEMENTS.—The Secretary may enter
7 into cooperative agreements with willing State and local
8 governments, private and nonprofit entities, and land-
9 owners for protection, restoration, and enhancement of
10 fish and wildlife habitat and other resources on public or
11 private land in a national forest watershed.

12 (b) REVOLVING LOAN FUNDS.—

13 (1) IN GENERAL.—In consultation with State
14 Foresters and other appropriate State officials, the
15 Secretary shall establish a program to provide assist-
16 ance through revolving loan funds to owners of non-
17 industrial private forest land to undertake forestry
18 activities, including those specified in a national for-
19 est watershed restoration cooperative agreement es-
20 tablished under subsection (a), that—

21 (A) increase the forest carbon reservoir of
22 the United States; or

23 (B) provide new sources of biomass feed-
24 stocks for renewable energy generation.

1 (2) ELIGIBILITY.—An owner of private forest
2 land shall be eligible for assistance from a revolving
3 loan fund if the owner owns not more than 5,000
4 acres of nonindustrial private forest land.

5 (3) FORESTRY ACTIVITIES.—

6 (A) OBJECTIVES OF FORESTRY ACTIVI-
7 TIES.—Eligible forestry activities shall be activi-
8 ties that, when evaluated in their entirety for a
9 parcel of land—

10 (i) increase long-term carbon storage
11 or provide new sources of biomass feed-
12 stocks for renewable energy generation;
13 and

14 (ii) have a positive impact on water-
15 shed and habitat protection.

16 (B) GUIDANCE.—The Secretary shall pro-
17 vide guidance to States on eligible forestry ac-
18 tivities based on the criteria of this Act, recog-
19 nizing that States should have maximum flexi-
20 bility to achieve the purposes of this Act in
21 ways most appropriate for each State.

22 (C) ACTIVITIES REQUIRED UNDER OTHER
23 LAW.—Funding shall not be provided under
24 this section for activities required under appli-
25 cable Federal, State, or local law.

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1 (D) PREAGREEMENT ACTIVITIES.—Fund-
2 ing shall not be provided for costs incurred be-
3 fore entering into a loan agreement with the
4 State under this Act.

5 (E) LAND HARVESTED AFTER DATE OF
6 ENACTMENT.—Reforestation of land harvested
7 after the date of enactment of this Act shall not
8 be eligible for a loan.

9 (F) NO ADDITIONAL ASSISTANCE.—Fund-
10 ing shall not be provided for a project that will
11 receive cost-share assistance on the same acre-
12 age under any other Federal cost-share pro-
13 gram.

14 (4) USE OF LOAN FUNDS.—The proceeds of a
15 loan under the program—

16 (A) may be used to pay—

17 (i) the cost of purchasing and plant-
18 ing tree seedlings; and

19 (ii) other costs, including consultant
20 and contractor fees, associated with plan-
21 ning, site preparation, tree planting, forest
22 management, and other forestry activities;
23 and

24 (B) may not be used to—

15

1 (i) pay the owner for the owner's own
2 labor; or

3 (ii) purchase capital items or expend-
4 able items, such as vehicles, tools, and
5 other equipment.

6 (5) LOAN AMOUNT.—A revolving loan fund
7 shall be used to provide a loan to an owner of pri-
8 vate forest land in an amount of up to 100 percent
9 of carrying out forestry activities, except that the
10 amount of loans made to an owner under this sec-
11 tion may not exceed \$100,000 during any 2-year pe-
12 riod.

13 (6) LOAN TERMS.—A loan agreement under the
14 program shall—

15 (A) include repayment terms for sharing
16 the proceeds of sales of timber biomass for en-
17 ergy feeds, and other forest products for repay-
18 ment of the loan, with interest at a rate (not
19 lower than the prime rate) established by the
20 State and specified in the agreement, except
21 that if the land is not harvested for timber for
22 a period of 200 years, the loan shall not be re-
23 quired to be repaid;

24 (B) include provisions that provide for pri-
25 vate insurance or that otherwise release the

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1 owner from the financial obligation for any por-
2 tion of the timber, forest products, or other bio-
3 mass that—

4 (i) is lost to insects, disease, fire,
5 storm, flood, or other natural destruction
6 through no fault of the owner; or

7 (ii) cannot be harvested because of re-
8 strictions on tree harvesting imposed by
9 the Federal, State, or local government
10 after the date of the agreement;

11 (C) impose a lien on all timber, forest
12 products, and biomass grown on land covered
13 by the loan, with an assurance that the terms
14 of the lien shall transfer with the land on sale,
15 lease, or transfer of the land;

