

Advanced Energy Economy, Alliance for Clean Energy New York, Coalition for Community Solar Access, Natural Resources Defense Council, New York League of Conservation Voters, New York Solar Energy Industries Association, Sierra Club, Solar Energy Industries Association, Vote Solar

November 25, 2020

The Honorable Basil Seggos
Commissioner, New York Department of Environmental Conservation
625 Broadway
Albany, New York 12233

Re: NYS Department of Environmental Conservation Social Cost of Carbon Guidance

Dear Commissioner Seggos:

We write concerning one of the most consequential decisions your Department has yet to make in New York's fight against climate change: the determination of a social cost of carbon ("SCC") that will be used in evaluating agency actions to meet the requirements of the Climate Leadership and Community Protection Act ("CLCPA"). The establishment of the SCC will play a critical role in the state's regulatory decisions and in New York's ability to meet the CLCPA's ambitious climate and environmental justice goals. Establishing a robust SCC will send a clear signal that New York acknowledges the widespread harms of greenhouse gas emissions, which fall disproportionately on disadvantaged communities and threaten to compound inequities for future generations.

The undersigned organizations — representing a broad coalition of environmental, public interest, and clean energy groups — appreciate the thoroughness and thoughtfulness that the Department of Environmental Conservation ("DEC") put into the proposed SCC guidelines, and note that this proposal incorporates several of the recommendations we made in our August 2020 letter.

Overall, we support the proposed guidelines and recommend that DEC finalize this guidance by the end of the year as required by the CLCPA. The establishment of the SCC by this date will help ensure timely progress on the Climate Action Council's work to develop a Scoping Plan, which must take into account the SCC when evaluating the costs and benefits of its recommendations.

However, we urge your office to make two changes to the proposed guidelines. First, DEC should establish a single, uniform SCC for use in regulatory processes. Second, given the ample evidence that the impacts of climate change are likely to get significantly worse over time, DEC should apply a low discount rate of 2% and a high, 95th percentile damages estimate to reflect this reality. In addition, we recommend that DEC assist agencies by providing guidance on appropriate SCC values for less common GHG emissions, including black carbon.

I. DEC should establish a single, uniform SCC to be used by state agencies.

Establishing a single SCC is not only required by the CLCPA,¹ it is also the only way to ensure that state agencies give equal weight to the climate impacts of their actions. Allowing agencies to choose from a menu of SCC options, as DEC proposes, could make it difficult to compare the benefits of different agency actions on an “apples to apples” basis. The lack of consistency among agencies is likely to create several challenges. First, allowing agencies to select their own SCC estimates could result in sectors of the economy that are regulated by agencies that take a less aggressive view of the SCC lagging behind those that are regulated by agencies that take a more aggressive view. For example, were the Department of Public Service to use a less aggressive estimate of the SCC than that chosen by other state agencies, the state would risk having its electric and natural gas sectors fall behind other sectors of the economy in taking steps to reduce emissions. Conversely, requiring all agencies to use a single SCC to measure the impacts of their actions, as we recommend, would ensure consistency among agencies to mitigate climate harms and the economic sectors these agencies regulate.

Second, allowing a menu of SCC options could inadvertently create an opening for litigious parties to challenge or delay agency actions on the basis of each agency’s choice of SCC. Requiring agencies to select and then defend their choice of SCC for every regulatory action could waste significant administrative resources and potentially compromise the state’s ability to move swiftly to implement the CLCPA in a coordinated fashion. Adopting a single SCC, as we recommend, would avoid putting the state in the untenable position of having to defend different assumptions for different agency actions as equally representing the social cost of carbon—i.e., the cost to society—and would relieve significant administrative burden and risk.

Finally, there is a risk that allowing agencies to choose from a menu of options would invite agencies to treat the evaluation of climate impacts as a secondary concern to be addressed at the end of the regulatory process, rather than a primary input into deciding among regulatory options. If agencies were allowed to choose from among a range of SCC estimates, they might be pressured to select SCC estimates after the fact to justify decisions that they were already intent on making, as opposed to incorporating the single state-wide SCC value from the beginning as part and parcel of the regulatory decision-making process.

