



Recent Litigation over the Social Cost of Greenhouse Gases

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Recent litigation over the activity of an executive branch working group has the potential to introduce uncertainty into how federal agencies consider the “social cost of greenhouse gas” (SC-GHG) emissions in their decisions. As discussed in a CRS [In Focus](#), SC-GHG is an estimate of the economic impact of the emission of one marginal ton of greenhouse gases (GHGs), accounting for quantifiable positive or negative effects in areas such as agricultural productivity, increased flood risk, or changes in energy system costs.

President Biden has taken executive action to promote uniformity in how federal agencies quantify the costs of GHG emissions, directing agencies to use SC-GHG [estimates](#) prepared by an Interagency Working Group (IWG). One federal district court judge has called into question whether those estimates are consistent with applicable statutes. In contrast, another district court judge and a court of appeals panel have left the estimates in place, concluding that they cannot be challenged until agencies actually rely on them for concrete decisions. With those decisions, the estimates remain available for use by federal agencies, although challenges to the estimates continue in multiple courts. This Legal Sidebar will review the status of those cases so that Congress can remain informed about how federal agencies are exercising the authority that Congress has granted.

Cost-Benefit Analysis and the Social Cost of Greenhouse Gases

The White House oversees rulemaking efforts by federal agencies under [Executive Order \(E.O.\) 12866](#), which was issued in 1993 and has been applied (with some [variations](#)) by each Administration since. E.O. 12866 requires that agencies undertake a cost-benefit analysis for any “significant regulatory action,” including any regulatory action that may have an annual effect on the economy of \$100 million or more or adversely affect the economy in a material way. (Some statutes also require the use of cost-benefit analysis, as [explained](#) in other CRS [products](#).) The Office of Management and Budget has issued [Circular A-4](#) to guide agencies in this duty.

If a cost-benefit analysis is required for an action that would affect GHG emissions, that analysis includes the costs of emitting additional GHG into the atmosphere and the benefits of reducing such emissions. To quantify the social costs of a GHG-emitting activity, an agency may multiply the total tons of GHG emissions from the activity by the cost per ton provided by an SC-GHG estimate. Thus, a higher SC-GHG

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estimate would [yield](#) a higher calculation of the costs of GHG emissions or a higher calculation of the benefits of GHG reductions.

To encourage consistency in determining SC-GHG, President Obama [convened](#) the IWG to develop a method for quantifying the costs and effects of GHG emissions. Prior to that, agencies had complied with Circular A-4 and court decisions by using other published estimates at their discretion. After a [public comment process](#), the IWG provided a range of SC-GHG values, drawn from a range of critical assumptions, yielding net social cost estimates for federal decisionmakers. Those estimates were used [most often](#) in regulatory actions by the U.S. Environmental Protection Agency (EPA) and the Department of Energy. For example, EPA in 2016 [used SC-GHG estimates](#) in [promulgating regulations](#) under the Clean Air Act related to the oil and gas sector.

In 2017, the Trump Administration [dissolved the IWG](#) and withdrew its prior SC-GHG estimates, although it [did not alter](#) agencies' obligations to comply with Circular A-4. Agencies conducting major rulemakings [continued to use](#) the SC-GHG to estimate regulatory benefits even though the use of the IWG's particular estimates were no longer required. In its 2019 Affordable Clean Energy Rule, EPA used SC-GHG estimates that were [significantly lower](#) than the 2016 values.

In [Executive Order 13990](#), issued on January 20, 2021, the Biden White House took several actions directing federal agencies to consider particular aspects of climate change and to adjust their decisions and practices accordingly. [Section 5](#) of E.O. 13990 re-established the IWG. In 2021, the IWG issued a Technical Support Document that [reinstated](#) the 2016 SC-GHG estimates from the Obama Administration, adjusted for inflation.

Not all agency actions require a cost-benefit analysis or consideration of SC-GHG under E.O. 12866, E.O. 13990, and Circular A-4. However, other authorities—most notably the [National Environmental Policy Act \(NEPA\)](#)—require agencies to [consider](#) the environmental impacts, including climate change impacts, of their decisions. [NEPA regulations](#) do not require cost-benefit analysis, but [agencies must](#) generally take a “[hard look](#)” at the factors relevant to their decisions and offer a [reasonable explanation](#) for how they have chosen to do so. The Council on Environmental Quality, an agency that promulgates regulations under NEPA that apply to other federal agencies, has recently [identified](#) SC-GHG estimates as “helpful in considering greenhouse gas emission effects and mitigation” but would not require their use in NEPA analysis.

