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The President, not the *New York Times*, Is Right on the Social Cost of Carbon

A CO2 Coalition Review of a Media Claim

By Bruce Everett, Ph.D.

The Social Cost of Carbon (SCC) is an estimate of the present value of the future impact of climate change and is supposed to serve as the basis for climate regulations. Like everything else in the climate debate, the SCC is a political exercise.

In a July 14, 2020 *New York Times* article, Lisa Friedman claims "G.A.O.: Trump Boosts Deregulation by Undervaluing Cost of Climate Change."[1] In fact, the GAO (Government Accountability Office) says no such thing. Responding to Congressional requests, the GAO considered (1) why the Trump administration's SCC is lower than the Obama administration's, (2) why the recommendations of a 2017 study by the National Academies of Sciences, Engineering, and Medicine have not been implemented and (3) how do states and other countries estimate SCC. Neither the GAO nor Ms. Friedman bothers to ask the only important question: do estimates of the SCC make any sense?

A 2008 federal court decision requires the executive to estimate the SCC as a basis for proposed climate regulations. An Interagency Working Group (IWG) was established in 2010 to generate this estimate. The IWG's methodology couples a climate model, which estimates global temperature as a function of atmospheric CO_2, with a "damage model," which estimates the value of future economic losses resulting from higher temperatures. The IWG's 2010 estimate was about $50 per metric tonne (mt) in 2020. As a point of reference, $1 per mt equates to about 1¢ per gallon of gasoline. The Trump administration's estimates range from $1-7 per mt in 2020 – not high enough to support any real carbon regulations.

Despite the hard work of the IWG, the methodology that it uses is effectively meaningless. The models assume (1) high sensitivity of the climate to CO_2, (2) extensive damage from higher temperatures, (3) a time horizon out to the year 2300 and (4) a low discount rate.

About the Author

Bruce Everett, Ph.D. During his 45-year career in international energy, Dr. Everett was an economist with the U.S. Department of Energy and an executive with ExxonMobil. He taught energy economics at the Georgetown University School of Foreign Service for ten years and was also an Adjunct Associate Professor of International Business at the Fletcher School of Tufts University for 17 years.

Take, for example, the time frame. Predicting the results of this year's election is hard enough. Do we really think we know what the world looks like 280 years from now? If you assume that the global economy keeps growing, then even small percentage losses of GDP will generate a fantasy of huge dollar "damages" in the far distant future, when our descendants will be unimaginably rich. If we limit the time scale to the year 2100, keeping all other assumptions constant, the SCC would fall by more than half.

The "discount rate" measures the value of having dollars in the future compared to having those dollars in hand today. In 2003, the Office of Management and Budget issued Circular A-4 specifying that government agencies evaluate proposed regulations using discount rates of 3% and 7%. The IWG, however, chose to use 2½%, 3% and 5% for SCC calculation. Why? The lower the discount rate, the higher the value of presumed future damages and the higher the SCC. If we use a year 2100 time frame and a 7% discount rate, the SCC goes to zero.

The Coalition's analysis demonstrated that varying only the time horizon and discount rate could generate virtually any SCC value you wish, including negative values (i.e., net benefits). That's without even discussing the climate science and economic impacts.

The CO_2 Coalition's July, 2019 White Paper entitled *The Social Cost of Carbon and Carbon* Taxes: Pick a number, any number" (available at CO2Coalition.org) showed that the SCC calculation depends more on points (3) and (4) than on points (1) and (2).

So what did President Trump do that Ms. Friedman found so objectionable? First, he limited the analysis to US rather than global impacts. This decision is logical. Why should US consumers bear the burden of regulatory actions that primarily benefit China? Furthermore, it makes no real difference.

[1] https://www.nytimes.com/2020/07/14/climate/trump-climate-change-carbon-cost.html

Second, he stopped the questionable practice of using special discount rates, and instructed the use of the OMB's standard rates instead. In other words, President Trump is guilty of declining to use the Obama administration's statistical sleight-of-hand to create an artificially high SCC.

If the SCC methodology is so useless, why then has nobody implemented the recommendations of the National Academies' 2017 recommendations to improve it? Simple. The National Academies produced a 261-page report that fails to address the real deficiencies of the SCC calculation. The SCC estimate was useless before the National Academies' report, and it's still useless.

The final section of the GAO report demonstrates that neither the states nor other governments have developed a meaningful approach to the SCC calculation.

Instead of using mathematical contortions to generate high SCC values to support expensive carbon reduction measures, we ought to apply a little common sense. Actual data over the last several decades demonstrate that, rather than causing damage, CO_2 is providing a net benefit to mankind through increased crop yields and drought resistance and the generalized benefits of the small amounts of warming we have experienced. President Trump's actions were a step in the right direction.

Science & Policy Briefs

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