



January 13, 2022

To: Department of Defense, General Services Administration, and National Aeronautics and Space Administration

Submitted by: Center for Biological Diversity, Center for Climate and Energy Solutions, Clean Air Task Force, Environmental Defense Fund, Institute for Policy Integrity at NYU School of Law, Sierra Club, Union of Concerned Scientists

Subject: Recommendations on the Consideration of Greenhouse Gas Emissions in Response to Advance Notice of Proposed Rulemaking for Amendments to Federal Acquisition Regulation, 86 Fed. Reg. 57,404 (Oct. 15, 2021)

The undersigned organizations respectfully submit the following comments¹ on the above-referenced advance notice of proposed rulemaking (ANPRM). In the ANPRM, the Department of Defense, General Services Administration (GSA), and National Aeronautics and Space Administration (collectively, the FAR Council) propose to amend the Federal Acquisition Regulation (FAR) to take better account of climate risks and to reduce the climate impacts of governmental procurement.²

The FAR Council rightly acknowledges that federal procurement decisions should be brought in line with the Biden administration’s government-wide approach to climate policy.³ Indeed, the realm of government procurement presents an especially promising avenue to reduce greenhouse gas emissions. Because the federal government has large purchasing power, it has the capacity not only to purchase low-carbon products and services that benefit society but also to incentivize potential suppliers to develop lower-emitting goods and services, carrying advantages that can spill over into the consumer sector. **Climate-sensitive federal procurement analyses are especially urgent in light of President Biden’s recently announced sustainability initiative, which includes goals like “us[ing] [the Federal Government’s] scale and procurement power” to purchase only carbon-free electricity, acquire only zero-emission federal vehicles and buildings, and achieve net-zero federal procurement in the coming decades.**⁴

¹ Our organizations may separately and independently submit other comments to this docket. This document does not purport to represent the views, if any, of New York University School of Law.

² Federal Acquisition Regulation: Minimizing the Risk of Climate Change in Federal Acquisition, 86 Fed. Reg. 57,404 (Oct. 15, 2021).

³ See Exec. Order No. 14,008 § 204, 86 Fed. Reg. 7619, 7623 (Jan. 27, 2021) (“It is the policy of [President Biden’s] Administration to lead the Nation’s effort to combat the climate crisis by example—specifically, by aligning the management of Federal procurement and real property . . . to support robust climate action.”).

⁴ See Exec. Order No. 14,057 § 102, 86 Fed. Reg. 70,935, 70,935–36 (Dec. 13, 2021).

The FAR Council requests input on a number of questions, including how to integrate the social cost of greenhouse gases in procurement decision processes under the FAR and how to give preference to bids and proposals that reduce emissions.⁵ The following principles should guide the FAR Council:

- **The FAR Council should instruct agencies to apply the social cost values from the Interagency Working Group on the Social Cost of Greenhouse Gases (Working Group) when evaluating bids and proposals.** These figures represent the best estimates currently recognized by the federal government of the economic and health harms from the incremental release of greenhouse gases. To align with best practices and economic theory, agencies should apply these figures for all procurement decisions, foreign and domestic, in all sectors for which emission estimates for competing proposals are readily attainable. This recommendation would be well in line with the FAR Council’s statutory authority and current practices and would add crucial rigor to agency decisionmaking under the FAR. Agencies should also adopt the updated figures that the Working Group is slated to release later this year.
- **Where volumetric emissions estimates are readily attainable, the relevant analysis involves simply multiplying the tons of greenhouse gases emitted by each gas’s per-ton social cost. Agencies should then add the social cost of greenhouse gases to the purchase price and prioritize proposals with the lowest social cost considering these two figures, consistent with the “price evaluation preferences” agencies apply for other social benefits.** While other factors could overcome this presumption in individual circumstances, use of the social cost of greenhouse gases in this fashion would offer the most rational basis for agencies to balance climate impacts against other factors.
- **Where emissions data are not readily attainable, agencies should first determine whether generating estimates would be feasible. If not, the agencies should still consider greenhouse gas emissions qualitatively and should require binding commitments in their contracts to reduce emissions.** Doing so would still enable notable progress toward the country’s climate goals.