Even for decisions that are not subject to E.O. 12866 and E.O. 13990, some litigants challenging agency decisions have argued that other legal authorities, including NEPA, effectively require agencies to use SC-GHG to quantify the effect of actions that may affect GHG emissions. The [courts](#) have generally [held](#) that agencies must explain whether SC-GHG is an appropriate tool for particular decisions based on the [best available](#) scientific data, but [they](#) have [not held](#) that NEPA requires the use of particular SC-GHG estimates.

Challenges to the IWG's Estimates of SC-GHG

In contrast to cases involving the use of monetized estimates of SC-GHG in specific agency decisions, two recent cases have sought to challenge the validity of E.O. 13990 or the IWG's estimates directly. Those cases have required the courts to examine whether the IWG's estimates themselves have any concrete legal effect and to decide when the effects of those estimates would be felt sufficiently to support a legal claim. The courts' different conclusions point to the likelihood of continued litigation over this issue.

Missouri Litigation

The U.S. District Court for the Eastern District of Missouri considered one such challenge in *Missouri v. Biden*. A group of states challenged E.O. 13990, arguing that the SC-GHG estimates were reviewable because, according to the states' allegations, those estimates would inevitably be used to justify increased regulation in sectors such as energy, agriculture, and manufacturing. The plaintiff states claimed that an immediate court order barring the use of the SC-GHG estimates was necessary because the IWG estimates are binding on federal agencies, and those agencies would therefore ignore any objections the states might make on a case-by-case basis.

The Missouri district court [held](#) that these allegations could not support an immediate challenge to the SC-GHG estimates. (In legal terms, the court held that the states did not have standing to bring their claims and that those claims were not ripe.) The court noted that the estimates do not forbid or require any actions on the states' part but only prescribe standards and procedures governing the action of federal agencies. In its view, the states' argument that future rulemakings would use the IWG's estimates of SC-GHG, and would do so in a way that would harm the states, "relies on a [highly attenuated chain](#) of possibilities." Instead, the court [stated](#) that the states would have "ample opportunity to bring legal challenges to particular regulations if those regulations pose imminent, concrete, and particularized injury." The court called the states' claims of harm "inherently speculative" because neither the court nor the parties could predict how the estimates would affect an agency's analysis in future actions. The Missouri district court's decision has been appealed to the U.S. Court of Appeals for the Eighth Circuit, where it remains pending.

Louisiana Litigation

The U.S. District Court for the Western District of Louisiana reached a different conclusion in *Louisiana v. Biden*, although its decision was subsequently [put on hold](#) by the U.S. Court of Appeals for the Fifth Circuit. A group of state plaintiffs [brought an action to enjoin](#) federal agencies from "[a]dopting, employing, treating as binding, or relying upon" the IWG's reinstated SC-GHG estimates in their regulatory processes. The states [alleged](#) that the estimates would "necessarily cause regulatory standards for air quality, energy efficiency, and power plant regulation to become more stringent and result in significant cost increases." They also relied on the possibility that SC-GHG estimates would be used in non-regulatory decisions, such as the issuance or terms of oil and gas leases. The states claimed that, as a result of the IWG's estimates, their tax revenues from energy production would decrease, their own energy costs would increase, and they would face "additional duties . . . when they implement cooperative federalism programs."

The Louisiana district court [granted](#) the states' petition for a preliminary injunction. The court dedicated [substantial attention](#) to the issue of the states' standing. E.O. 13990 directs the administration only of [federal agencies](#), but the court [agreed](#) that the "implementation of the SC-GHG Estimates imposes new obligations on the states and increases regulatory burdens" and that the estimates would also harm the states' rights to collect proceeds from oil and gas leases. The court [cited](#) several "final rules" in which it [concluded](#) that federal agencies had already employed the SC-GHG estimates, although [some](#) of its [examples](#) involved non-final agency actions that would be subject to later judicial review if they were finalized. For example, the court cited a proposed rule that [referred](#) to the IWG's estimates as "helpful" in NEPA analysis but would not have required their use.