For these reasons, DEC should adopt a single SCC to be used by all state agencies in calculating the carbon impacts of their actions.

II. DEC should take into account the multiple high-risk scenarios and unaccounted-for damages in establishing the state’s SCC by adopting a SCC based on the IWG’s 95th percentile damages estimate with a maximum 2% social discount rate.

Although DEC’s proposed guidance recognizes the shortcomings in relying on the 2016 Interagency Working Group (“IWG”) report’s “central estimate” as the cost of carbon for New York, the guidance does not adequately correct for these shortcomings.

¹ § 75-0113 (requiring “a social cost of carbon.”) (emphasis added).

The draft guidance appropriately acknowledges that the 2016 IWG’s adoption of a 3% “central” estimate underestimates the SCC because it does not capture the risk of catastrophic damages from large-scale, single events or irreversible tipping points.² Indeed, the 2016 IWG report recognized that there is “extensive evidence in the scientific and economic literature on the potential for lower-probability, but higher-impact outcomes from climate change, which would be particularly harmful to society and thus relevant to the public and policymakers.”³ For this reason, the IWG included the 95th percentile damages estimate to represent the marginal damages associated with these lower-probability, higher-impact outcomes. The evidence for damages due to these events has only increased since the IWG report was published in 2016.

DEC’s proposal to use a slightly lower discount rate to “accommodate for this shortcoming” in the IWG report represents a good first step toward adjusting the IWG values for this important omission, but unfortunately does not fully address the unaccounted-for damages in the IWG estimates. For example, the IWG estimates that annual damages under the 95th percentile scenario would be roughly three times (200%) higher than under the “base case” for a 3% discount rate. The IWG’s 2.5% discount rate scenario—which is one option proposed by DEC to take into account the unaccounted-for damages in the IWG estimates—yields damage estimates that are only about 50-60% higher than the 3% base case estimates.

In addition to these lower-probability, high-impact outcomes, which are not reflected in the IWG’s “central” estimate, there is also widespread understanding that the IWG central estimates are likely to be conservative because the IWG’s modeling largely excluded damages from many sectors (transportation, communication, fisheries, recreation) and effects (ocean acidification; increases in pests, pathogens, weeds, erosion, air pollution, and fires; changes to economic growth rates).⁴ These factors strongly support establishing an SCC that is based on the IWG’s 95th percentile damages estimate, as opposed to the less accurate 50th percentile estimate on which the IWG’s other SCC estimates and DEC’s proposed SCC would rely.

Second, DEC’s guidance correctly states that lower discount rates appropriately reflect not only public cost preferences, but also social concerns over public safety, welfare, and environmental protection.⁵ When considering societal preferences, the proposed guidance correctly proposes to use lower discount rates than those observed in private markets to reflect the state’s mandate to invest in preserving a viable environment for future generations.⁶ These considerations strongly support adoption of a low social discount rate, in the range of 2% or lower. Use of the 3% value in DEC’s guidance—even as the maximum of a range of “acceptable” values—would be inconsistent with DEC’s mandate to establish a cost of carbon based on the social discount rate or rate of time preference (as opposed to individual

² New York State Department of Environmental Conservation, Draft Value of Carbon Guidance (2020), p. 18.

³ IWG Report at 3.

⁴ E.g., Peter Howard, Cost of Carbon Project, Omitted Damages: What’s Missing from the Social Cost of Carbon (2014), <http://costofcarbon.org/reports/entry/omitted-damages-whats-missing-from-the-social-cost-of-carbon>.

⁵ NYSDEC Draft Value of Carbon Guidance, p. 17.

⁶ *Id.*

economic sectors' or individuals' discount rates, which may be higher or lower than society's rate). Conversely, adopting a social discount rate of 2% or lower would be more in line with the agency's responsibility to identify the appropriate discount rate for use in decisions that affect the wellbeing of the natural environment and both present and future generations.