This comment letter has four sections. Section I provides background on the Working Group’s process and valuations, explaining that its climate-damage estimates, while underestimates, reflect the best estimates currently available from the federal government. Section II explains how agencies should apply those valuations in procurement determinations when emission estimates are readily obtainable. Section III offers recommendations for how agencies can rationally account for climate impacts in procurement when emission estimates are unavailable. Section IV outlines the FAR Council’s statutory authority to require formal consideration of greenhouse gas emissions in procurement determinations, including application of the social cost values.

⁵ While these comments are not organized around the ANPRM’s individual questions, they are primarily responsive to questions (a), (f), and (g). They also touch on questions (d) and (h), albeit in less detail. These comments only briefly discuss how to quantify the amount of GHG emissions associated with a particular procurement.

I. The FAR Council Should Instruct Agencies to Apply the Working Group’s Social Cost of Greenhouse Gases Estimates

The FAR Council should instruct agencies to apply the social cost of greenhouse gases in procurement decisions that implicate a substantial amount of greenhouse gas emissions. In particular, it should recommend that agencies use social cost estimates from the Working Group. Such a recommendation is consistent with the FAR Council’s regulatory authority and existing federal procurement practices. And the Working Group’s social cost estimates and its updates represent the best estimates currently recognized by the government. They appropriately adopt a global perspective and adopt what have been considered the best practices regarding discount rates. The FAR Council should also apply the Working Group’s forthcoming updates to these estimates, which are due later this year and will reflect updates to research and best practices recognized by the government.

Because the Working Group’s social cost figures represent the cost of a ton of greenhouse gas emissions, their values should be the same no matter where and in what sector the relevant emissions occur. Because of climate change’s globally distributed impacts, a given quantity of greenhouse gases does not have meaningfully different effects if it is emitted in the United States versus abroad, or if it originated from a car versus from a power plant, for instance. Thus, for procurement decisions in which estimates of greenhouse gas emissions are readily obtainable, the FAR Council should require consistent, rigorous, and uniform application of the Working Group’s social cost estimates wherever and however greenhouse gas emissions occur.

a. *Considering the Social Cost of Greenhouse Gases Is Consistent with the FAR Council’s Statutory Authority and Current Federal Procurement Practices*

Monetizing greenhouse gas emissions when weighing competing proposals enables agencies to rationally weigh climate change impacts in procurement decisions. The social cost of greenhouse gases “reflect[s] the societal value of reducing emissions of the [greenhouse] gas in question by one ton.”⁶ Put differently, this figure represents the monetized costs to society in climate damages that an extra ton of greenhouse gas emissions imposes. Both the statutory and existing regulatory frameworks regarding the FAR support the consideration of climate costs in procurement decisions.

Under the FAR, agencies must adhere to the statutory guiding principle to consider “the lowest cost or best value considering the nature of the property or service procured.”⁷ As the statute distinguishes between “lowest cost” and “best value,” the latter must include more than purely financial cost. In fact, the FAR defines “best value” as “the expected outcome of an acquisition that . . . provides the greatest overall benefit”⁸ and notes that it “must be viewed from a broad perspective and is achieved by balancing the many competing interests in the [Federal Acquisition] System.”⁹

⁶ Interagency Working Grp. on the Soc. Cost of Greenhouse Gases, *Technical Support Document: Social Cost of Carbon, Methane, and Nitrous Oxide—Interim Estimates Under Executive Order 13,990*, at 9 (2021) [hereinafter *2021 TSD*].

⁷ 41 U.S.C. § 1303(b)(3)(B).

⁸ 48 C.F.R. § 2.101.

⁹ *Id.* § 1.102-1(b).

