## **Testimony of John D. Podesta**

## Before the House Select Committee for Energy Independence and Global Warming U.S. House of Representatives

## Hearing on "Cap, Auction, and Trade: Allowance Auctions and Revenue Recycling Under Carbon Cap and Trade"

## January 23, 2008

Thank you, Chairman Markey, Congressman Sensenbrenner, and members of the Committee. I am John Podesta, President and Chief Executive Officer of the Center for American Progress.

Global warming is one of the greatest challenges our world faces, and as our understanding of its implications increases, the case for dramatic, immediate action is only made stronger.

Just last week, for instance, we learned a new, startling fact: the western Antarctic ice sheet is melting at a faster rate than anticipated by scientific models.<sup>1</sup>

This news was particularly disturbing because sea level rise may be well above the "expected" A1B emission scenario projected in the International Panel on Climate Change's Fourth Assessment Report which had already foreseen a sea level rise during the next 30 years that would have severe global consequences. Perhaps the best we can

<sup>&</sup>lt;sup>1</sup> Eric Rignot and others, "Recent Antarctic ice mass loss from radar interferometry and regional climate modeling," *Nature Geoscience* (13 January 2008): doi:10.1038/ngeo102, available at http://www.nature.com/ngeo/journal/vaop/ncurrent/abs/ngeo102.html (last accessed January 2008).

hope for and certainly the least we ought to plan for is a climate that will cause severe damage to coastal cities, trading centers and ecosystems around the world.

We have to come to grips with a climate that will force highly destabilizing human migration in some of the most politically fragile regions of the world. For instance, a climate that will put Lagos at risk by 2015, and will pose enormous challenges for Nigeria and the entire West African region, not to mention the impact it would have on international oil supplies.<sup>2</sup>

We face a climate that will inflict severe damage on the coastal wetlands of Bangladesh and its groundwater supplies, thus driving more people inland and fomenting instability as the resettled population would have to compete for scarce resources with the established residents. Others would migrate abroad, creating heightened political tension not only in South Asia, but Europe and Southeast Asia as well.

Increasing water scarcity due to climate change will also contribute to instability throughout the world. Although we are not likely to see "water wars" per se, countries will more aggressively pursue the kinds of technological and political solutions that currently enable them to exist in regions that are stretched past their water limits. This is likely to be the case in the Middle East where water shortages will coincide with a population boom.

<sup>&</sup>lt;sup>2</sup> M. Boko and others, "Africa. Climate Change 2007: Impacts, Adaptation and Vulnerability. Contribution of Working Group II to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change." In M.L. Parry and others, Eds., IPCC Fourth Assessment Report (Cambridge: Cambridge University Press, 2007) available at http://www.ipcc-wg2.org/ (last accessed October 2007).

And this, as I mentioned, was before we learned that the rate at which the western Antarctic ice sheet is melting means that the sea level rise this century may be measured not in inches, not even in feet, but in meters.

Global warming greatly complicates the challenge of restoring economic growth and shared prosperity. Here in the U.S., Americans are already burdened by near record oil prices and high gasoline and electricity bills. This is one of the consequences of the Bush Administration's refusal to adopt a clean energy strategy and solutions.

The challenge we face now is nothing short of the conversion of an economy sustained by high-carbon energy—putting both our national security and the health of our planet at serious risk—to one based on low-carbon, sustainable sources of energy. The scale of this undertaking is immense but its potential is also enormous.

Our traditional understanding of energy security has been largely limited to assuring adequate supplies of energy to fuel our economy. That will remain a necessary concern, of course, but not a sufficient one. Going forward our leaders will have to act on an understanding of energy security that turns not just on the supply but on the carbon content of the energy we use. Otherwise, we will consign ourselves long-term to the mercy of international markets and an increasingly variable climate. We must act now and act boldly to put ourselves on a sustainable footing, in the interest of our national, economic, environmental, and energy security. Simply put, energy will rapidly transform the world for good or ill. The question for the United States is whether we will participate as a leader in the global energy revolution.

The scale of the change we need is daunting but achievable.

We must create a virtuous circle of rising economic fortunes for a growing global middle class. This must include an energy strategy comprising complementary policies that reduce our nation's carbon footprint, revolutionize energy production and consumption, lower costs for consumers over time, create new green-collar jobs, and spur innovation and leadership in the global low-carbon technology marketplace.

It is clear that energy policy is economic policy: in order to reverse the economic downturn we are currently facing and to capture the opportunities provided by a low-carbon energy transformation, we must put energy at the center of our nation's economic transformation and economic growth. The U.S. economy is currently dependent on a few high-carbon, increasingly-expensive energy sources like oil. Fundamentally changing how we produce and consume energy, investing in low-carbon innovation, and transforming our economy to a low-carbon model are key to promoting economic mobility, growth, job creation, and re-gaining technological leadership in the global innovation marketplace.

