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March 16, 2007

The Honorable John Dingell,
Chairman, House Committee on Energy and Commerce
2125 Rayburn House Office Building
Washington, DC 20515

The Honorable Rick Boucher
Chairman, Subcommittee on Energy and Air Quality
2125 Rayburn House Office Building
Washington, DC 20515

Dear Chairmen Dingell and Boucher,

The Climate Policy Center (CPC) is pleased to provide the following comments regarding issues of interest to the House Committee on Energy and Policy as you seek appropriate policy responses to the problem of climate change. The Climate Policy Center (CPC) is an independent, bipartisan, non-profit organization, incorporated in June 2000. CPC seeks to develop and advocate politically realistic and economically efficient U.S. climate policies. We support Congressmen Udall and Petri's Keep America Competitive Global Warming Policy Act, which incorporates many of the policy recommendations set out in detail below.

[1. Please outline which issues should be addressed in the Committee's legislation, how you think they should be resolved, and your recommended timetable for Congressional consideration and enactment. For any policy recommendations, please address the impacts you believe the relevant policy would have on:

(a) emissions of greenhouse gases and the rate and consequences of climate change; and

(b) the effects on the U.S. economy, consumer prices, jobs.]

We believe that the Committee has engaged an appropriate effort to develop the facts about the scientific and economic facets of the climate change issue, and to seek the development of consensus, bipartisan legislation. For the reasons outlined below, we favor an economy-wide cap and trade approach as the basic vehicle for delivering greenhouse gas emission reductions at the national level. The most important consideration in the development of any greenhouse gas emissions reduction effort, but particularly of any effort

utilizing the cap and trade concept, is to get the architecture of the cap and trade system right.

Global climate change caused by man-made emissions of greenhouse gases represents a singularly profound threat to the world's environment, which, if unrestrained, could also severely damage the global economy. At the same time, policies necessary to counter climate change, which must drive changes in the world's energy economy, may, if not properly designed and implemented, lead to unnecessary and costly economic disruption. A sound greenhouse gas emissions policy should be structured to minimize the sum of the value of climate change damages and the costs of the policies designed to cope with climate change. Because the problem is long-term, the policy should provide support for the emergence of low and no-carbon energy technologies. Because no single country can solve the problem unilaterally, a sound policy must link national efforts in the U.S. with efforts by other major emitters.

(a) As the Congressional Budget Office (CBO) noted in its 2003 review of The Economics of Climate Change, "In balancing alternative investments... modest restrictions on emissions today would yield net benefits in the future... the most cost-effective way to respond to the risks of climate change is through a gradual process of adjustment." (CBO 2003, p. 28). Thus, an appropriately designed strategy would at first slow the rate of growth of emissions, then stabilize emissions, and finally, over time reduce emissions. Equally importantly, the policy should nurture technological research, development and deployment so that new technologies will be available when existing capital stock is retired, thus making the necessary transition to new forms of energy production at the least social cost. No mitigation program alone, no matter how costly, can entirely prevent climate change consequences that are already foreseeable. Thus, in addition to a realistic path for emissions reduction, a sound climate change policy approach should also encourage the development of adaptation strategies.

(b) As indicated above, a sound climate change policy must achieve significant emissions reductions in a manner which exacts the lowest social cost in terms of the loss of other social investment opportunities. In that sense, an appropriate policy balances the economic interest with the climate change interest. Such a policy will generate less emissions reduction in the short to intermediate term than some policy proposals, and also less economic dislocation, including less disruption of the economy at large, prices and jobs. CPC also believes that a policy which balances economic interests with the climate change interest stands a better chance of being enacted and moving our nation from debating the problem to doing something about it.

[2. One particular policy option that has received a substantial amount of attention and analysis is “cap-and-trade.” Please answer the following questions regarding the potential enactment of a cap-and-trade policy:]

[(a) Which sectors should it cover? Should some sectors be phased-in over time?]

Since greenhouse gas emissions come from a diverse number of entities, and not just one sector, the most efficient way to reduce emissions is through an economy-wide approach. An economy-wide approach will create the necessary incentives to reduce those greenhouse gas emissions that are the least expensive earliest and the more expensive reductions further into the future, when a greater range of economically-feasible technologies may be available to reduce such emissions.

[(b) To what degree should the details be set in statute by Congress or delegated to another entity?]

