Statement on Consumer Impacts of a Cap-and-Trade Climate Change Policy

March 12, 2009
Subcommittee on Income Security and Family Support
US House Committee on Ways and Means
Hearing on Protecting Lower-Income Families While Fighting Global Warming

A fair Climate Change policy ensures reduction of greenhouse gas emissions at the same time it protects small consumers, especially vulnerable working families and retirees, from losing their purchasing power or access to affordable home energy and transportation.

Many of the current proposals aim for such fairness, and, as originators of the Fair Climate Change Principles endorsed by a wide variety of consumer advocacy groups, we applaud the President’s proposal and others that auction all allowances. We are pleased with the intent to seek mechanisms to ensure most households and small businesses are held harmless from the substantial price increases expected in fuels and most goods and services. We also support using a share of revenues for the Weatherization Assistance Program and LIHEAP and for developing more sustainable low-income communities.

However, we are concerned that neither the analyses available to Congress so far nor the mechanisms proposed for implementing the “hold-harmless” or “mitigation” policy are adequate to the challenge.

Consumers’ expenditures on fuel vary today based on the kinds of fuel they use at home and the distances they drive. Under a climate change policy, the cheapest fuel – coal and the electricity it generates - will cost far more relative to cleaner fuels; so will fuel oil and liquid propane gas. That means some households will see their bills change far more than others.

The only study of cost impacts that uses household energy usage data, the 2007 review by Oak Ridge National Laboratory found low-income residents of the South and Midwest would experience far larger increases in household fuel bills than consumers in the Northeast and West.

Further, while gasoline bills would rise in the same proportion everywhere, rural households, would lose a far greater share of their income than most because they drive 60% further yearly than others. Clearly, rural residents of the South and Midwest will be particularly hard-hit.

---

Unfortunately, the proposals for delivering rebates through today’s tax credit and income maintenance programs will provide essentially uniform awards to households at the same income level, no matter where they live. This can mean a majority of low and moderate income households in one highly impacted region or a majority of rural households everywhere will get rebates worth far less than the increased costs they are paying. Others who live in urban areas, especially those on the two coasts, would get significantly more back in rebates than the increases in their expenditures. We urge the Committee to devote more analysis and more complete consideration to the “how” as well as the “what” of the question of revenue recycling.

First, better impact analysis using energy bill and energy use data is essential. The Department of Energy and EPA should be required to support analysis that includes modeling of household impacts and identifies variations in the patterns under different scenarios, especially those affecting low-and moderate-income working families and retirees.

Next, it is time to consider a fresh program design to ensure that the climate change policy for the next generation does not rely on the mechanisms for general family income support suitable for the early 21st century. Among the options we believe should be considered are:

- Provide a base, flat rebate that does not exceed the costs that consumers in the least-affected geographic regions will bear.
- Use state grant mechanisms to direct incremental income support resources through direct income transfers in highly impacted states.
- Design geographically targeted tax credits for rural consumers.
- Add funding to the state LIHEAP programs to assist highly-impacted households in every state.

Of paramount importance is to have a policy ensuring that the design of an auction revenue distribution regime remains responsive to the sure-to-come, but unpredictable, changes in energy markets and consumer conditions over the generation-long span of the legislation. We have proposed that a governing body be responsible for evaluating the impact and effectiveness of policies to protect consumers and for making proposals to Congress regarding their implementation.

Attached are the Fair Climate Principles on which these comments are based and a brief review of the technical analyses that indicate cost impacts on consumers in one place may be very different from the costs borne by those in a different place.

Thank you for considering these concerns.

