

As Concerns Mount, Environmentalists Seek To Raise Carbon 'Cost' Estimate

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Inside EPA

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Environmentalists are launching an effort they hope will pressure the Obama administration to raise its default estimate of the social cost of carbon (SCC), believing it will strengthen the case for strict greenhouse gas (GHG) rules and other emission controls just as concerns about irreversible climate change due to the emissions are mounting.

The Natural Resources Defense Council (NRDC), Environmental Defense Fund and the Institute for Policy Integrity, a think tank based at the New York University School of Law, are developing a web-based platform to foster sharing of data between climate scientists and economists in an effort that proponents believe will help put pressure on the administration to raise its SCC estimate.

While launch of the platform is still six months away, one source familiar with the effort says it will be difficult for the Obama administration to update its SCC now due to political realities.

As a result, the “action” on the issue will be happening in the private and academic sectors, a second source says, which is where it should be because when the administration does update the measure it will use the most updated peer-reviewed research.

The environmentalists' effort is aimed at raising the Obama administration's 2010 determination setting an SCC measure to be used in regulatory cost-benefit analysis at \$21.40 per ton. The measure, crafted by an interagency task force, is used to calculate the regulatory benefits of curbing emissions, which allows it to be used to justify rules and other policy measures. The Congressional Budget Office has also estimated the revenue benefits of a carbon tax that assumed a \$20/ton value.

But environmentalists and others have long criticized the administration's measure as being too low. Some have said the measure could be as much as 13 times the administration's value. Critics also faulted the administration's use of discount rates of 2.5, 3 and 5 percent to determine present-day values of regulatory actions, saying they are twice as high as they should be.

Ever since the administration set its SCC value, groups have been pressing for it to be revised. For example, in 2012 comments on the administration's proposed vehicle GHG rules for model years 2017-25, [NRDC called unsuccessfully](#) on the administration to alter how it measures SCC to result in even greater predicted benefits from cutting emissions.

“Short of our preferred 0.7 [percent discount] rate, the agencies should at least use a more representative set of discount rates that take into account long run uncertainty in interest rates,” the group said.

The second source also says the administration's SCC task force drew on existing literature, some of which is now outdated, and did not do any of its own research. The conclusions that they drew were only as sound as the research they were using, the source explains.

Sen. Sheldon Whitehouse (D-RI), who is sponsoring a bill that proposes a carbon fee ranging from \$15 to \$35 per ton, said in a [March 25 interview](#) that the White House Office of Management and Budget (OMB) is reviewing the SCC.

“There are considerable studies that peg the social cost of carbon well higher than that,” Whitehouse said. He added that in discussions with White House officials prior to the introduction of his bill, he learned that OMB is reviewing its original SCC values. “So it could very well be that the OMB [SCC] number increases, in which case that would be an argument in favor of the higher fee to offset the higher damage calculation,” he said.

While Whitehouse said OMB is reviewing its earlier SCC calculations, it has not yet publicly reconvened the interagency task force that calculated its 2010 value, something the backers of the new platform hope to change.

Concerns Mount

Environmentalists' SCC platform effort comes as concerns are mounting in the wake of reports that atmospheric monitoring showed this month for the first time that daily carbon dioxide (CO₂) concentrations came close to exceeding [400 parts per million \(ppm\)](#), 50 ppm higher than what many scientists say is the level needed to avoid dramatic global warming impacts.

Scientists say that the 400 ppm level was estimated to have last occurred more than 3 million years ago, a time when average temperatures were significantly warmer and sea levels much higher than they are now.

The scientific consensus that such levels are likely to cause harm is also increasing. A [peer-reviewed study](#) released May 16 in the journal *Environmental Research Letters* finds that 97 percent of scientists agree that human activity boosting GHG emissions is causing global warming.

The study, “Quantifying the Consensus on Anthropogenic Global Warming in the Scientific Literature,” analyzed the evolution of scientific consensus by examining nearly 12,000 papers from 1991-2011. “There is a strong scientific agreement about the cause of climate change, despite public perceptions to the contrary,” said John Cook of the University of Queensland in Australia who led the study.

Additionally, former Energy Secretary Steven Chu identified climate change as the biggest problem of the day in a [May 15 interview in the *Stanford Report*](#). “We're heading into an era

where if we don't change what we're doing, we're going to be fundamentally in really deep trouble. We're already in trouble. So we have to transition to better solutions.”

Also raising alarms on global warming impacts, a new [Government Accountability Office \(GAO\) report](#) released May 14 urges EPA and other agencies to better address the impacts of climate change on infrastructure, saying it is preferable to pay "more now to account for the risks of climate change, or potentially [pay] a much larger premium later to repair, modify, or replace infrastructure ill-suited for future conditions."

In its first advice on the issue since it listed federal climate change liabilities as a high-risk issue in need of reform, GAO urged EPA and the Department of Transportation to craft infrastructure design standards to better account for risks of climate change and urged the White House Council on Environmental Quality to issue long-delayed guidance for how agencies should account for climate change impacts when conducting National Environmental Policy Act reviews of their decisions.

A separate report issued the same day by NRDC warns that taxpayers are paying a significantly greater share of property losses from major storms such as Hurricane Sandy than private insurers, with damages last year equaling 16 percent of total federal non-defense discretionary spending. Both reports warn that future costs could be staggering.

Despite the growing global warming impact concerns, environmentalists warn that the administration is not doing enough to mitigate GHG levels. The vehicle GHG rules the administration issued in President Obama's first term are "not enough" to meet his target of cutting GHGs by 17 percent by the end of the decade, or to "do our part to stop CO2's relentless rise above the 400 ppm threshold just crossed," [NRDC's David Doniger said in a May 10 blog post](#).

Doniger renewed the group's call for EPA to regulate GHG emissions from new and existing power plants, regulate methane leakage from oil and gas drilling and pipelines, bar the use of hydrofluorocarbon refrigerants, strengthen energy efficiency standards for appliances and buildings, and modernize the power grid.

Driving Agenda

To drive that agenda, NRDC and others are looking to their new process to help raise SCC estimates. The second source familiar with the group effort says that SCC estimates will only rise until emission reduction measures are put in place. The source points to record damages from last year's storms, droughts and fires. "It will take time for these kinds of damages to enter the peer-review literature, but they are very much ingrained in the public conscience and public budgets.”

The first source says one problem with agreeing on an SCC is that economic models that are used are “not as updated and nuanced as they should be to express the range of scientific conclusions that are out there.” Instead of a major research effort with large teams of people, the

reality is that there is a small group of economists working on the issue in isolation, the source adds, citing institutional barriers and funding as hurdles.

The second source says the project's aim will be to put the climate data and economic data in one place, and is in response to a clear need “for the damage function community to be talking more closely with the integrated assessment modeling community.” The source says it is “not a secret” that some of the models have damage functions that have not been updated in more than a decade.

The groups have established a blue ribbon panel to assure the work is scientifically accurate and “informs the SCC process,” the second source says.

A third source says the platform will also be accessible to the general public and could help the administration decide to reconvene the SCC task force, which it has said it would when new climate data and economic models became available. -- *Dawn Reeves*

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