Applying these principles rationally demands that agencies consider costs to society, including the costs of climate pollution, in procurement decisions. Doing otherwise would omit a large share of the “value” or the “broad[ly]” defined “overall benefit” that lower-emission procurement alternatives offer. The FAR’s list of factors that agencies may consider in determining what alternative offers the “best value” further confirms the relevance of climate costs, as that list includes “environmental and energy efficiency considerations.”¹⁰

Indeed, existing FAR provisions already declare that “[t]he Government’s policy is to acquire supplies and services that promote a clean energy economy that . . . safeguards the health of our environment[] and reduces greenhouse gas emissions from direct and indirect Federal activities.”¹¹ Other provisions specifically recognize that agencies may assess “environmental and energy efficiency considerations” in assessing best value.¹² Still another directs agencies to “[i]mplement cost-effective contracting preference programs promoting energy-efficiency . . . and the acquisition of environmentally preferable products and services.”¹³ Agencies therefore already must consider the climate impacts of their procurement decisions under existing FAR guidelines. Use of the social cost of greenhouse gases would add rigor to that assessment by translating climate impacts into the same unit as monetary costs (dollars) and thus enabling agencies to rationally balance these key factors. Part III of the attached Institute for Policy Integrity report—*Broadening the Use of Social Cost of Greenhouse Gases in Federal Policy*, which this comment incorporates by reference—further explains how the social cost metric can add rigor to procurement decisions.¹⁴

A service contract that GSA awarded exemplifies how agencies already can and sometimes do incorporate the social cost of greenhouse gases into procurement decisions. In that case, GSA applied the social cost of greenhouse gases—specifically, the social cost of carbon dioxide—to compare different carriers when awarding parcel-shipping contracts.¹⁵ As part of this process, GSA “asked contractors for initial benchmarks and goals for alternative fuel and vehicle use as part of their proposals,” “investigated the anticipated [greenhouse gas] emissions performance of each contractor,” and then “used the . . . [social cost of carbon] estimates to monetize and compare the market and non-market economic impacts of these expected contractor emissions.”¹⁶ The GSA then “considered these estimates alongside price and other past performance information when assessing the value of proposals” in making its selection.¹⁷ This application closely mirrors the optimal application suggested in Section II below.

¹⁰ *Id.* §§ 8.405-1(f)(7); 8.405-3(a)(2)(vii). While these lists only pertain to certain specific purchasing situations, they illustrate that environmental concerns are relevant to a “best value” determination.

¹¹ *Id.* § 23.202(a).

¹² *Id.* §§ 8.405-1(f)(7); 8.405-3(a)(2)(vii).

¹³ *Id.* § 23.703(a).

¹⁴ See Max Sarinsky et al., Inst. for Pol’y Integrity, *Broadening the Use of the Social Cost of Greenhouse Gases in Federal Policy* 26–28 (2021), <https://policyintegrity.org/publications/detail/broadening-the-use-of-the-social-cost-of-greenhouse-gases-in-federal-policy>.

¹⁵ See GSA, *GSA Includes New Environmental Features in Next-Generation Parcel Delivery*, https://www.gsa.gov/cdnstatic/DDS3_green_features_fact_sheet.doc.

¹⁶ *Id.*

¹⁷ *Id.*

Mandating that agencies consider the social cost of greenhouse gases in procurement would add critical rigor to decisions that could result in significant greenhouse gas emissions or emission reductions. At present, while the FAR directs agencies to consider climate impacts, the regulations offer little guidance regarding how exactly to consider those impacts. The social cost of greenhouse gases provides agencies with the greatest ability to rationally determine what level of emissions reduction measures is cost-effective and achieves the “best value.” Otherwise, agencies are left trying to compare emissions, measured in tons, with other impacts, measured in dollars. Section II below suggests how agencies could rigorously integrate these social-cost figures into procurement decisions under the FAR. Section IV below contains a more detailed explanation of why the executive branch has ample statutory authority to promulgate this rule.