For these reasons, we urge DEC to make two critical adjustments to its proposed SCC estimates: First, we strongly recommend that DEC adopt the IWG's 95th percentile damage estimates as the starting point for calculating the SCC. Doing so would reflect the numerous high-risk and unaccounted for damage scenarios that the IWG's other estimates do not reflect. Second, we recommend that DEC adopt a 2% discount rate as the social discount rate to be used in calculating the SCC. In addition to using the 95th percentile damage estimate to counterbalance the conservative damages estimates incorporated in the IWG's central values, DEC's guidance should also encourage agencies to consider the significance of potential climate harms that cannot be easily reduced (or should not be reduced) to monetary terms, such as biodiversity loss, increased conflict and displacement, and declines in mental health and wellbeing.

Finally, as we have explained above, we strongly recommend that DEC specify a single SCC for use by state agencies—in this case, an SCC based on the 95th percentile damages estimates at a 2% discount rate.⁷ However, if DEC decides to maintain its proposal to allow agencies to use a range of SCC values, we recommend that DEC set the maximum of this range at no more than 2.5% with the 95th percentile damages estimate. In addition, if the final guidance includes a range of discount rates, DEC should include a zero percent discount estimate, which the CLCPA requires DEC to consider.⁸ If DEC includes a range of discount rates, DEC should identify the 2%, 95th percentile damages estimate as its “central” estimate, and encourage agencies to use this estimate in all cases unless they provide strong reasons to deviate from it.

III. DEC should provide guidance on SCC values for less common GHG emissions.

We strongly support DEC's recommendation that state agencies make every effort to assess the damages of each greenhouse gas and that peer-reviewed research on damages be applied whenever possible. However, as DEC points out, doing so for GHGs other than carbon dioxide, methane, and nitrous oxide—which are already monetized by the IWG—is challenging and would require a significant investment in research and analytical resources from each agency.

In practice, these challenges will likely become insurmountable barriers that will result in DEC's recommendation being ignored. To address this issue, DEC should provide more specific guidance to

⁷ In our letter dated August 20, we recommended adoption of the IWG's then-available 95th percentile estimate, which relied on a 3% discount rate. We did so because we were eager for DEC to move quickly to adopt a single SCC for the state, and believed this was the most accurate “off-the-shelf” estimate that was then available, even though we believed the discount rate of 3% to be too high. In light of NYSERDA and DEC's ability to rely on Resources for the Future to quickly calculate estimates with lower discount rates, however, we modify our recommendation for the reasons herein, and recommend that DEC use a lower discount rate with the IWG's 95th percentile damages estimates.

⁸ CLCPA § 75-0113(2).

ensure that state agencies have the ability to monetize and consider the social costs of less common, but still harmful, GHG emissions in their regulatory decision making.

Specifically, DEC should establish adjustments to its SCC for CO₂ based on the relative Global Warming Potential (GWP) of greenhouse gases not separately monetized by the IWG. This includes those gases listed in Table 2 of the proposed guidance (other than carbon dioxide, methane, and nitrous oxide), as well as black carbon, a short-lived but powerful GHG not contemplated in the proposed guidance and hydrogen, an indirect GHG with a high propensity for leakage and a GWP of 5.8.^{9 10} Omitting these gases from the guidance could have the practical though inadvertent effect of causing agencies to underestimate the greenhouse gas impacts of their actions, or encouraging them to take actions that reduce emissions of monetized greenhouse gases while increasing emissions of other, more potent gases to levels that negate the impact of their emission-reducing actions.

Conclusion

DEC's proposed guidance represents a strong and thorough treatment of this important issue, and we applaud the agency for the progress it has made in releasing its draft guidance. As discussed above and in our previous letter, the guidance can be significantly strengthened by selecting a single SCC, and by incorporating the 95th percentile damages estimate and a 2% social discount rate in that number.

We appreciate the opportunity to provide feedback on this issue and look forward to working with DEC to finalize this guidance. Please contact David Gahl or Cullen Howe at the information listed below with any question on these comments.

Sincerely yours,

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⁹ <https://www3.epa.gov/airquality/blackcarbon/basic.html>

¹⁰ See, e.g., Richard Derwent et al., Global Environmental Impacts of the Hydrogen Economy, available at https://www.geos.ed.ac.uk/~dstevens/Presentations/Papers/derwent_ijhr06.pdf