What is the most effective way for Congress to engage in the effort to address climate change?
Individual behavior is already being employed—to some degree

- Mandatory recycling
- Net Metering
- Mandatory refund laws for beverage containers
- Tax credits for energy efficiency
- Customer engagement with utilities & dynamic pricing (e.g., time-of-day metering)

- These laws all tend to reduce greenhouse gas emissions.
“[W]e must also admit that fulfilling America's promise will require more than just money. It will require a renewed sense of responsibility from each of us to recover what John F. Kennedy called our intellectual and moral strength.

Yes, government must lead... but each of us must do our part to make our homes and businesses more efficient.

Individual responsibility and mutual responsibility - that’s the essence of America’s promise.”

Barack Obama, August 28, 2008
Climate change bills

- Findings concerning seriousness of problem as well as opportunities that it creates.
- Steep and progressive cuts in current greenhouse gas emissions by 2050
- Market-based mechanisms for achieving these cuts, including trading.
- Hundreds of pages long
- Role of individual:
  - Does not appear to be a priority
  - Considerable differences among bills
Cap and trade will affect human behavior, but will not affect all sources because of market imperfections.

- 1) consumers undervalue efficiency/conservation savings
- 2) principal/agent problem for efficiency/conservation
- 3) price signal not sufficient for needed investment
What follows: Menu of options for engaging individual behavior

- Many of these are taken from various bills.
- Some of these should perhaps be removed.
- In all likelihood, some items should be added.
A. Findings and purposes

1. Purpose. Congress could identify full engagement of the citizenry in the national climate change effort as a necessary and important purpose of the legislation.

2. Findings

- Congress could find that efforts to mitigate climate change can create jobs, foster the development of new technology, reduce other air pollutants, reduce the vulnerability of individuals and businesses to high and fluctuating energy prices, and improve domestic security.

- Congress could also find that individual effort and engagement are needed to make the legislation work more effectively, quickly, and cheaply.
B. Specific Targets & timetables

All of the bills contain an overall emissions reduction target.

Congress could require EPA to translate overall targets/timetables into more specific timetables for transportation, industrial, commercial, residential (and electricity) sectors, and by region, etc.
**Additional energy consumption targets**

- Set target/timetable for stabilizing and reducing per capita energy consumption (growth rate=0.3%/year)
- Encourage/direct states to set overall per capita targets and timetables (per capita energy use in Texas is twice that in New York or California)
- Set target/timetable for stabilizing and reducing overall energy consumption
C. Public information
1. Emissions reporting

- Some bills would require EPA to establish a National Greenhouse Gas Database to “collect, analyze, and verify data on greenhouse gas emissions.”

- The data base would be of greater value to individuals as both citizens and consumers if EPA were also required to collect and publish detailed data on per capita energy use and greenhouse gas emissions, and specific data about overall U.S. energy consumption and changes in that consumption.
Under some more recent bills each covered entity is also required to submit an annual report to EPA stating its overall greenhouse gas emissions.

This is similar to public reporting for the Toxics Release Inventory.
2. Consumer information

- There is little in most bills directing the provision of information for individuals as consumers.
- Congress could broaden existing public information or labeling requirements to include, e.g., the estimated monthly or annual energy costs of operating motor vehicles, and the estimated monthly or annual energy costs of operating new or existing residential and commercial buildings.
3. Public information on available choices

- Congress could direct EPA or another agency to make publicly available, in a variety of contexts, information about how individuals can reduce their energy use.
- Congress could also direct EPA or another agency to provide readily understandable public information about economic, social, and environmental effects of making (and not making) appropriate choices.
4. Building Energy Performance Labeling Program

☑ This is in Boucher-Dingell draft.
☑ Would establish an energy performance labeling program in all states.
☑ Would provide for disclosure of building label contents in tax, title, and other property records that are employed at local level for recording and supervising real estate transactions.
5. So you want to be carbon neutral?

Congress could require EPA to publish credible information enabling and encouraging individuals to be “carbon neutral.”
6. Filling gaps in the market

- Gaps exist in the market. There does not appear to be a significant number of providers of energy efficiency and conservation services for residences and smaller businesses, for instance, even though substantial opportunities for energy and cost savings are available from such structures.

- Congress may want to direct the Small Business Administration or a related agency to provide financial and technical support to start such businesses, and then to direct the publication of information about such businesses.
7. Public information on climate change effects

- Congress could establish a National Climate Change Assessment, Vulnerability and Resilience Program to assess and make recommendations on local, regional, and national vulnerability and resilience to short- and long-term climate change.

- Congress could require publication every five years of a report of the effect on the “possible and projected impacts” of climate change on coastal areas.

- Congress could even require the Secretary of Commerce to conduct research “on the impact of climate change on low-income populations everywhere in the world.”
D. Incentives for individual action
1. Tax Incentives

- Congress could provide the fullest possible set of tax credits and other incentives, particularly for behaviors that involve significant initial financial outlays.
- It may also be appropriate to provide some form of reduced taxation to individuals who can demonstrate that their actions over the previous year have been carbon neutral.
2. Low interest or zero interest loans for energy efficiency

- Boucher-Dingell draft focuses on use of this tool for existing residential and commercial buildings.
- Money would come from distribution of allowances, and would be put in a revolving fund.
3. Distribution of Allowances

A major issue in implementing any trading system is how to allocate allowances. One option is to allocate a significant fraction of available allowances to individuals and entities that can establish that they have significantly reduced their energy use or greenhouse gas emissions.
4. Ability to generate and trade offset allowances

This option allows individuals to generate offset allowances themselves rather than depend on allocation by the government. This option may also generate a suite of cost-effective reductions that would not otherwise have occurred.
5. Distribution of proceeds from sale of allowances

- Any government auction or sale of allowances will result in receipt of money by the government.
- Some of this money could be distributed to individuals who have made significant demonstrated reductions in their greenhouse gas emissions.
- Some money could also be distributed directly or indirectly to low income persons for home weatherization or the purchase and installation of other energy efficient or greenhouse gas reducing technologies.
E. Role of States

- Congress could require or allow states to adopt individual or public engagement plans.
- In these plans, states would explain what they intend to do to engage individuals in addressing climate change.
- These plans would allow particular states to tailor individual engagement efforts to their own economic, geographic, and demographic situation.
F. Powers and Duties of EPA

Give EPA or other implementing agency general responsibility for continually finding ways to engage individuals, informing them of available choices, and conducting ongoing research on effectiveness of these efforts.
G. Evaluation and improvement

EPA, in cooperation with the National Academy of Sciences, could be required to conduct a periodic evaluation of the effectiveness of human behavior programs, and to make recommendations (including recommendations to Congress) for improvement.
Questions for you

1. Should Congress attempt to fully engage individual behavior in the national climate change effort?

2. If so:
   a. What should be added to the list?
   b. What should be subtracted?
Prof. John C. Dernbach
Widener University Law School
3800 Vartan Way
Harrisburg, PA  17106-9382
(717) 541-1933
(717) 541-3966 (fax)
jcdernbach@widener.edu
http://ssrn.com/author=411559
http://www.johndernbach.com/