**Contact information for these organizations:**
National Community Action Foundation, Washington, DC; David Bradley, Exec. Director, 202 842 2092, davidbradley@ncaf.org
National Consumer Law Center, Boston, MA and Washington, DC; Olivia Wein, Staff Atty., 202 452 6252, owein@nclcdc.org
Public Citizen, Washington, DC; Tyson Slocum Energy Program Director, 202.454.5191, tslocum@citizen.org
Friends of the Earth, Washington, DC, Erich Pica, epica@foe.org
FAIR CLIMATE CHANGE POLICY:

Principles for Protecting Low- and Moderate-Income Consumers from the Costs of Climate Change Policy and for Re-building Their Communities

The United States must meet its obligation to promote the common good of all peoples and reduce its greenhouse gas emissions; the policy framework for this change must fairly share the immediate economic costs and future benefits of change. It must ensure that vulnerable populations do not suffer greater hardship as a consequence of the policy.

Policies to address climate change through mechanisms that raise the price of carbon will directly raise the price consumers pay for the use of energy and transportation and indirectly raise costs for other products and services, such as food and medical care. Legislation must ensure that low-income individuals and families do not find the cost of basic necessities to be even further beyond their reach than before.

New climate change policies should be designed, implemented and governed based on the following principles:

THE DESIGN of any climate change mitigation policy that raises the cost of energy and other essential consumer goods must be fair to all Americans. Climate change policies must:

- Ensure that all consumers can afford the quantities of residential and transportation energy that meet their basic needs;
- Ensure that no households experience economic insecurity as a consequence of climate change policies;
- Ensure that vulnerable consumers who lack the capital or credit to reduce or eliminate their use of carbon-based energy in their homes and vehicles have access to cost mitigation programs such as weatherization, energy efficiency programs and clean energy technologies;
- Ensure that disadvantaged communities have access to a fair share of any funds designated for investments in infrastructure such as green homes and buildings, renewable energy technologies and easy access to low-emissions transit.
- Ensure that emissions of greenhouse gases are subject to regulation by government acting for the public and that any value created by the regulation belongs entirely to the public.

THE IMPLEMENTATION of programs, policies and investments that achieve these goals will include resources that are sufficient in size, distributed in proportion to the anticipated impact of cost increases, and available to affected low-income families and communities in a timely and efficient manner, as follows:
> **Adequate resources:** Funding must be adequate to hold low-income consumers harmless against costs resulting directly or indirectly from the climate change policy. Policies should reduce the burden of fuel prices to affordable levels, and support complementary policies, including significant reinvestments that adapt low-income homes, community facilities and equipment to a low-carbon economy.

> **Proportional Distribution:** The resources for mitigating costs and adaptation must be distributed in direct proportion to the economic burdens of climate change policies on vulnerable consumers and communities and in inverse proportion to their ability to afford energy and to make investments in sustainable buildings, equipment and community improvements.

> **Timely Distribution**

1. Investments to prevent harm due to rising energy costs and changing climate conditions such as the low-income weatherization program must begin in advance of the time that added costs will be incurred;
2. Funds that mitigate harm from loss of purchasing power and unaffordable bills for energy and transportation fuel must be delivered in the period when the damage is sustained; and

> **Efficient Distribution:** Assistance to vulnerable consumers must be managed through proven, efficient program mechanisms such as LIHEAP, the Weatherization Assistance program, EITC, and Social Security, provided that such programs are administered so as to distribute these resources proportionately and timely.

**THE GOVERNANCE** of climate change regulation and investment policy must be fair and responsive to emerging conditions. Governance mechanisms authorized must have sufficient flexibility to allow for adjustments and policy changes to be considered over the lifetime of any Greenhouse Gas regulatory framework.

- An entity governed by Directors who represent the interests of rural and urban low income consumers must be established to direct, oversee and report to the President and Congress on the operations and impact of programs for low- and moderate income consumers and for redeveloping communities that are authorized by climate change legislation. It should:
  - Develop standards for the distribution of funds and other resources intended to mitigate cost impacts on low-and moderate-income consumers and for reports on the uses of those resources, and
  - Develop strategies for integrating resources for sustainable re-development of low- and moderate-income communities, and
  - Evaluate and make recommendations regarding the effectiveness of the programs to mitigate adverse impacts of climate change policy on vulnerable consumers;
- All entities established to administer resources to implement climate change policies should follow clearly defined procedures for thorough and transparent public reporting of all transactions and uses of funds, and for full compliance with federal regulations for fiscal accountability.