16 (D) include a buyout option that—

17 (i) specifies financial terms allowing
18 the owner to terminate the agreement be-
19 fore harvesting timber from the stand es-
20 tablished with loan funds; and

21 (ii) repays the loan with interest; and

22 (E) specify that for any project funded
23 with the loan—

24 (i) the State has exclusive rights to
25 any carbon storage credits that could be

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1 used for purposes of complying with any
2 current or future Federal, State, or local
3 air quality or climate protection objectives
4 or regulations; and

5 (ii) the State shall be entitled to—

6 (I) transfer the credits to any
7 nongovernmental organization, busi-
8 ness, or person that has provided
9 funds to the revolving loan fund; or

10 (II) dispose of the credits in any
11 other way that the State chooses.

12 (7) REMOVAL OF LIEN.—The State shall re-
13 move the timber lien required under paragraph
14 (6)(C) if a conservation easement that permanently
15 protects the private forest land is conveyed to the
16 State or another appropriate entity.

17 (8) RECORDS.—The State Forester shall—

18 (A) maintain all records related to any
19 loan agreement funded from a revolving loan
20 fund; and

21 (B) make the records available to the pub-
22 lic.

23 (9) ALLOCATION OF FUNDS.—

24 (A) IN GENERAL.—The Secretary shall al-
25 locate funds available for loans to a State after

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1 determining that the State has implemented a
2 system to administer the loans in accordance
3 with this Act.

4 (B) MATCHING FUNDS.—Beginning in the
5 second year of a State's participation in the
6 program under this section, the non-Federal
7 share of funds provided to carry out the pro-
8 gram shall be 25 percent.

9 (C) FORMULA.—

10 (i) IN GENERAL.—Not later than 180
11 days after the date of enactment of this
12 Act, in consultation with State Foresters,
13 the Secretary shall—

14 (I) establish a formula under
15 which, subject to clause (iii), Federal
16 funds shall be distributed under this
17 section among eligible States; and

18 (II) report the formula and
19 methodology to Congress.

20 (ii) BASIS.—The formula shall be
21 based on maximizing the potential for
22 meeting the objectives of this Act, after
23 giving appropriate consideration to—

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1 (I) the acreage of unstocked or
2 underproductive private forest land in
3 each State;

4 (II) the potential productivity of
5 such land;

6 (III) the potential long-term car-
7 bon storage of such land;

8 (IV) the potential to achieve
9 other environmental benefits, such as
10 forest establishment in riparian areas
11 and wetlands;

12 (V) the number of owners eligible
13 for loans under this section in each
14 State; and

15 (VI) the need for reforestation,
16 timber stand improvement, or other
17 forestry investments consistent with
18 the objectives of this Act.

19 (iii) STATES WITH SIGNIFICANT DE-
20 CLINES IN EMPLOYMENT LEVELS.—In
21 order to support sustainable rural econo-
22 mies, at least 40 percent of appropriated
23 funding under this section shall be made
24 available to States that have experienced
25 or are expected to experience significant

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1 declines in employment levels in the for-
2 estry industries due to declining timber
3 harvests on Federal land.

4 (10) PRIVATE FUNDING AND CARBON STORAGE
5 CREDITS.—A revolving loan fund may accept and
6 distribute as loans any funds provided by nongovern-
7 mental organizations, businesses, and persons in ex-
8 change for carbon storage credits.

9 (11) AUTHORIZATION OF APPROPRIATIONS.—
10 There is authorized to be appropriated to carry out
11 this section \$25,000,000 for each of fiscal years
12 2001 through 2005.

 Michael L. Rodemeyer
05/25/99 03:32:12 PM

Record Type: Record

To: Julie M. Anderson/WHCCTF/EOP@EOP, Roger S. Ballentine/WHO/EOP@EOP

cc:

Subject: Roberts Summary --may want to send on to Julie

Julie had asked for some reaction a few weeks ago.

Summary of Draft Bill from Senator Roberts Carbon Cycle and Agricultural Best Practices Research Act

Problematic Language:

- Cites Fan, Sarmiento, et al, paper (controversial work that implies US sink is greater than US emissions) as NOAA result.
- Designates USDA as lead agency with respect to any agricultural soil carbon research conducted by the Federal government. USDA is, and should be, a leader, but does not need to be given exclusive leadership role. USGS and DOE also have significant expertise.
- Sets up USDA/NASA Regional Earth Science Application Center at University of Kansas to carry out research on remote sensing of carbon sequestration (authorized at \$5million per year for FY2000 – 2002).
- Allows payments of conservation premium payments top producers as compensation for allowing research activities on their land, but prohibits Secretary of Agriculture from using results for “enforcement” or providing research results to EPA.
- Prohibits Secretary of Agriculture from carrying out a conservation or carbon sequestration program, and says that best management practices can’t be used for purposes of trading or meeting emissions limitations.

