Social Cost of Greenhouse Gas Emissions: Frequently Asked Questions (FAQs)

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With this document, the Office of Information and Regulatory Affairs (OIRA) is providing answers to frequently asked questions about the use of the interim estimates of the social cost of greenhouse gas emissions, which were issued in February 2021 pursuant to Executive Order 13990 (E.O. 13990) in the *Technical Support Document: Social Cost of Carbon, Methane, and Nitrous Oxide: Interim Estimates under Executive Order 13990* (herein called the "2021 interim estimates of the social cost of greenhouse gas emissions" or "2021 interim estimates").

On January 21, 2021, President Biden signed E.O. 13990, which established an Interagency Working Group on the Social Cost of Greenhouse Gases (IWG) and directed the IWG, as appropriate and consistent with applicable law, to publish interim estimates of the social cost of carbon, nitrous oxide, and methane "which agencies shall use when monetizing the value of changes in greenhouse gas emissions resulting from regulations and other relevant agency actions until final values are published."

Executive Order 12866 (E.O. 12866) states as a general principle that "[e]ach agency shall assess both the costs and the benefits of the intended regulation and, recognizing that some costs and benefits are difficult to quantify, propose or adopt a regulation only upon a reasoned determination that the benefits of the intended regulation justify its costs." In addition, it provides that agencies must submit a regulatory impact analysis for those regulatory actions that are "significant" within the meaning of section 3(f)(1) of E.O. 12866—or what OMB Circular A-4 (Circular A-4) describes as "economically significant." For regulatory actions that are otherwise deemed significant under the other provisions of section 3(f) of E.O. 12866, E.O. 12866 requires that agencies provide OIRA with "[a]n assessment of the potential costs and benefits of the regulatory action." As Circular A-4 explains, such agency assessments "should monetize quantitative estimates whenever possible" while also noting that assessments "should carry out a careful evaluation of non-quantified benefits and costs."

The purpose of this document is to offer answers to questions often asked with respect to the 2021 interim estimates of the social cost of greenhouse gas emissions; nothing said here is meant to alter existing requirements in any way. For more complete guidance, please consult E.O. 13990, E.O. 12866, and Circular A-4.

1. How should agencies use the 2021 interim estimates of the social cost of greenhouse gas emissions in the context of benefit-cost analysis conducted pursuant to E.O. 12866?

Pursuant to E.O. 13990, when agencies prepare an assessment of the potential costs and benefits of regulatory action for purposes of compliance with E.O. 12866, they must use the 2021 interim estimates in monetizing increases or decreases in greenhouse gas emissions that result from regulations and other agency actions until updated values are released by the IWG. Agencies should follow this requirement as they follow other requirements for preparing E.O. 12866 benefit-cost analysis. For example, when an agency's E.O. 12866 benefit-cost analysis uses the 2021 interim estimates and the agency receives comments through the notice-and-comment process that relate to the agency's use of the 2021 interim estimates, the agency should respond to those comments in order to satisfy the requirement in E.O. 12866 that the regulatory process be accessible and open to the public.

2. How should agencies use the 2021 interim estimates of the social cost of greenhouse gas emissions in the context of analysis conducted pursuant to specific statutory authorities?

Directives issued in executive orders and OIRA guidance are always made subject to applicable law. Occasionally, for example, an applicable statute expressly specifies and requires or excludes an analytic approach, such as benefit-cost analysis, in deriving a standard. When an agency conducts benefit-cost analysis pursuant to specific statutory authorities, those authorities must control the agency's development and use of the analysis in taking an agency action.[1]

In addition, there are circumstances where the applicable statutory authorities do not dictate a specific approach to benefit-cost analysis, and the agency incorporates and relies upon a benefit-cost analysis in deciding to take a regulatory action. In those circumstances, and where required by principles of administrative law, the agency must make its benefit-cost analysis (including any use of the 2021 interim estimates and methodological choices made with respect to the 2021 interim estimates, as well the agency's rationale for those choices) available for public notice and comment.

Because the 2021 interim estimates are based on models and inputs that have been used in peer reviewed publications, are endorsed by the interagency experts on the IWG, and are supported by a methodology that has been subject to public comment and consideration by the National Academies Sciences, Engineering, and Medicine, those estimates will often provide the best available method for monetizing the value of increases or decreases in greenhouse gas emissions resulting from or related to federal agency actions. Nevertheless, when applicable statutes require another approach, those statutory requirements must dictate whether and how the agency monetizes changes in greenhouse gas emissions in the context of the agency action.[2] And in other circumstances where an agency will take final action in reliance on a benefit-cost analysis that includes estimates of the social cost of greenhouse gas emissions, the agency must respond to any significant comments on those estimates and ensure its analysis (including any use of the 2021 interim estimates) is justified as not arbitrary or capricious, as required by principles of administrative law.

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[1] In these circumstances, the agency's additional E.O. 12866 and/or Circular A-4 analyses provide the public with transparency on the impacts, including the costs and benefits, of the agency action, even though those additional analyses might not be used to justify the agency's action, depending on the requirements of any applicable statutes. For analyses pursuant to E.O. 12866, agencies must use the 2021 interim estimates of the social cost of greenhouse gas emissions, as explained in Answer #1.

[2] Again, as explained in footnote 1, in such circumstances, any additional E.O 12866 and/or Circular A-4 analyses must continue to use the 2021 interim estimates of the social cost of greenhouse gas emissions, even if those additional analyses might not be used to justify the agency's action.

In sum, agencies must be governed by any relevant statutory authorities when they decide whether and how to monetize the impacts of their actions in the context of proposing and justifying a regulatory action, including monetizing a change in greenhouse gas emissions that will result from the action.