Supporting Organizations 11/01/08:

*State and Regional:*

*Local and Other Organizations:*
Tri-CAP, Malden, MA; CAA of Somerville (MA), Inc., Democracy and Regulation (MA), A.W.I.S.H., Inc (WA)
Carbon Emission Auction Rebates for Working Families and Retirees:

Research Shows Uniform Payments Would Be Unfair

Lynn Schneider and Meg Power, PhD.
March 2009

Proposed cap-and-trade policies could harm America’s working families and retirees because their purchasing power drops as the cost of energy rises. The lower a household’s income, the more its capacity to afford basic necessities will be impacted. Most major climate change bills filed in the 110th Congress in some way acknowledges the regressive impact of emission caps or taxes and proposed mechanisms to alleviate the impact, as does the Obama Administration’s policy outline.

New proposals for “recycling” revenues or “rebates” from the Treasury’s auction revenues to consumers generally involve remitting cash transfers or tax reductions that vary by income. In other words, all households with a given income would receive the same rebate, perhaps varied for household size. Very little research has been conducted on the incidence of the consumer costs that will result from an auction system, but all of that analysis suggests a “flat” rebate is simple, but unfair. If the goal of a rebate or “dividend” mechanism is to mitigate the loss of purchasing power of the most vulnerable households, one size does not fit all.

A rebate, even varied by family size, will significantly overcompensate some and undercompensate others because of their location and the fuels their utilities use. The key factors which were found to cause significant variation in the costs of climate policy to low-income households are: rural vs. non-rural residency and geographic region. Further research is needed in this area in order to ensure proposed revenue “recycling” is fair and progressive.

Study #1: Oak Ridge National Laboratory

The Oak Ridge National Laboratory (ORNL) conducted a study on the impact that the Climate Change Stewardship and Innovation Act of 2007 (S.280) would have on LIHEAP-eligible households’ direct expenditures on gasoline and residential energy across rural and non-rural residencies, and across geographic regions. This remains the only published analysis based on data that includes the fuels used in homes. Of course, limits on CO2 emissions will raise the price of fuel oil, propane, and coal-based electricity more than the cost of other fuels. The bill analyzed, S.280, exempted natural gas from caps and had longer-range horizons on reductions than subsequent proposals; therefore, the costs to households seem low by contrast to the later proposals.

The important figures are the differences between groups of households rather than the level of allocation values. Rural residence may entail substantial price increases for delivered consumer goods and food as well, but these prices are probably reflected in the base period prices, which are higher in many rural areas. ORNL looked only at the two types of direct household energy
purchases: household fuels and gasoline because variability was the subject under study and inflation as an indirect result of energy price increases is not thought to vary greatly.

**Variation between Rural and Urban Area Households**

Rural areas’ residents in all regions drive far longer distances than do others. Table 1 displays ORNL’s findings that there will be significant variation between rural and non-rural consumers’ increased gasoline expenditures and therefore in the percent of income they must spend on transportation. Rural low-income households spend 45% more on average per year on gasoline than other low-income households.

| Table 1. Increase in Annual Gasoline Expenditures above Baseline by 2030 |
|-----------------------------|-----------------|
| **National Average**        | $323            |
| **Rural**                   | $424            |
| **Non-rural**               | $291            |

Source: ORNL. p. 6-8.