Given the significant impact which the architecture of a cap and trade program will have on the economy and on the effectiveness of the emissions reduction effort, Congress would be wise to adopt a climate change policy that sets the parameters for and provides the guidance for the departments who will implement the program. At the same time, since many issues are not easily foreseeable, the policy should be broad, flexible and not overly-prescriptive. Congress shouldn't micro-manage the implementing agencies or lock in outcomes beyond the broad parameters. The broad parameters should define, not just the emission reduction targets and the safety valve price, but also the other objectives of the program, including the public benefits it is designed to achieve, thus allowing an accurate understanding of the costs and benefits proposed. In specifying these parameters, Congress should speak with enough clarity so that the program's economic consequences can be projected with reasonable accuracy while still leaving the implementing agencies the flexibility to react and respond to evolving circumstances. In addition, Congress should outline how the program will address the issue of the growing emissions of developing countries, and create a framework that links U.S. national action to actions by other countries, including major emitters in the developing world. Such a policy will provide a badly-needed incentive for international action and will also avoid excessive risk to the U.S. economy from an entirely unilateral approach.

Finally, a sound policy will put in the place the basic architecture to address the issue, but it will also give the implementing agencies a broad delegation of power and sufficient and predictable revenue streams from the program to achieve the public benefits that Congress deems necessary. The future path this country must take with respect to climate change is largely uncharted, and

is dependent of many variables that are unforeseeable, e.g., the precise time when alternative low and no-greenhouse gas technologies will be commercially available and affordable.

[(c) Should the program's requirements be imposed upstream or downstream or some combination thereof?]

The most efficient point of regulation is upstream. If carbon is regulated at the point where carbon is introduced into the economy, or at the narrowest point in the chain of commerce in terms of requiring the submission of allowances in a cap-and-trade system, it will result in the least number of regulated entities and thereby significantly lower the transaction costs of the program. Similarly, non-CO2 greenhouse gas emissions should be regulated at the point of creation, where possible. An upstream point of regulation would involve regulating several thousand entities while a downstream point of regulation could result in literally millions, e.g., every car, household, place of business, etc., making such an approach virtually impossible to effectively oversee and enforce. A key factor in choosing the appropriate point of regulation is the effect of the choice on the ease with which the increased price of carbon will be passed through the value chain. In order to derive the full emissions reduction benefit, it is essential that the cost of the allowances be passed through to the ultimate consumer.

[(d) How should allowances be allocated? By whom? What percentage of the allowances, if any, should be auctioned? Should non-emitting sources, such as nuclear plants, be given allowances?]

CPC supports a public purpose allocation, i.e., an allocation system that 1) affords the predictable and necessary resources for the development of new technologies, 2) provides assistance to people and entities which are adversely-impacted by the adoption of the policy, 3) provides resources to facilitate necessary adaptation measures, 4) supports endeavors that closely complement the underlying policy, such as strategic investment in the reduction of emissions in developing countries and 5) avoids enlarging the federal deficit.

CPC would oppose the grandfathering of allowances to regulated industries beyond the amount economists have concluded would be necessary to keep the regulated industries whole, or to non-emitters such as nuclear power. While increased nuclear generation may likely prove a necessary component in reducing greenhouse gases in the future, there are several programs to assist the nuclear industry, most recently in the Energy Policy Act of 2005, which are intended to reduce the capital costs of future generating facilities. To give a particular industry allowances would put Congress in the position of selecting and locking in the "winning" technology by statute, rarely a wise course of action. Finally, the economics of electric generation suggest that the

nuclear industry will benefit economically when the clearinghouse price of electricity rises to recognize the cost of the carbon allowances that the fossil-fuel generators must pay and build into their price of electricity, costs that nuclear generators will not incur.

[(e) How should the cap be set (e.g., tons of greenhouse gases emitted, CO₂ intensity)?]

The cap should be prospective so as not to result in the costly premature retirement of capital stock. With an escalating safety valve, which CPC supports, the specific number of allowances is of less importance than it would be in a cap-and-trade that does not have a safety valve, provided that the allowance total is low enough to generate a market. The cap, along with other key factors including the state of climate science, the development of technology, etc., should be subject to periodic review by the National Academy of Sciences.

[(f) Where should the cap be set for different years?]

See the answer to e.

[(g) Which greenhouse gases should be covered?]

The policy should cover all greenhouse gases, with the only exception being GHGs from sources that cannot be accurately measured and monitored, since the threat of climate change stems from the emissions of all such gases. There is also an economic advantage to including all GHG gases. Different greenhouse gases have differing global warming potential and differing costs of abatement. By covering all greenhouse gas emissions, the policy facilitates the reduction of those emissions which are least expensive first and the reductions that are more expensive later, which is the most efficient approach.