Nothing in these recommendations precludes agencies from considering the importance of supporting small businesses. As discussed further in Section II below, applying the Working Group’s per-ton social cost estimates imposes only a minimal burden wherever volumetric greenhouse gas emissions estimates exist for a business or product. The FAR Council can also support small businesses by offering analytical guidance and support in the form of grants, consulting services, and accessible guidelines to estimate greenhouse gas emissions associated with a particular good or service. Additionally, for procurement decisions with minimal greenhouse gas impacts, agencies may reasonably conclude that the affected emissions are small enough that these greater burdens are not warranted. While climate costs are critically important and tangible, they are not the only applicable factors agencies should consider.

b. The FAR Council Should Affirm that, While the Working Group’s Estimates of the Social Cost of Greenhouse Gases Represent the Best Estimates Available, They Remain Conservative Underestimates

The Working Group’s social cost estimates are based on a methodology that “reflects rational, evidence-based decisions that incorporate the best available evidence.”¹⁸ The resulting numbers therefore currently “offer the best method to measure incremental climate effects from a particular amount of greenhouse gas emissions.”¹⁹

The Working Group released its first estimates of the social cost of carbon (i.e., carbon dioxide) in 2010,²⁰ which it updated in both 2013²¹ and 2016²² to incorporate more recent scientific and economic data. Following its 2013 update, the Working Group also solicited comments on its social cost estimates,²³ resulting in a 44-page document with detailed responses

¹⁸ Richard L. Revesz & Max Sarinsky, *The Social Cost of Greenhouse Gases: Legal, Economic, and Institutional Perspective*, YALE J. ON REG. (forthcoming 2022) (manuscript at 42), <https://ssrn.com/abstract=3903498>.

¹⁹ *Id.*

²⁰ Interagency Working Grp. on the Soc. Cost of Carbon, *Technical Support Document: Social Cost of Carbon for Regulatory Impact Analysis Under Executive Order 12866* (2010), <https://perma.cc/C59L-KCMV> [hereinafter 2010 TSD].

²¹ Interagency Working Grp. on the Soc. Cost of Carbon, *Technical Support Document: Technical Update of the Social Cost of Carbon for Regulatory Impact Analysis Under Executive Order 12866* (2013), <https://perma.cc/4U6A-EVWZ>.

²² Interagency Working Grp. on the Soc. Cost of Greenhouse Gases, *Technical Support Document: Technical Update of the Social Cost of Carbon for Regulatory Impact Analysis Under Executive Order 12866* (2016), <https://perma.cc/3EW6-SARH>.

²³ Request for Comment, 78 Fed. Reg. 70,586 (Nov. 26, 2013).

to the comments received.²⁴ In 2016, the Working Group also released damage estimates for two other greenhouse gases: methane and nitrous oxide.²⁵ The Working Group applied three models of climate damages that were the most widely used and cited models in the economics literature linking physical climate impacts to economic damages²⁶: the DICE, FUND, and PAGE models.²⁷ These models were developed by outside experts, published in peer-reviewed economic literature,²⁸ and were the product of extensive scholarship and expertise. One of the models, DICE, was developed by William Nordhaus, an economics professor and former provost of Yale University who won a Nobel Memorial Prize in Economic Sciences for developing the model. The three models reflect a wide diversity of methodological assumptions about a range of key parameters and inputs.²⁹

The Working Group’s social cost numbers have been endorsed or otherwise supported by the National Academy of Sciences, Engineering, and Medicine (NAS), the Government Accountability Office (GAO), and the federal courts. The NAS has supported social cost of greenhouse gas estimates based on the DICE, FUND, and PAGE models.³⁰ Additionally, in 2014, the GAO found that the estimates derived from these three models and used by federal agencies are consensus based, rely on peer-reviewed academic literature, disclose relevant limitations, and are designed to incorporate new information via public comments and updated research.³¹ The GAO also criticized estimates that moved away from the Working Group’s current approach as not “reflect[ing] the best available science”³²—implicitly endorsing the Working Group’s approach once more. The economics literature confirms that estimates based on the DICE, FUND, and PAGE models remain the best currently available estimates.³³ In 2016, the U.S. Court of Appeals for the Seventh Circuit held the estimates used to date by agencies are

²⁴ Interagency Working Grp. on the Soc. Cost of Carbon, *Response to Comments: Social Cost of Carbon for Regulatory Impact Analysis Under Executive Order 12866* (2015), <https://perma.cc/6DYA-ANEX> [hereinafter *Response to Comments*].

