

CARBON TAX

By Gary Antonides



In the Spring 2017 issue of the CEPA Newsletter, we discussed “The Future of Coal.” At that time, there were many changes in the works, and this article is to bring readers up to date with regard to “carbon taxes.” Since the previous article, the Trump administration has killed the Clean Power Plan initiated by the Obama administration. This would have left it up to the states to implement plans to meet carbon reduction goals set by the EPA. In the absence of federal leadership, many states have implemented or are now considering various means of carbon reduction.

<https://www.brookings.edu/wp-content/uploads/2016/07/State-level-carbon-taxes-Options-and-opportunities-for-policymakers.pdf> reports that a number of states have committed to deep, long-term emissions reduction targets. For example, Massachusetts, New York, and Rhode Island all have targets to reduce their greenhouse gas (GHG) emissions by 80 percent of 1990 levels by 2050, and Oregon and Vermont have goals of 75 percent reductions.

The three most common carbon reduction methods are: (1) Renewable Portfolio Standards (RPS), (2) Cap-and-Trade systems, and (3) Carbon Taxes.

(1) Renewable Portfolio Standards are requirements that a certain amount of power generation come from renewable sources. Twenty-nine states have them. Maryland’s RPS is 25% by 2020. Environmentalists are advocating a higher percentage in the future.

(2) Cap-and-Trade Systems. In the US, the trading of greenhouse gas (GHG) emission-reduction credits is underway in a large group of states on the East Coast and in California. In the northeast US, the six New England states, New York, Maryland, and Delaware joined together to set up a carbon dioxide (CO₂) cap-and-trade regime that covers CO₂ emissions from power plants in those states. This is the Regional Greenhouse Gas Initiative (RGGI) and it was the first US mandatory cap-and-trade program for GHG emissions. The RGGI trading scheme, which became effective in 2009, applies only to power plants with capacities to generate 25 MWs or more. The RGGI system is narrower than some other regional GHG emissions trading systems that cover GHGs other than CO₂ and that apply to emitters other than power plants. The RGGI states set a cap for total emissions of CO₂ from covered power plants in the region. Each state implements the program through its own emissions caps which decline over time. Covered power plants must obtain an allowance for each ton of CO₂ emitted annually. RGGI auctions allowances, rather than allocating them for free. Power plants may purchase allowances at quarterly auctions or purchase allowances from other generators within the region that have an excess. According to <https://www.rggi.org/>, the price for an allowance of a ton of CO₂ at the last auction was \$3.79, and the Chair of the RGGI, Ben Grumbles, who is Secretary of the Maryland Department of the Environment says other states have become interested in the program.

<https://www.lexology.com/library/detail.aspx?g=0f6bf054-27dd-4cc0-b856-107b1ad0854e> reports that although Virginia is not an RGGI member, its governor recently directed environmental regulators in that state to cap power plant GHG emissions in Virginia and establish a GHG emissions trading system where credits can be traded with similar systems in other states. Additionally, New Jersey, who pulled out of RGGI in 2011, may get back in.

California operates one of the most active GHG trading markets in the world, second in size to the European Union’s Emissions Trading System. The California cap-and-trade rules came into effect in 2013, and apply to large power plants, industrial facilities, and fuel distributors. It is broader than the East Coast’s RGGI system because it covers emitters other than power plants and GHGs other than CO₂. Some allowances are auctioned, while others are allocated or given away for free. The free allowances allocated to emitters has been reduced over time. Also, the California Global Warming Solutions Act of 2006 aims to reduce the state’s GHG emissions to 1990 levels by 2020 and to 40 percent below 1990 levels by 2030. California’s cap-and-trade system is connected to a similar scheme in Québec. Ontario plans to join the program next year.

(3) Carbon Tax. At this time, there is increasing interest in a carbon tax based on the amount of CO₂ generated by fossil fuels, and this now seems to be most likely means of carbon reduction to be implemented nationwide. This could be implemented at the refinery or the first point where they enter the economy, such as the mine, well or port. Different carbon tax plans use the money collected in different ways (schools, infrastructure, dividend to the people, etc). At the present time, it is estimated that a tax of \$40/ton of CO₂ would be sufficient incentive to motivate companies to reduce carbon emissions. An initiative on the November 2016 ballot in Washington State would have instituted the first state carbon tax starting at \$15 per metric ton of CO₂ on fossil fuels sold or consumed in the state. The measure would have used the revenue to, among other things, reduce the state sales tax by one percentage point. The measure failed, primarily because people disagreed on how to spend the revenue. There are several variations of carbon taxes being proposed, which are discussed later in this article.



Public Opinion. There seems to be a willingness on the part of our population to pay more to combat climate change. According to a new study published by Yale scientists in *Environmental Research Letters*, Americans are willing to pay a carbon tax that would increase their household energy bills by \$15 per month, or about 15%, on average. This result is consistent with a survey from last year that also found Americans are willing to pay an average of \$15 to \$20 per month to combat climate change. Another recent Yale survey found that overall, 78% of American voters support taxing and/or regulating carbon pollution, including 67% of Republicans and 60% of conservative Republicans.

