## **CRS Reports & Analysis**

## Legal Sidebar

## Courts Evaluate How Federal Agencies Put a Price on Carbon

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In August 2016, a federal court for the first time in *Zero Zone, Inc. v. Department of Energy (DOE)* upheld the use of the social cost of carbon (SCC) in a cost-benefit analysis by a federal agency. The <u>SCC</u> is a monetary estimate of economic damages associated with an incremental increase in carbon dioxide (CO<sub>2</sub>) emissions. The net present value of these damages is calculated by multiplying future costs by an appropriate discount factor and summing across all affected years. The SCC reviewed in this case was developed by an interagency working group (IWG). The <u>estimate</u> is intended to include (but is not limited to) changes in net agricultural productivity, human health, property damages from increased flood risk, and the value of ecosystem services due to climate change. Federal agencies have used the SCC in over <u>60 final rulemakings</u> between 2008 and 2016. The SCC was recently renamed as the <u>Social Cost of Greenhouse Gases</u> (SC-GHG) by the Administration to account damage estimates for other types of GHG including the <u>social costs of methane and nitrous oxide</u>.

The application of the SCC has been raised in the ongoing litigation over the U.S. Environmental Protection Agency's (EPA's) Clean Power Plan (CPP). If it survives legal challenge, the CPP would regulate GHG emissions from fossil fuel-fired power plants under the Clean Air Act (CAA). One issue raised in the legal challenge to the CPP is whether EPA's regulatory impact analysis of the CPP is flawed because it relies on the SCC and "assesses domestic costs against global benefits." The petitioners argue that the CAA "expressly forecloses" the use of global costs because the Act's purpose is "exclusively domestic." EPA, however, states that the SCC's global scope is appropriate because, among other reasons, GHG emissions "contribute to damages around the world and the world's economies are now highly interconnected" and "that the true cost of climate change to U.S. is much larger than impacts that simply occur in the U.S." In a letter to the court, EPA argues that it conducted a cost-benefit analysis that accounted for global benefits using the SCC in a manner similar to the DOE's analysis in *Zero Zone, Inc.*, the subject of the recent court case.

In *Zero Zone, Inc.*, petitioners claimed that the DOE abused its discretion by considering environmental factors in its determining whether the <u>new energy efficiency standards for commercial refrigeration equipment</u> were "economically justified" and, in the alternative, that the use of the SCC was arbitrary and capricious. In rejecting the petitioners' claims, the U.S. Court of Appeals for the Seventh Circuit held that "the expected reduction of environmental costs needs to be taken into account" in DOE's cost-benefit analysis, and that it had "no doubt that Congress intended that DOE have the authority under the [Energy Policy and Conservation Act] to consider the reduction in SCC."

Previous judicial decisions have faulted agencies for failing to use the SCC or another type of economic tool in their cost-benefits analysis. For example, the U.S Court of Appeals for the Ninth Circuit in <u>Center for Biological Diversity v. NHTSA</u> held that it was arbitrary and capricious for an agency to fail to assess the impacts of GHG emissions in its cost-benefit analysis, even when there is uncertainty about those impacts, stating that "while the record shows there is a range of values [for the SCC], the value of carbon emissions reduction is certainly not zero."

Other cases have addressed agency decisions to not use the SCC in environmental reviews of proposed agency actions under the National Environmental Policy Act (NEPA), which requires federal agencies to consider, document, and disclose the potential effects of their actions and decisions on the environment. A 2014 district court decision, <u>High</u>

Country Conservation Advocates v. U.S. Forest Service, vacated the Bureau of Land Management's (BLM's) approval

of a coal exploration plan for failure to justify why the SCC was not used to quantify the costs associated with the mining exploration. BLM's environmental reviews continue to be challenged in court. On August 25, 2016, WildEarth Guardians and Physicians for Social Responsibility filed a complaint asking the U.S. District Court for the District of Columbia to vacate authorizations for 397 oil and gas leases on public lands in three states because the BLM violated NEPA by failing to use the SCC or any other economic or scientific tools to assess the climate impacts of these leases.

In contrast, the U.S. Court of Appeals for the D.C. Circuit (D.C. Circuit) in April 2016, upheld an agency's environmental review under NEPA that did not use the SCC to quantify potential GHG impacts from a project in *EarthReports, Inc. v. Federal Energy Regulatory Commission (FERC)*. Unlike *High Country Conservation Advocates* where BLM provided no explanation on why it did not use the SCC, FERC acknowledged the availability of the SCC tool but explained that it would not be "appropriate" or "informative" because of significant variation in output, lack of incremental impact measurement— criteria related to NEPA environmental reviews. The court concluded that FERC acted reasonably in finding that the SCC was "inadequately inaccurate" to use its environmental review of a liquid natural gas facility conversion project.

Collectively these judicial opinions illustrate how courts have focused on an agency's justification (or lack thereof) regarding the use of the SCC to determine whether the agency acted reasonably in using or not using the SCC in its rulemaking or environmental review. Although each of the agencies was faced with the same uncertainties inherent in the SCC estimates, courts have faulted those agencies that failed to articulate why the SCC was not an appropriate estimate to quantify the potential impacts of GHG emissions associated with the agencies' actions, while upholding an agency's decision to not rely on the SCC when that agency provides a reasoned explanation. These cases signal that the decision on how to account for the costs associated with GHGs is largely up to the agency as long as the agency can adequately support its methodology and decision.

Agencies often use the SCC as a means to comply with Executive Order 12866 which requires agencies to assess both the costs and the benefits of proposed regulation, and with the NEPA guidance on assessing GHG emissions and climate change effects. Since 2009, some in Congress have raised concerns about the SCC in hearings and proposed legislation regarding the quality of the SCC and whether the methods and estimates are sufficient for use in regulatory decision making and cost-benefit analysis. These concerns will likely continue as the Administration updates and expands its SC-GHG estimates to other GHGs and agencies increasingly apply these estimates in rulemakings and environmental reviews.

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