²⁵ Interagency Working Group on the Social Cost of Greenhouse Gases, *Addendum to Technical Support Document on Social Cost of Carbon for Regulatory Impact Analysis under Executive Order 12866: Application of the Methodology to Estimate the Social Cost of Methane and the Social Cost of Nitrous Oxide* (2016), <https://perma.cc/S4Z7-Z46G>.

²⁶ *Response to Comments*, *supra* note 24, at 4 (stating the models “remain the most widely cited”); *id.* at 8 (quoting the National Academies of Sciences for recognizing that the chosen models represent “the most widely used impact assessment models” available).

²⁷ *2010 TSD*, *supra* note 20, at 5.

²⁸ *Response to Comments*, *supra* note 24, at 4.

²⁹ *See 2010 TSD*, *supra* note 20, at 6 (discussing how “[t]he parameters and assumptions embedded in the three models vary widely”).

³⁰ Specifically, in 2016, NAS concluded that a near-term update was not necessary or appropriate and the current estimates should continue to be used while future improvements are developed over time. *See Nat’l Acad. of Scis., Assessment of Approaches to Updating the Social Cost of Carbon: Phase 1 Report on a Near-Term Update* (2016).

³¹ *See Gov’t Accountability Off., Regulatory Impact Analysis: Development of Social Cost of Carbon Estimates* (2014), <https://perma.cc/UV48-EV4Z>.

³² Gov’t Accountability Off., *Social Cost of Carbon: Identifying a Federal Entity to Address the National Academies’ Recommendations Could Strengthen Regulatory Analyses* 48 (2020), <https://perma.cc/WL3E-PE4W>.

³³ *See, e.g.,* Richard G. Newell et al., *Carbon Market Lessons and Global Policy Outlook*, 343 *SCI.* 1316 (2014); Bonnie L. Keeler et al., *The Social Costs of Nitrogen*, 2 *SCI. ADVANCES* e1600219 (2016); Richard Revesz, Kenneth Arrow et al., *The Social Cost of Carbon: A Global Imperative*, 11 *REV. ENV’T ECON. & POL’Y* 172 (2017).

“reasonable,”³⁴ and the U.S. District Courts for the Districts of Colorado and Montana have supported agency use of these values.³⁵

Some opponents of climate action have advanced arguments against using the social cost of greenhouse gases, but no such argument withstands scrutiny. For a detailed rejoinder to counterarguments advanced by such opponents, see the attached Institute for Policy Integrity report titled *Playing with Fire*, which this comment incorporates by reference.³⁶

Notably, due to data limitations, the Working Group’s estimates do not currently reflect societal costs arising from many significant effects of climate change, including ocean acidification, wildfires, public health effects from methane emissions, abrupt ecosystem disruptions, and many potentially catastrophic outcomes, to name just some categories of omitted damages.³⁷ Because of such omitted damages and other limitations of then-existing research, the Working Group’s current damage estimates most likely substantially underestimate the full effects of greenhouse gas emissions. (State-of-the-art research reflects a fuller, albeit still incomplete, accounting of such effects.) Additionally relevant for the FAR Council’s purposes is that the Working Group’s estimates do not aim to capture (i) the health harms of certain co-pollutants, such as fine particulate matter, that greenhouse gas sources frequently also emit;³⁸ and (ii) the potential spillover benefits that federal procurement can have as the government’s enormous purchasing power spurs innovations that benefit consumer markets. The FAR Council should note that, for all analyses and decisions under the FAR that use the Working Group’s figures, estimates of climate benefits are conservative underestimates that do not currently include many significant categories of climate damages.³⁹

The Working Group’s 2021 interim estimates are identical to its widely endorsed 2016 estimates (only adjusted for inflation),⁴⁰ and so these estimates continue to represent the best

³⁴ *Zero Zone v. Dep’t of Energy*, 832 F.3d 654, 678 (7th Cir. 2016).

