March 14, 2018

Testimony Concerning House Bill 5363, An Act Establishing a Carbon Price for Fossil Fuels Sold in Connecticut

Marc Breslow, Ph.D., Policy & Research Director, Climate XChange

Dear Members of the Committee:

I am speaking in favor of HB 5363, which could be critical to meeting the state’s goal, set in the Global Warming Solutions Act of 2008, to reduce greenhouse gas emissions at least 80 percent by 2050.

I am an economist, and the Policy Director for Climate XChange in Boston. Previously I held two positions with the state of Massachusetts: first, developing climate policies for the Executive Office of Energy and Environmental Affairs; and later Director of the Electric Power Division of the Department of Public Utilities. In 2010 I was the lead author of the state’s Clean Energy & Climate Plan for 2020.

In recent years I have focused on market-based policies for reducing greenhouse gas emissions. In 2014 I co-authored a study for the state on how a carbon pollution pricing system for Massachusetts could be designed and what its impacts would be. Recently I completed two similar studies for Maryland.

I have designed separate carbon pricing bills that are pending in the Massachusetts state House and Senate. I also designed Maryland HB 939, filed this year, that would institute carbon pricing there; and I have helped design carbon pricing bills for Rhode Island, New Jersey, and other states.
HB 5363 would institute fees on greenhouse gas pollution. There is worldwide recognition among policy experts that such fees, which would make the price of fossil fuels include the damage that they cause to health, the environment, and the economy, are the most effective, and least costly, way to cut emissions.

Due to its advantages, besides Connecticut, carbon pricing bills are now pending in Vermont, Massachusetts, Rhode Island, New York, Maryland, Washington, DC as well as other states.

**Questions to ask me**

I would like to speak in depth about the best designs for carbon pricing legislation, but due to time limits cannot do so. Instead I will discuss only one aspect, and encourage you to ask me questions about others, which include:

1) Given that HB 5363 would return all the fees to households and employers, where is the incentive to reduce emissions?
2) How should revenues be divided among households, employers, and investments in programs to further reduce emissions?
3) Why use flat dividends per person rather than cutting tax rates paid by individuals and households?
4) Which industries and types of employers need dividends and which do not?
5) What can you expect the administrative costs of this system to be?

**Protection for low and moderate income households**

The one aspect I will address is what is necessary for dividends to adequately protect low and moderate income households. With equal rebates per state resident, close to 70 percent of the overall revenues need to go to such households. If the dividends are instead targeted, so that lower income households get larger benefits than higher income ones, then around 60 percent of the revenues are adequate to protect vulnerable households. If you ask, I can explain in more detail.

Thank you for the opportunity to testify. I welcome your questions.
Supplementary comments for written testimony

Optimal policy design to protect vulnerable households

The Maryland policy design would split the fee revenues 62.5% to households, 22.5% to employers, and 10% to investments in clean energy, resilience to the impacts of climate change, and transition benefits for workers and communities that currently depend on fossil fuel industries. Within the funds going to households, about 30% is targeted to lower income households, and the other 70% goes equally to all adult residents of the state, with half-shares for children.

The key result of this design is that the lower 60% of households have a net gain, on average, from the combination of pollution charges and rebates. Because energy use varies greatly from one family to another, the impacts also vary. But, based on data for individual households from surveys by the U.S. Bureau of Labor Statistics, we estimate that about 85% of the lowest-income fifth of households would come out ahead, with high fractions of the second and middle fifths also having net gains. Please see the table and graphs in my written statement.

![Bar chart showing average gain for lowest-income 5th of households in Maryland.](chart.png)
Maryland study: Year 1, $15 fee per metric ton of carbon dioxide emissions

<table>
<thead>
<tr>
<th>Average impact per household</th>
<th>Carbon fee</th>
<th>Rebate</th>
<th>Net gain or loss</th>
<th>% net gain or loss</th>
<th>% net loss</th>
</tr>
</thead>
<tbody>
<tr>
<td>All households</td>
<td>$250</td>
<td>$300</td>
<td>$50</td>
<td>60%</td>
<td>40%</td>
</tr>
<tr>
<td>bottom 5th</td>
<td>$170</td>
<td>$320</td>
<td>$150</td>
<td>85%</td>
<td>15%</td>
</tr>
<tr>
<td>second 5th</td>
<td>$230</td>
<td>$360</td>
<td>$130</td>
<td>80%</td>
<td>20%</td>
</tr>
<tr>
<td>middle 5th</td>
<td>$240</td>
<td>$300</td>
<td>$60</td>
<td>70%</td>
<td>30%</td>
</tr>
<tr>
<td>next to top 5th</td>
<td>$290</td>
<td>$240</td>
<td>-$50</td>
<td>40%</td>
<td>60%</td>
</tr>
<tr>
<td>top 5th</td>
<td>$320</td>
<td>$280</td>
<td>-$40</td>
<td>40%</td>
<td>60%</td>
</tr>
</tbody>
</table>

Protection for vulnerable employers

My research for Massachusetts indicates that for advanced service and information-oriented economies like Connecticut and Massachusetts, energy costs are a small percentage of overall expenses in most industries. As a result, carbon pollution charges will not be a significant burden compared to other costs such as wages and salaries, rent, and health insurance. There are three categories of employers for whom carbon pollution charges could be an issue, but these employers constitute only a small portion of the economies in such states. We estimate that 20% to 25% of the fee revenues should be sufficient to provide rebates that will protect these industries. The industries are:

1) Specific manufacturing sectors that are both energy-intensive and are in competition for sales with companies in states or nations that won’t have carbon charges comparable to Maryland’s in the near future.

2) Small non-profit organizations that are unable to cover any significant increased costs by bringing in new revenues.

3) Government agencies that have large energy costs and are similarly unable to increase their budgets to cover them.