[(h) Should early reductions be credited? If so, what criteria should be used to determine what is an early reduction?]

Early reductions should not be credited for two reasons. First, those that have reduced their emissions prior to the adoption of an emissions control policy will benefit by requiring fewer allowances if the entity is a regulated entity, or reduced energy costs, if it is not a regulated entity. Second, picking a date for early credits is arbitrary and contentious. What is to say that emissions reductions made in 1995 should qualify for early credits, while earlier efforts are ineligible? Why not 1985? Why not 2005? Early credits are a form of rent-seeking that should be avoided in favor of tackling the serious challenges associated with climate change.

[(i) Should the program employ a safety valve? If so, at what level?]

CPC strongly favors the safety valve concept, because it allows an ambitious emissions reduction effort while assuring that the reductions are achieved without unsustainable economic dislocation. The safety valve gives the regulated industries, the industries that rely on them, and our economy at large the certainty of the cost of the program that is lacking in a cap-and-trade without a safety valve. A cap-and-trade program without a safety valve may under some circumstances result in unpredictable increases in the price of allowances. As the recent California energy crisis serves to remind us, in an energy-intensive society such as ours, exogenous events can quickly drive the cost of the program to the point of major economic dislocation.

Properly structured, the safety valve would start low and grow over time so as to encourage continued emission reduction while avoiding economic disruptions, including the costly and inefficient premature retirement of capital stock. CPC supports a modest initial safety valve price that keeps up with inflation and escalates over time. We also believe that the rate of increase of the safety valve should be related to the state of climate change science, the state of the development of new technologies, the state of adaptation planning and strategies, the level of effort of the largest greenhouse gas emitting developing countries in reducing their greenhouse gas emissions, and the effect that a given escalation will have on the U.S. economy and its competitiveness. The President should be authorized to escalate the safety valve within an increasingly greater range after review of these factors, but if, over time, the largest developing countries have not moved increasingly towards an equivalent level of effort to that of the U.S., the escalation of the safety valve should be constrained. This policy of linking the safety valve level to international progress will avoid putting American industries and jobs at an economic disadvantage and creating incentives to move industry and jobs to developing countries with less rigorous emissions controls, an unwelcome result for both American workers and the environment.

[(j) Should offsets be allowed? If so, what types of offsets? What criteria should govern the types of offsets that would be allowed?]

Geological offsets, domestic and foreign, that can be measured, monitored and verified at the cost of the proponent of such offsets should be eligible for allowances, assuming all other issues surrounding geological sequestration (compliance with other environment laws and regulations, federal and state, liability, leakage, etc.) can be satisfactorily resolved.

Although biological sequestration efforts are a legitimate means to reduce carbon dioxide from the atmosphere, issues related to accounting and establishing baselines for such efforts make it unwise to allow them to be used as offsets in a cap and trade system at this time. Given its potential utility as

part of an overall program to reduce emissions, however, it would be appropriate to allow the use of allowances to support a well-structured effort to encourage biological sequestration, and to improve the necessary metrics for monitoring its impact.

[(k) If an auction or safety valve is used, what should be done with the revenue from those features?]

CPC supports allocating the majority of allowances from a cap and trade program in such a way as to achieve public purposes related to climate change which will not easily be achieved without such investment. These purposes include accelerating RD&D for transformative energy technologies, supporting efforts to accelerate emissions reductions efforts among developing countries, facilitating needed adaptation to climate change, reducing the economic cost of the policy by reducing its contribution to the national deficit, and assisting people and entities adversely impacted by the adoption of the policy. (See also answer to question d). With respect to the revenues from the sale of safety valve allowances, we support the revenues going into the Treasury.

[(l) Are there special features that should be added to encourage technological development?]

CPC favors the creation of an Advanced Research Projects Agency-Energy (ARPA-E), as recommended by the National Academy of Sciences in its Augustine Report “The Rising Storm.” The new agency should be funded through the allocation of allowances, and given the flexibility, nimbleness and tools to take the research in whatever direction it needs to go to bring forth no and low-greenhouse gas emitting energy. It is important the ARPA-E effort not be weighted down with well-intended, but nevertheless harmful Congressional mandates and earmarks. In a more general sense, Congress should not attempt to pick winning (or more likely, losing) technologies. Naming technologies locks the research agency into the research, development and deployment of technologies that may or may not pan out. The successful development of alternative high-risk, high-payoff, transformational technologies requires an institutional structure like the Defense Advanced Research Projects Administration (DARPA) with the agility to cut and run on failing technologies.