³⁵ See, e.g., *High Country Conservation Advocs. v. U.S. Forest Serv.*, 52 F. Supp. 3d 1174, 1191 (D. Colo. 2014); *Mont. Env’t Info. Ctr. v. U.S. Off. of Surface Mining*, 274 F. Supp. 3d 1074, 1081 (D. Mont. 2017); *WildEarth Guardians v. Bernhardt*, 2021 WL 363955 (D. Mont. Feb. 3, 2021).

³⁶ See Iliana Paul & Max Sarinsky, Inst. for Pol’y Integrity, *Playing with Fire: Responding to Criticism of the Social Cost of Greenhouse Gases* (2021), <https://policyintegrity.org/publications/detail/playing-with-fire>.

³⁷ See Inst. For Pol’y Integrity, *A Lower Bound: Why the Social Cost of Carbon Does Not Capture Critical Climate Damages and What That Means for Policymakers* 4–7 tbls.1 & 2, https://policyintegrity.org/files/publications/Lower_Bound_Issue_Brief.pdf (listing included and omitted damages in the Working Group’s estimates). While this report was released in 2019, before the Working Group’s 2021 Technical Support Document, the Working Group’s estimates are based on the same integrated assessment models that the report analyzes, so its analysis is fully applicable.

³⁸ See, e.g., Jeffrey Shrader et al., Inst. for Pol’y Integrity, *Valuing Pollution Reductions: How to Monetize Greenhouse Gas and Local Air Pollutant Reductions from Distributed Energy Resources* 19–21 (2018) (cataloging some local pollutants’ health harms); RICHARD L. REVESZ & JACK LIENKE, *STRUGGLING FOR AIR: POWER PLANTS AND THE “WAR ON COAL”* 10–11 (2016) (same).

³⁹ See *2021 TSD*, *supra* note 6, at 4 (explaining that due to omitted damages, uncertainties surrounding long-term discount rates, and other factors such as recent evidence on equilibrium climate sensitivity, “the range of four interim SC-GHG estimates presented in this [technical support document] likely underestimate societal damages from GHG emissions”).

⁴⁰ See *id.* at 22 (“The interim [social cost] estimates presented in this TSD rely on the same models and harmonized inputs for the socioeconomic emissions scenarios and equilibrium climate sensitivity distribution used for [social cost] estimates since 2013.”).

values currently available to the government. However, the Working Group is currently performing a full assessment of its social cost valuations to reflect recent updates in scientific and economic research—a task that it has been ordered to complete by January 2022.⁴¹ In addition to reflecting advances in understanding of climate science and economics, these updates will also respond to and incorporate recommendations by NAS.⁴² Any FAR rulemaking should incorporate the new figures.

c. The Working Group’s Estimates Appropriately Adopt a Global Perspective on Climate Damages

In line with economic theory, which suggests that a global perspective is appropriate and defensible, the Working Group’s social cost valuations appropriately estimate the global impact of incremental emissions or emission reductions.⁴³ This approach has been applied in dozens of previous rulemakings⁴⁴ and was upheld by the Seventh Circuit,⁴⁵ whereas the U.S. District Court for the Northern District of California has rejected alternative estimates that focus only on domestic effects.⁴⁶

Considering global damages, as opposed to disregarding all climate effects outside U.S. borders, is desirable for numerous reasons. As the Working Group has explained, using global damage costs reflects U.S. strategic interests in at least two ways. First, any domestic-only valuation of the social costs of greenhouse gases ignores significant, indirect costs to trade, human health, and security likely to “spill over” to the United States as other regions experience climate change damages.⁴⁷ As the Northern District of California recently explained, this is “because emissions of most greenhouse gases contribute to damages around the world and the world’s economies are now highly interconnected.”⁴⁸ Second, a consequence of the United States using a global social cost of greenhouse gas figure to justify actions that protect against climate damages is that foreign countries take reciprocal actions that benefit the United States.⁴⁹ Peter Howard and Jason A. Schwartz expanded upon these justifications in a law review article titled

⁴¹ Exec. Order No. 13,990 § 5(b)(ii)(B), 86 Fed. Reg. 7037, 7040 (Jan. 25, 2021).