The U.S. Congress obviously realizes the importance of energy policy to the U.S. economy – last year's passage of the Energy Independence and Security Act is a demonstration of this – and I congratulate you for your leadership on this achievement. But we must do more, both to reduce our national greenhouse gas emissions and to jumpstart the technological innovation and investment needed to get us on the right track, not only to stimulate and grow the economy but also to avoid the worst effects of global warming. The longer we wait to act, the costs to our productivity growth, our national security, and our environment will only continue to skyrocket. I appreciate the opportunity to be with you today to discuss the design of a national cap and trade program for global warming emissions which must be a fundamental part of our energy and economic policy.

The Center for American Progress (CAP) recently released a report, entitled "Capturing the Energy Opportunity: Creating a Low-Carbon Economy," which outlines our strategy for transforming our economy from a high-carbon to a low-carbon model. In this report, we propose ten steps that the next Administration can take to transform the economy from a high-to low-carbon model and capture the opportunities provided by this transformation.

CAP recommends an energy strategy that employs a cap and trade system with a 100 percent auction of carbon permits and a suite of public investment policies *funded by the auction revenue*. Any national cap and trade system should be designed to achieve a level of reductions that will limit the temperature increase to 3.6°F (2°C) above pre-industrial levels, the level at which scientists believe we have at least a strong likelihood of avoiding the worst impacts of catastrophic climate change.

At the core of this proposal is a fundamental commitment by the federal government to assist low- and middle-income Americans with rising energy costs *and* to public investment in green-collar jobs, research, development, and deployment of low carbon technologies, re-committing to leading in international global warming negotiations, and re-envisioning the way the federal government does business so that low-carbon energy is a centerpiece.

It is becoming increasingly clear that our nation will adopt a cap and trade program to

control and reduce global warming emissions: regional efforts to reduce emissions, such as the Regional Greenhouse Gas Initiative, have chosen to employ a cap and trade mechanism, and bills currently in the U.S. Congress which have large bi-partisan support, such as the Lieberman-Warner Climate Security Act (S. 2191), and Rep. Waxman's Safe Climate Act, (H.R. 1590) also rely on a cap and trade system to achieve reductions.

Moreover, cap and trade makes sense. Markets are essential to creating a low-carbon economy, and a cap-and-trade program should be at the core of a greenhouse gas emission reduction strategy. Once businesses have to factor the cost of emitting  $CO_2$  (and other greenhouse gases) into their bottom lines, the power of the marketplace will start to push toward efficiency, low-carbon fuels, renewable energy, and carbon-capture-andstorage technologies for coal-fired power. Market-based pricing is a critical part of the equation but will not work to rapidly transform our economy to a low-carbon model without accompanying public investment in complementary clean energy and innovation policies and policies to reduce energy costs for low and middle income Americans.

A cap-and-trade system will identify the necessary level of carbon reductions, and then allow the marketplace to price the cost of those emissions. Moreover, the cap-and-trade market model boasts a great track record in reducing acid rain. In fact, the United States actually "wrote the book" on cap-and-trade, creating the oldest and arguably most successful emissions trading system for sulfur dioxide under the acid rain program of the 1990 Clean Air Act Amendments, which has reduced SO<sub>2</sub> emissions at a fraction of anticipated costs and engendered health benefits exceeding program costs by more than 40 to  $1.^3$ 

<sup>3</sup> Benjamin Goldstein, "Learning from Europe: Designing Cap-and-Trade Programs that Work" (Washington: Center for American Progress, 2007) available at

http://www.americanprogress.org/issues/2007/06/g8\_cap\_and\_trade.html (last accessed October 2007).

Further, by adopting a market-based model for reducing greenhouse gas emissions, the United States can link up with the rapidly growing international marketplace for carbon credits. The United States can learn from the growing pains in the European carbon market in the design of our cap-and-trade system—giving too many credits away for free to carbon-intensive industries rather than requiring those companies to purchase the credits on the open market, led to extreme price volatility in the European marketplace and windfall profits for utilities. Giving away the credits also has the potential to exacerbate the regressivity of consumer price increases as the Director of the Congressional Budget Office Peter Orszag has noted.<sup>4</sup>

Requiring emitters to buy 100 percent of their carbon credits will avoid windfall profits for polluting industries. Ensuring that the number of carbon credits available in the marketplace is linked to a strict emissions cap will help avoid carbon permit price volatility and achieve real emission reductions. And, once the United States enacts its own carbon cap, our cap-and-trade marketplace will integrate more fully into the emerging global marketplace, providing much more liquidity and allowing our highly competitive derivatives exchanges to deploy their proven trading prowess in a new and critical global marketplace for carbon credits.