[(m) Are there designs features that would encourage high-emitting developing countries to agree to limits on their greenhouse gas emissions?]

A sound U.S. climate policy should include a linkage to the emissions reduction efforts of the highest-emitting developing countries. The clear Congressional desire for such a linkage was enunciated in Senate passage of

the Byrd-Hagel Resolution in 1997, and restated in the Bingaman Resolution of 2005. Since greenhouse gas emissions are an inherently global problem, unilateral action by the US and other OECD nations to reduce domestic emissions, in the absence of emissions reductions efforts by the highest-emitting developing countries, will not achieve the necessary global improvement in greenhouse gas concentration levels.

An entirely unilateral emissions reduction effort would also likely have economic consequences that would make it unsustainable over time. American businesses would have clear incentives to move operations and jobs to developing countries, thus moving emissions rather than reducing them. Since the U.S. Congress does not have the power to directly mandate developing country emission reductions, the U.S. policy must be linked to developing country progress through other means. First, the safety valve escalation should be linked to the actions developing countries take to reduce greenhouse gas emissions. Over time, the President's discretion to raise the safety valve price above the level of inflation should be limited unless the most important developing countries are taking actions equivalent to the actions of the US. This linkage would avoid unnecessary economic damage in the instance wherein China and India, in particular, fail to take comparable and eventually equivalent actions to reduce their emissions.

Second, as part of the public purpose allocation, a portion of the allowances should be dedicated to engaging the developing countries in projects and policies that will reduce their greenhouse gas emissions, towards the objective of moving to actions equivalent to those of the U.S.

[3. How well do you believe existing authorities permitting or compelling voluntary or mandatory actions are functioning? What lessons do you think can be learned from existing voluntary or mandatory programs?]

Existing voluntary programs, while well-intended, are the best evidence that voluntary programs alone cannot provide the necessary economic incentives to reduce greenhouse gas emissions on a significant scale. The 1605(b) program at the Department of Energy has yielded extremely small reductions, particularly in the face of growing emissions. Putting a reasonable price on greenhouse gas emissions causes the cost of the emissions to be internalized, and to the maximum extent either avoided or passed on, thus sending consumers a price signal that will cause them to make behavioral changes, which, in the aggregate, are necessary to reduce greenhouse gas emissions. Conversely, mandatory programs have to be designed correctly so as not to harm the economy, to be globally fair, and to provide the pathway to the necessary technological solutions if the policy is to be accepted and endorsed by the American people.

[4. How should potential mandatory domestic requirements be integrated with future obligations the United States may assume under the 1992 United Nations Framework Convention on Climate Change? In particular, how should any U.S. domestic regime be timed relative to any international obligations? Should adoption of mandatory domestic requirements be conditioned upon assumption of specific responsibilities by developing countries?]

Along with the other parties to the United Nations Framework Convention on Climate Change, the U.S. is presently obligated to take actions necessary to avoid damaging climate change. These actions will in fact likely be quite strenuous, given the emerging understanding that unacceptable climate change impacts may begin at atmospheric concentrations that are likely to be reached by mid-century in a business-as-usual scenario.

Reflecting on the extraordinary efforts that were required to bring the present Kyoto Protocol into effect without U.S. participation, it seems unlikely that the international community will be able to agree to a new round of emissions reduction efforts in the absence of the U.S. The key developing countries whose participation is essential are unlikely to buy in without clear evidence of U.S. domestic action. For these reasons, waiting for a new international agreement to establish a linkage between U.S. domestic efforts and those of other nations is preordained to failure. As we have outlined in answer to other questions, however, it would be both futile and damaging for the U.S. to take strenuous domestic action without some assurance that our economic trading partners, especially the developing countries whose emissions will soon overtake our own, would themselves be making increasingly greater efforts. Building a policy linkage into the architecture of the U.S. domestic strategy will allow us to move forward and exhibit the leadership that the world has been waiting for without waiting for the elaboration of a new international agreement or series of agreements to succeed the Kyoto Protocol, a process that could take years to unfold.

The Climate Policy Center appreciates the opportunity to provide these comments to the Committee and hopes you find them useful. We would be happy to meet with your staff or you to further discuss these comments and look forward to working with you as the Committee develops a national climate change policy.

Sincerely,

Roger C. Dower
Chairman, Climate Policy Center

cc: The Honorable Joe Barton,
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Washington, DC 20515

The Honorable Dennis Hastert,
Ranking Minority Member, House Subcommittee on Energy and Air Quality
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