Possibly positive language (needs closer look):

- Calls for establishment of biotechnology research partnership program authorized at \$15 million for FY200-2002.
- Calls for establishment of USDA-NOAA carbon monitoring system (relation to carbon sequestration remote sensing program with NASA unclear) authorized at \$10 million.

- Agricultural best practices tax credit.

Strange language:

- Says that soil carbon can be increased without “implementing a United Nations sponsored climate change emissions trading system that would disregard the scientific possibility that climate change also means global cooling.”

[date]

Senator Jeff Bingaman
United States Senate
Washington, D.C. 20515

Dear Senator Bingaman:

Thank you for your May ___, 1999 letter requesting the Department of Energy's views on S.882, the Energy and Climate Policy Act of 1999.

First, we are encouraged to see that the sponsors of this bill, Senators Murkowski and Hagel, now recognize that the threat of climate change is serious and needs to be addressed. This is real progress and we commend them for their contribution to the debate.

Second, we also welcome the bill's recognition of the importance of promoting long-term research and development of technologies to reduce or sequester greenhouse gases. As you know, the Administration is already working in partnership with the private sector to accelerate the development and deployment of energy efficient technologies and renewable energy. Importantly, however, these efforts include both medium and long-term research, as well as more immediate "win-win" deployment programs such as Energy Star Products, Energy Star Buildings, Green Lights, and the President's Million Solar Roofs initiative. We feel this balance between near and long term efforts is important and appropriate.

Third, the Department welcomes the statements by Senators Murkowski and Hagel that their bill's proposed \$200 million R&D authorization program would be *in addition* to federal efforts already underway to address climate change. As you know, Congress appropriated over \$1 billion for these programs in FY 1999, and the Administration has requested nearly \$1.4 billion for FY 2000. The real question now for Congress is how much is it willing to appropriate for these clean energy efforts that not only reduce greenhouse gas emissions, but that are also good for business, good for consumers, good for U.S. competitiveness, and good for our energy security.

Fourth, we are concerned that this bill would not give businesses real, bankable credit for taking early action to reduce greenhouse gas emissions. We believe that businesses deserve such credit and we are prepared to work with Congress and stakeholders on a fair and workable program that rewards real environmental gain.

Fifth, we think it important to make clear that this bill -- focusing almost exclusively, as it does, on long-term R&D -- cannot be seen as a substitute for the broad range of policies already underway to address climate change. In addition to the research program discussed above, these efforts include: a five year package of tax incentives to encourage the purchase of clean energy products; a bill to restructure the electricity industry; a set of working partnerships with key energy-intensive sectors including autos, home building, steel, chemicals, and forest products; a \$1.7 billion scientific research program to improve our understanding of the forces that shape

the Earth's climate. A serious, comprehensive climate change policy needs to address all of these areas.

Sixth, the bill's sponsors have stated repeatedly that the United States should abandon the Kyoto Protocol and that their legislation is offered as a substitute for the Protocol. We think this approach is fundamentally misguided. Let me clearly reiterate what the Administration has repeatedly stated: the Kyoto Protocol is a work in progress. Thanks largely to U.S. leadership, the treaty embodies a market-based approach that will get us the most environmental gain for each available dollar, mark or yen. But is also a treaty that still needs more work. In particular, there needs to be greater participation by developing countries in efforts to address climate change and we are currently engaged in a vigorous diplomatic effort towards this end. Until [this unfinished business is finished] OR [we secure such participation], the Administration has made clear it won't submit the Protocol for ratification. It is in the best interests of the United States to continue with this process.

In summary, we believe that the United States should keep working on diplomatic front to complete the Kyoto Protocol so that it can be ratified, and keep working on domestic front on steps to promote energy efficient technologies and practices that not only reduce net greenhouse gas emissions, but that also provide economic and environmental benefits to American consumers. While we see S. 882 as a sincere and positive contribution to the debate, we fear that its narrow and limited focus will divert us from this sensible, pragmatic approach.

Again, thank you for your interest in this important issue and we look forward to working with the Energy Committee and other interested Senators on this legislation as well as other efforts to address the challenge of climate change.

Sincerely yours,

Bill Richardson
Secretary of Energy