Having found that the plaintiff states could challenge the IWG's estimates, the court went on to conclude that they were likely to win on the merits of their claims. It [found](#) that the government had not cited clear statutory authorization for E.O. 13990, that NEPA directs agencies to focus consideration of environmental impacts on a national (rather than global) scale, that the SC-GHG estimates could not be established without notice-and-comment procedures, and that the SC-GHG estimates were "neither

‘reasonable’ nor ‘reasonably explained.’” Finding that the other factors required for a preliminary injunction were met, the court enjoined federal agencies from employing the IWG’s SC-GHG estimates. The court did not address what other methods agencies might use to analyze SC-GHG in the absence of the IWG’s estimates, although it [ordered](#) agencies “to return to the guidance of Circular A-4” in conducting regulatory analyses.

The federal government immediately appealed that decision to the Fifth Circuit, seeking a stay of the district court’s injunction even before the appeals court considered the full appeal. A panel of the appeals court held that [a stay was warranted](#) because the plaintiff states did not have standing to challenge the IWG’s estimates. Like the Missouri district court, the Fifth Circuit considered the states’ claims of increased regulatory burdens to be “merely hypothetical.” The court explicitly [recognized](#) that, even without the IWG’s estimates, agencies would continue to conduct cost-benefit analyses pursuant to Circular A-4. The Fifth Circuit also agreed with the Missouri district court that any injury to the states would result from future agency decisions that considered SC-GHG as one factor among many and that, taken alone, the IWG’s estimates “do nothing to the Plaintiff States.” The Fifth Circuit also held that the federal government was harmed by the district court’s injunction, which “stops or delays agencies in considering SC-GHG in the manner the current administration has prioritized within the bounds of applicable law,” while the states would not be injured if the injunction were lifted. The states would instead be able, the court [held](#), to challenge specific agency actions as they arose.

The full Fifth Circuit later denied rehearing of the panel’s stay order. Louisiana’s Attorney General has [announced](#) his intent to pursue relief from the Supreme Court.

Implications for Agencies and Congress

After the Fifth Circuit’s decision, litigation is pending in three different courts related to the IWG’s estimates. The Eighth Circuit is considering the state plaintiffs’ appeal from the Missouri district court’s final decision. The Fifth Circuit has issued an order staying the Louisiana district court’s preliminary injunction while the government appeals that injunction, but the appeal remains to be considered in full. And the states’ original complaint challenging the IWG estimates themselves remains pending in the Louisiana district court.

The practical result of the decisions in Missouri and by the Fifth Circuit is that the IWG’s estimates of SC-GHG continue to remain in place and that agencies may use them while that litigation proceeds. The courts may also continue to consider the use of those estimates in agency decisions on a case-by-case basis, and those courts may take different approaches to legal challenges from one federal circuit or district to the next.

More uncertainty is possible if litigation developments lead to the IWG’s estimates being vacated or enjoined. [According to news reports](#), the Biden Administration identified “a significant number of agency rules and actions” that would be reconsidered or postponed as a result of the Louisiana district court’s preliminary injunction. Although that injunction has now been stayed, any future court decision that may invalidate or delay the use of the IWG’s estimates could complicate the executive branch’s efforts to coordinate agencies’ consideration of the potential impacts of their actions. Circular A-4, [judicial decisions](#), and some statutes would continue to require agencies to account for the effects of their actions on climate change, either using cost-benefit analysis or other methods. If the IWG estimates were unavailable, agencies applying a cost-benefit analysis to their actions may return to their pre-IWG practice of adopting their own approaches to quantifying the costs and benefits of actions that may affect the climate. Depending on the method chosen, those alternative methods could result in a lower or higher estimated cost per ton of GHG emissions than the IWG’s estimates. Decisions may also be less consistent across agencies, and decisions already made using the IWG’s estimates may be [subject to change](#).

Particularly in the event of conflicting court decisions, Congress might consider bringing uniformity or certainty to this question through a legislative response. Because E.O. 13990 is an administrative measure that applies to agencies' implementation of a variety of statutory authorities and programs, Congress could affect agency obligations in this area in a variety of ways. Through legislation, Congress could endorse or reject the IWG's estimates generally. It could amend particular statutes to limit or require the use of cost-benefit analysis, or a particular kind of cost-benefit analysis, in particular regulatory programs. Finally, Congress might monitor individual regulatory actions that use SC-GHG estimates, considering them further under the [Congressional Review Act](#).

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