**Variation Among Regions**

The carbon intensity of heating fuel and electricity generation will lead to very different cost increases in different residential fuels. As seen in Table 2, ORNL’s findings reveal dramatic variation in impacts across regions by 2030, with vulnerable consumers in the South and Midwest incurring price increases more than double those of lower-income consumers in the Northeast and West. This disparity appears to be mainly due to the reliance of the South and Midwest on coal for electricity, as well as the high use of coal-fired electric heating in the South.

| Table 2. Percent Increase in Annual Electricity Expenditures above Baseline by 2030 |
|-----------------------------|-----------------|
| **National Average**        | 20%             |
| **West**                    | 14%             |
| **Midwest**                 | 28%             |
| **South**                   | 21%             |
| **Northeast**               | 12%             |

Source: ORNL. P.4-6.

**Study #2: Resources for the Future**

Resources for the Future (RFF) evaluated a variety of climate policy mechanisms and their impacts on the 20% of households with the lowest incomes. The analysis shows what happens first when a flat rebate is provided (the “dividend” approach, which provides a uniform rebate to all individuals) and then when other uses of auction revenues are added to a flat rebate. The results are stated in terms of percentage of annual income lost or added. No data on the type of fuel used by the households was included.
Variation among Regions under Different Policy Scenarios

Table 3 shows the impact of five policies on households in the lowest 20% of income and the range of impacts in percent of annual income lost/gained for those households by state or grouping of states. The percentages shown here are not comparable to the ORNL results. However, these results compare the fairness of various rebate proposals.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>National Average</strong></td>
<td>1.97%</td>
<td>-6.15%</td>
<td>1.81%</td>
<td>0.03%</td>
<td>1.59%</td>
</tr>
<tr>
<td><strong>Range of Impact on Regions</strong></td>
<td>-1.23% (NE) to 3.80% (TX)</td>
<td>-9.04% (NE) to 5.12% (NW)</td>
<td>-1.17% (NE) to 3.50 (TX)</td>
<td>-2.74% (NE) to 1.72% (TX)</td>
<td>-1.52% (FL) to 2.81% (TX)</td>
</tr>
</tbody>
</table>


RFF found that Texas, the Northwest, California, and Nevada are the only areas whose lower-income households incur net income gains under all policies except free allocations to polluters. Under that scenario all low-income consumers incur dramatic losses.

Low-income households in New England incur higher losses than those in any other region under most policies, except the exclusion of home heating fuels. If heating fuels are excluded, Floridians incur the greatest real income losses. However, the losses in New England (not shown) are only a little lower.

While ORNL found that low-income households in the entire Northeast Census region, including New York and Pennsylvania, would be harmed less by the direct cost of cap-and-trade relative to other regions, RFF found that New Englanders would be most harmed under any variation of cap-and-trade policy that returns a flat dividend. Texas’ low-income consumers are net winners under four of five RFF scenarios; their collective real incomes would be 2-4% higher after the flat dividend is distributed. This finding reflects that the Texas share of US families in the bottom 20% of income is much higher than New England’s. These variations do not change the fact that a flat rebate creates unintended income transfers among low-income households in different locations.

Consumer Mitigation Proposals and the Distribution of “Mitigation” Resources

The best-developed blueprint for a rebate to lower-income households delivered through existing tax and income support systems was proposed by the Center on Budget and Policy Priorities. The analysis supporting the proposal does not examine how the direct cost of fuels would lead to different household impacts.
Since today's tax credits and income support systems vary only by adjusted income, family size and employment status, changes or new approaches would be required to solve the redistribution problem. The Center proposes a small set-aside of auction revenues to provide to states to use for offsetting household burdens in unspecified ways and proportion.

Cap-and-dividend proposals circulated by several groups give every individual in the nation the same “climate dividend.” Since low-income households are smaller on average than others, the plan not only locks in, but actually, exacerbates the regressive nature of the increase in direct and indirect increases in the price of energy.