Some economists argue that if we set the right price in a cap and trade system, we could dispense with complementary policies such as vehicle fuel efficiency standards, new power plant performance standards, decoupling of electricity rates and use, etc. However, markets do not operate perfectly, and this argument is flawed in practice. Because the energy component of overall cost is often not that high, the carbon price signal required to spur many of the changes we need would be too high as a matter of political reality. In addition, fuel economy standards ensure that the U.S. protects its economic and national security by reducing its dependence on oil.

<sup>&</sup>lt;sup>4</sup> Congressional Budget Office, Issues in Climate Change November 16, 2007, available at http://cbo.gov/ftpdocs/88xx/doc8819/11-16-ClimateChangeConf.pdf (last accessed January 2008).

A cap and trade program is necessary but it is not sufficient; we must also involve large public investment in low carbon infrastructure, job training, tax incentives, and research and development of new technologies. And, the time is ripe for this investment, not just because the costs of *inaction* with respect to global warming, national security, and economic mobility will only grow increasingly higher, but also because Americans support public investment. A recent poll found that 61% of Americans support public investment than tax cuts as a way to improve the economy.<sup>5</sup>

Specifically, our proposal would allocate ten percent of cap and trade auction revenue to businesses operating in energy intensive sectors to compensate shareholders, employees, and communities in those sectors. Half of the remaining 90 percent of the revenue will be allocated to low- and moderate-income Americans to help offset energy price increases.

It is the polluting industries, and not hardworking American families, who should be bearing the brunt of the cost of this transformation. To ensure that low- and moderateincome Americans are protected from short-term increases in energy costs, we propose committing an estimated \$336 billion over 10 years to tax rebates and other income support to offset their higher costs. We need policies that will hold low- and middleincome Americans harmless through tax benefits and other measures and that will ensure that the lowest-income Americans who are not eligible for traditional tax benefits also receive these funds.

<sup>&</sup>lt;sup>5</sup> Ruy Teixeira, "What the public really wants on budget priorities," based on a 2007 poll by Hart Research for AFSCME/US Action, (Washington: Center for American Progress and The Century Foundation, 2007) available at http://www.americanprogress.org/issues/2007/11/pdf/WTPRW\_Nov.pdf (last accessed January 2008).

Energy cost increases for high-income households would represent a relatively small percentage of their post-tax income. And even though we expect the cap-and-trade program to increase the unit price of energy consumption, we also fully expect that proposed new incentives for energy efficiency would work to lower overall energy expenditures.

We recommend that the remaining half of the revenue go to spur science and technology innovation and to drive our transition to a low-carbon economy by funding research and development, tax incentives, and other initiatives. And the public supports this: 71 percent of Americans are ready to quickly change from using coal and oil to using clean, alternative energy.<sup>6</sup> Transportation and electricity account for 72 percent of U.S. CO2 emissions from energy, so our policies focus on these two sectors.<sup>7</sup>

First, we must re-envision our transportation sector. We must continue to press for increases in vehicle fuel efficiency. The Energy Independence and Security Act was a landmark achievement in part because of its mandated increase of fleet wide vehicle fuel efficiency to 35 miles per gallon by 2020 – the first Congressionally-mandated increase in vehicle fuel efficiency in over 30 years. Thank you Mr. Chairman for your years of leadership to make this policy a reality. But, we can do more than this –we support a 55 miles per gallon standard by 2030. This goal is readily achievable through the swift development of existing fuel-efficient technologies and through the dedicated research and development to deploy new technologies. Providing incentives to U.S. auto manufacturers to retool their automotive fleets and consumer tax credits for the purchase

<sup>&</sup>lt;sup>6</sup> John Podesta, Daniel J. Weiss, and Laura Nichols, "Americans Feel New Urgency on Energy Independence and Global Warming," (Washington: Center for American Progress, 2007), available at http://www.americanprogress.org/pressroom/releases/2007/04/environmental\_poll.html (last accessed October 2007).

<sup>&</sup>lt;sup>7</sup> Energy Information Administration, U.S. Emissions Data, (Department of Energy, 2007) available at http://www.eia.doe.gov/environment.html (last accessed October 2007).

of more fuel efficient vehicles will also help pave the way for clean transportation in this country.

Following on the heels of the Energy Independence and Security Act production mandate of 36 billion gallons of biofuels by 2022, we must also ensure that we increase the availability of the lowest greenhouse gas-emitting and most sustainably-produced fuels, including electricity. We recommend that we improve our distribution and fueling infrastructure so that Americans across the country can make choices at the pump (or electric fueling station) about the fuels they want to purchase.

