TESTIMONY OF DR.KENNETH P. GREEN

BEFORE THE

SENATE COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS

"LEGISLATIVE HEARING ON S. 1733,
CLEAN ENERGY JOBS AND AMERICAN POWER ACT"

OCTOBER 28, 2009

Chairman Boxer, Senator Inhofe, Members of the Committee:

Thank you for inviting me to testify today on this important topic. Along with these remarks, I have submitted, for the record, two policy studies pertinent to today's topic. One, published in 2007, compares cap-and-trade with a revenue neutral carbon tax, and points out the many problems inherent in cap and trade. That study is "Climate Change: Caps vs. Taxes." The second study I'm submitting for the record is entitled "Climate Change: The Resilience Option," and is my most recent publication. My testimony here today represents my personal views, and should not be construed as the official position of the American Enterprise Institute, or any other persons or organizations.

Before I begin my remarks, I always like to list my three B's, my background, biases, and beliefs.

As to background, I am a biologist and environmental scientist by training, an economist by exposure, and a policy analyst by vocation: I've spent the last 15 years analyzing environmental policy in think tanks in the U.S. and Canada.

My biases are for solving environmental problems, whenever possible, with instruments that maximize freedom, opportunity, enterprise, and personal responsibility. Thus, I strongly favor true market-based remedies for environmental problems over command-and-control regulation. (I will observe here that cap-and-trade legislation is not truly market-based, as government sets a limit on emissions, rather than allowing a market to determine that level. Cap-and-trade, no matter how cleverly hidden behind misleading terminology, as it is in S. 1733, is more akin to rationing than it is to markets. We have written, elsewhere, about cap-and-trade's failings when it comes to greenhouse gas controls.)

Finally, my beliefs are based on reading the scientific literature as well as the IPCC climate science reports, and I believe that while greenhouse gases do retain heat in the atmosphere (making Earth habitable), the heat-retention capability of additional anthropogenic greenhouse gases is modest. I do not believe in predictive climate models, or most other forms of forecasting other than simple extrapolation for very modest periods of time.

That being said, I do believe that climate science has taught us something important that merits action. We have learned the Earth's climate is not the slow-moving system we thought it was. Rather, the climate is prone to sharp shifts into cooler and warmer conditions that can depart significantly from "average" temperatures for decades at a time. Acting to enhance climate resilience is an important task.

So, to the issue at hand: how can we best build U.S. resilience to global warming impacts?

First, I believe that we should shift our focus from mitigation of greenhouse gas emissions toward an adaptation agenda. We do not, at present, have the technologies needed to significantly curb greenhouse gas emissions without causing massive economic disruption, and without preventing the developing countries from developing, and lifting their billions of people out of squalor and poverty. The money and attention that we are spending on mitigation efforts is largely wasted – even if we shut the U.S. and the EU off completely, the trajectory of emissions from China and India will negate the environmental benefit of our self-sacrifice completely in only a few years. All that jacking up energy costs will do is deprive of us economic productivity which is the ultimate wellspring of our resilience and well-being.

Second, I believe that we should stop making things worse. That is, we should remove the misguided incentives that lead people to live in climatically fragile areas such as the water's edge, drought-prone locations, flood-prone locations, and so on.

At present, our federal and state governments exacerbate this risk-taking by acting as the insurer of last resort. When people who live at water's edge or in a flood plain are hit by storms or floods, governments intervene not only to rescue them and their property if possible, but then to provide rebuilding funds to let the people build right back where they are at risk. We are currently doing this in New Orleans, where people are re-building in an area that is still at risk from storm surges and levee failure. Undoubtedly, we'll do this in California, putting people right back into fire-prone areas they were burned out of last year.

As Charles Perrow observes in his book *Our Next Catastrophe*: "State-mandated pools have been established to serve as a market of last resort for those unable to get insurance, but the premiums are low and thus these have the perverse effect of subsidizing those who choose to live in risky areas and imposing excess costs on people living elsewhere. In addition, the private insurers are liable for the net losses of these pools, on a market-share basis. The more insurance they sell, the larger their liability for the uninsured. Naturally, they are inclined to stop writing policies where there may be catastrophic losses. The Florida and California coastlines are very desirable places to live and their populations have grown rapidly, but these handsome lifestyles are subsidized by residents living in the less desirable inland areas in the state, and, to some limited extent, by everyone in the nation."

Programs that subsidize climatic risk-taking should be phased out as quickly as possible, in favor of fully-priced insurance regimes. Rebuilding after disasters in climatically fragile areas should be discouraged. Eliminating risk subsidies would show people some of the true cost of living in climatically risky areas, and would, over time, lead them to move to climatically safer places where they can afford to insure their property and safety.

Third, we must look to our infrastructure. Another government action that leads people to live in harm's way is the failure to build and price infrastructure so that it is both sustainable, and resilient to change. Governments build highways, but generally without a pricing mechanism. Thus, no revenue stream is created to allow, for example, for the highway to be elevated if local flooding becomes a problem. There is also no price signal relayed to the users of the highway that reflects the climatic risk that their transportation system faces. The same is true of fresh-water infrastructure, wastewater infrastructure, electricity, and other infrastructure. Politicians love cutting ribbons on new "free" infrastructure. They're less prone toward having the cost of that infrastructure show up in terms of tolls or user fees.

Establishing market pricing of infrastructure would quickly steer people away from climatically fragile areas, dramatically reducing the costs of dealing with climate variability.

For example, let's consider our electricity supply. As long as governments distort the prices consumers pay for energy with subsidies, fuel mandates, renewable power mandates, and the like, electricity markets cannot effectively adapt to changing climatic conditions. If electricity markets were fully deregulated, and if full costs were passed onto consumers, price signals would be created for the electricity provider in terms of expanding or decreasing capacity and for the consumer in terms of the real cost of living in an environment subject to energy-consuming heat waves (or cold snaps). Privatization would create incentives for electricity conservation and for the acquisition of energy-efficient appliances and devices without any need for specific governmental efficiency standards. Further, electric companies would be driven to connect with one another to ensure reliability to their customers rather than doing the minimum possible to satisfy regulators.

And consider our water supply. Full pricing of water and full privatization of the water supply, drinking water plants, and wastewater treatment plants would ameliorate many climatic risks incrementally over time, including flooding, seawater intrusion, and coastal and river pollution from storm runoff. Charging the full price for water, from supply to disposal, would create a price signal for consumers regarding the real risks they face living in hydrologically sensitive areas and create incentives for conservation while producing a revenue stream to allow for expanded capability or the securing of alternative supplies. At some point, again, high prices could simply lead people to move away from areas that are hydrologically costly, such as cities dependent on a single winter snow pack that shrinks or a single major river that suffers reduced flow.

Finally, I would suggest that we trust in resilience, but tie up our camel. In the event that climate change does tend toward higher estimates put forward by the United Nations and other groups, it is reasonable to consider insurance options that might help deal with such climate changes. Such options might include government investment in geoengineering research, investment in research and development to advance technologies allowing the removal of greenhouse gases from the atmosphere

Climate variability, whether natural or man-made, does pose significant challenges to the health of our population, the maintenance of our infrastructure, and to our economic growth. Taking

steps to make our society resilient in the face of climate variability is an important endeavor, and I applaud your hearing on the matter today.

Thank you for allowing me to speak to you today on this timely and important issue.