**The Analysis Tools Limit Understanding: or Better Thinking Comes from Complete Information**

The analyses of consumer impacts offered by CBO, the Center on Budget and Policy Priorities, and RFF all use the Consumer Expenditure Survey (CEX) to determine what low- and moderate-income Americans spend on energy directly and also on other products whose costs change because of the price of energy. The CEX is a snapshot of the past, but using it limits the predictive power of these analyses because it does not reflect the type of household fuel used. Those homes with the highest CO2 content, including coal-fired electricity, will cost far more proportionately than natural gas and nuclear power. What’s more, there will be a proportional shift among the consumer groups based on fuel and location. Those now using coal-based power have some of the lowest-cost electricity in the nation; it will rapidly become the most expensive. Electric bills make up the majority of low-income household expenditures today.

The 2005-2006 CEX data patterns will not be the burden distribution in a carbon-constrained future. In fact, the residential energy expenditures in those years were lower than normal so that expenditures that were below normal weather requirements are the basis for those analyses predictions about future needs.

The combination of the DOE Residential Energy Consumption Survey and the National Energy Modeling System, as used by ORNL, can offer fuels data that can be projected for different auction scenarios (and different weather forecasts). It lacks the data on all expenditures that would allow calculations of total household burden. However, those increases will be essentially the same percentage increase nationwide.

**Conclusion:** The analysis of what a cap-and-trade policy will cost households and what to do as a remedy is incomplete, and its tools are too limited. The 30-year framework proposed for re-distributing revenues requires imaginative and flexible policy tools; the analyses result in recommendations that are limited by today’s income redistribution mechanisms and by the faulty analytic base.

A thorough investigation of the direct and indirect household impacts of the major policy alternatives is an essential first step. The second is to undertake a fresh approach to designing program tools, including, but not limited to, targeted tax “rebates” to protect all American consumers equally as well as the economy they support while a future-directed climate change policy drives up the cost of all fossil fuels.
2 S.280 was designed to reduce greenhouse gas emissions over time through a cap-and-trade system that would begin in 2012. The cap would be lowered drastically in 2020, 2030, and 2050. Some emission allowances would be allocated freely to emitters, and an unspecified number of allowances would be auctioned. The bill establishes that some of the proceeds of the auctions would go toward cash rebates, discounts, and subsidies for consumers to offset increasing costs of energy, climate change adaptation and mitigation programs targeting low-income populations, support of technology innovation and deployment, assistance to dislocated workers and communities, among other things.
3 ORNL developed projections of impacts on the expenditures of low-income households on gasoline and residential energy by integrating the Energy Information Administration (EIA) National Energy Modeling System’s price projections for electricity and gasoline under S.280 with the EIA Residential Energy Consumption Survey and the EIA National Household Transportation Survey, both from 2001.
5 For these projections of impacts, RFF used data on household expenditures from the U.S. Bureau of the Census Survey of Consumer Expenditure 2004-2006. To develop their sample, RFF used a national population sample from the Bureau of Labor Statistics, grouped households by income decile, and aggregated those households into 11 regions. Those samples exclude Alaska and Hawaii, and due to a small number of observations, five other states were excluded from the study (Iowa, New Mexico, North Dakota, Vermont, Wyoming). The 11 regions into which the remaining 43 states and District of Columbia were aggregated are: Ohio Valley (IL, IN, KY, MI, MS, OH, WV, WI), Northeast (CT, ME, MA, NH, RI), Mid-Atlantic (DE, MD, NJ, PA), Plains (KS, MN, NE, OK, SD), Southeast (AL, AR, DC, GA, LA, MS, NC, SC, TN, VA), Northwest (ID, MT, OR, UT, WA), Mountains (CO, AZ), California and Nevada, Florida, Texas, and New York.

Disclaimer: “This report was prepared as an account of work sponsored by an agency of the United States Government. Neither the United States Government nor any agency thereof, nor any of their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights. Reference herein to any specific commercial product, process, or service by trade name, trademark, manufacturer, or otherwise does not necessarily constitute or imply its endorsement, recommendation, or favoring by the United States Government or any agency thereof. The views and opinions of authors expressed herein do not necessarily state or reflect those of the United States Government or any agency thereof.”