Less fuel-intensive transportation options means fewer greenhouse gases. To boost greater use of alternative transportation we propose new investment in more diverse and lower-carbon transportation infrastructure such as local mass-transit networks, regional and interstate long-distance high-speed rail systems, and green city programs to encourage the redevelopment of urban areas and reduce long commutes and suburban sprawl.

Energy efficiency is the cheapest, fastest, cleanest way to reduce the carbon intensity of our economy. To this end, we propose requiring efficiency improvements in electricity and natural gas distribution, a major upgrade of the U.S. electricity grid to increase energy and national security, improved distributed generation, and increased transmission efficiency. Additional significant gains in efficiency can be made by requiring upgrades for our appliances and private, commercial, and federal buildings. If we look at California, it has held its per capita electricity consumption roughly constant at about 7000 kilowatt-hours per person since the mid-1970s<sup>8</sup>, while electricity in the rest of America has continued to grow and is now nearly 5000 kilowatt-hours per person higher than in California. This occurred while California's economy continued to lead the nation.

We can lower the amount of greenhouses gases produced by electric power through investments in renewable energy sources and advanced-coal energy production. We propose a new national renewable electricity standard to require 25 percent of energy produced in the United States to come from renewable sources by 2025, increasing distributed renewable electricity generation and facilitating investment in renewable energy by improving the structure of production tax credits and low interest loans. Any cap and trade bill should also include an emission performance standard for all new coalfired facilities equivalent to the best available carbon capture-and-store technology, and the provision of federal funds to help offset additional costs of implementing carbon capture-and-storage technology. Revenues from allowance auctions should pay for these incentives.

The urgency of this issue demands a president willing to make the low-carbon energy challenge a top priority in the White House—a centerpiece not only of his or her energy policy but also of his or her economic program—to produce broad-based growth and sustain American economic leadership in the 21st century. This task is so encompassing it will demand that the incoming president in 2009 reorganize the mission and responsibility of all relevant government agencies—economic, national security, and environmental. As part of this reorganization, to the next President, we recommend that the next President create a White House National Energy Council to lead all other agencies in making energy and global warming top administration priorities. The new

<sup>&</sup>lt;sup>8</sup> California Energy Commission, US Per Capita Electricity Use By State in 2003, available at http://www.energy.ca.gov/electricity/us\_percapita\_electricity\_2003.html ((last accessed January 2008).

Council will ensure that the U.S. government leads the way on all of these fronts, not just by adopting these proposals but also by wielding the purchasing power of the federal government to promote low-carbon technologies, implementing new tax policies, and coordinating R&D across the entire platform of federal research activity. It must also spur interagency alternative energy-related research and development, and help demonstrate the efficacy of these new clean technologies and ensure these technologies can make it in the marketplace. The federal government must also ensure that taxpayer investments reduce and withstand the effects of global warming both at home and abroad and that steps are taken to boost the sustainability of new foreign aid given likely impact of climate change in project-feasibility assessments.

In our proposal we also recommend that the government create a Clean Energy Jobs Corp to promote new "green collar" jobs in a new clean economy and must more than double currently existing federal investment in low-carbon energy research, development, and deployment.

Finally, global warming is obviously an international problem that requires concerted action by all countries. As such, we think the United States needs to reclaim the lead in global efforts to combat climate change by getting our own house in order while simultaneously joining current international efforts to reduce greenhouse gas emissions. This means creating an E-8 of nations comprised of leading developed and developing countries devoted to addressing global ecological and resource issues. And it means taking the lead once again in the U.N. Framework Convention for Climate Change global warming negotiations. As a component of these efforts, the United States must also invest in the energy, environment, and infrastructure sectors in developing nations to alleviate energy poverty with low-carbon energy systems and to help these nations adapt to the effects of climate change.

Adoption of a combination of shorter-term stimulus and longer-term public investment policies will not only enable the U.S. to once again become a world leader in low-carbon energy innovation but will also diversify our energy base, thus fostering economic stability and helping to boost economic growth because businesses and individuals can plan better for the future.

Placing energy at the center of our economic strategy and making smart public investments will also build new workforces – world class green-collar as well as science and engineering workforces –providing good jobs and pathways out of poverty for Americans, including those who were left out of the high-carbon economy. We cannot continue to wait on jumpstarting this energy transformation – waiting will only reduce productivity growth and jeopardize our nation's economic, environmental, and international security.

Thank you, Mr. Chairman and the members of the Committee, for inviting me today. I'd be happy to take any questions you may have.