With such broad support, why doesn't America have a carbon tax in place by now? Study co-author Anthony Leiserowitz noted the similarity to public support for many gun control policies. Public support often doesn't translate into policy. On the issue of gun control, Republican lawmakers are afraid that if they vote for even the most benign policies like requiring background checks for all gun purchases, the NRA will mobilize its supporters against them in elections. On the issue of climate change and carbon taxes, they have the same fear of the gas, oil, and coal interests. Unfortunately, the wealthy and powerful have more influence over our legislators than voters.

The new Yale study also asked survey participants how they would like to use the revenue generated by a carbon tax. Supporting the development of solar and wind energy and funding infrastructure improvements were the two most popular choices (around 80%), followed by assisting displaced coal workers (73%) and paying down the national debt (67%). Interestingly, the option of returning the revenue back to taxpayers was supported by fewer than half of Americans – both Republicans and Democrats.

The Case for Revenue Neutral Carbon Taxes. There are some important reasons why returning all of the carbon tax revenue to households ('revenue neutrality') has widespread support, including among many prominent Republicans, and this type of tax is being advocated on a federal level as well as in individual states.

Poorer households spend a larger proportion of their income on energy bills, so a carbon tax by itself would be a regressive policy. However, because wealthier households will have larger net energy bills, returning all the revenue

equally to all households would be a progressive policy. Studies have found that most households would actually come out ahead -- rebate checks would exceed their increased energy costs, particularly in lower income households. Studies have also shown a revenue-neutral carbon tax would grow the economy because the rebate checks would give people more disposable income. Lastly, returning the revenue to households would allow for a higher carbon pollution tax. If Americans are willing to pay an extra \$15 per month to tackle climate change, that would translate to a very modest carbon tax. But if some or all of the revenue is returned to households, higher energy costs will be offset by rebate checks, allowing for a higher carbon tax at the same cost to households. And the higher the tax, the more effective it will be at reducing American carbon pollution.

Citizen's Climate Lobby (CCL). This is one of the organizations advocating a revenue-neutral carbon tax policy in the USA. Their volunteers have been at work for ten years, and the group has grown exponentially. In its annual lobbying effort this year, the group sent 1,300 volunteers to lobby every member of congress to support a revenue-neutral carbon tax. CCL is a non-profit, nonpartisan, grassroots advocacy organization. They train and support volunteers to build relationships with elected officials, the media and their local communities. They have 476 chapters worldwide, including 9 in Maryland, one of which is in Annapolis. CCL proposes a \$15/ton tax in the first year, increasing \$10/ton in each succeeding year. This would not be much of a burden at first, but knowing the tax would increase significantly in the coming years would motivate reductions in carbon use.

Last month CEPA invited Jim O'Reilly from the Annapolis Chapter of CCL to speak at our Board of Trustees meeting. You can get their monthly newsletter by contacting www.citizensclimatelobby.org, click on "Join CCL" and provide your email address.

Climate Leadership Council. As explained in https://www.washingtonpost.com/news/energy-environment/wp/2017/02/07/senior-republican-leaders-propose-replacing-obamas-climate-plans-with-a-carbon-tax/?utm_term=.ef9f9d2f4310, there is another plan that has received attention lately. Representatives from a coalition of veteran Republican officials, including five who have either served as treasury secretary or as chairman of the Council of Economic Advisers, met with White House officials to discuss the idea of imposing a national carbon tax to address climate change. The Climate Leadership Council, led by James Baker, is proposing elimination of nearly all of the Obama administration's climate policies in exchange for a rising carbon tax that starts at \$40 per ton, and is returned in the form of a quarterly check from the Social Security Administration to every American.

This revenue-neutral plan has been popular among economists and some climate scientists for years. The Council estimates that the average family of four would receive \$2,000 annually in dividends if the tax starts at \$40 per ton, and as the tax rises, so would their dividends. This would naturally create a constituency for ever-tougher climate change action.

CLC's plan would have border carbon adjustments for the carbon content of both imports and exports. Exports to countries without comparable carbon pricing systems would receive rebates for carbon taxes paid, while imports from such countries would face fees on the carbon content of their products.

Regulations that are no longer necessary upon the enactment of a rising carbon tax could be eliminated. Many of the Obama-era carbon dioxide regulations could be safely phased out, including the repeal of the Clean Power Plan (which, of course, has already happened).

Carbon Tax Center (CTC). This organization developed a website (<https://www.carbontax.org/states/>) that advocates a carbon tax. They report that no U.S. state has a carbon tax. It also reports that, although a tax on carbon emissions in the state of Washington was defeated in 2016, Washington's governor has proposed another plan with the majority of the funds being used for education. Six other states and Washington DC are considered "promising" arenas for enacting state carbon taxes. In a [comprehensive 2017 report](#) by the Carbon Tax Center, they classify the 51 states (including DC) into five categories of carbon tax readiness ranging from "promising" to "very challenging."