⁴² See 2021 TSD, *supra* note 6, at 14 (noting that, as it generates new social cost estimates, the Working Group “shall consider the recommendations of [NAS] and other pertinent scientific literature”).

⁴³ See *id.* at 3 (“[T]he [Working Group] found previously and is restating here that a global perspective is essential for [social cost of greenhouse gas] estimates . . .”).

⁴⁴ Peter Howard & Jason A. Schwartz, *Think Global: International Reciprocity as Justification for a Global Social Cost of Carbon*, 42 COLUM. J. ENV’T L. 203, 270–84 (2017) (listing all uses through mid-2016).

⁴⁵ *Zero Zone v. Dept. of Energy*, 832 F.3d 654, 679 (7th Cir. 2016).

⁴⁶ See *California v. Bernhardt*, 472 F. Supp. 3d 573, 613 (N.D. Cal. 2020).

⁴⁷ See 2021 TSD, *supra* note 6, at 3. Indeed, the integrated assessment models used to develop the global social cost estimates largely ignore inter-regional costs entirely. See Peter Howard, *Omitted Damages: What’s Missing from the Social Cost of Carbon* (2014), https://policyintegrity.org/files/publications/Omitted_Damages_Whats_Missing_From_the_Social_Cost_of_Carbon.pdf. Though some positive spillover effects are also possible, such as technology spillovers that reduce the cost of mitigation or adaptation, see S. Rao et al., *Importance of Technological Change and Spillovers in Long-Term Climate Policy*, 27 ENERGY J. 123-39 (2006), overall spillovers likely mean that the United States’s share of the global social cost of greenhouse gases is underestimated, see Jody Freeman & Andrew Guzman, *Climate Change and U.S. Interests*, 109 COLUM. L. REV. 1531 (2009).

⁴⁸ *Bernhardt*, 472 F. Supp. 3d at 609.

⁴⁹ See generally Howard & Schwartz, *supra* note 44, at 270–84.

Think Global: International Reciprocity as Justification for a Global Social Cost of Carbon, particularly focusing on the strategic interests to the United States of adopting global damage costs.⁵⁰ Prominent legal scholars such as Cass Sunstein also agree that global damage costs offer the proper framework to value climate impacts.⁵¹

Another strong defense of the global valuation as consistent with best economic practices appears in a letter published in *The Review of Environmental Economics and Policy*, co-authored by Nobel laureate Kenneth Arrow. As Arrow and his co-authors explained, “To solve the unprecedented global commons problem posed by climate change, all nations must internalize the global externalities of their emissions[.] . . . [O]therwise, collective abatement efforts will never achieve an efficient, stable climate outcome.”⁵² Indeed, in January 2021, Trevor Houser and Kate Larsen conservatively estimated that, for every ton the United States pledged to reduce, other nations had pledged 6.1–6.8 tons in return.⁵³ While implementation of all these foreign policies is not guaranteed, Houser and Larsen cite evidence that several large emitters are on track to meet their goals, and that the ratio should grow over time as the U.S. share of global emissions falls.⁵⁴ As this analysis demonstrates, domestic climate policies that consider the full scope of global externalities will facilitate reciprocal emission reductions from other nations that will directly benefit the United States.

These sorts of analyses illustrate how critical a rigorously derived global estimate is for policies that affect greenhouse gas emissions. And the Northern District of California recognized as much when it struck down as arbitrary the Bureau of Land Management’s (BLM) repeal of the Waste Prevention Rule in part because the agency had abandoned the peer-reviewed, global estimates of the social cost of greenhouse gases in favor of flawed, domestic-only estimates.⁵⁵ The court noted that “focusing solely on domestic effects has been soundly rejected by economists as improper and unsupported by science,” explaining that the model upon which BLM relied “ignore[d] impacts on 8 million United States citizens living abroad, including thousands of United States military personnel; billions of dollars of physical assets owned by United States companies abroad; United States companies impacted by their trading partners and suppliers abroad; and global migration and geopolitical security.”⁵⁶

⁵⁰ *Id.* at 221–38.

⁵¹ See Cass R. Sunstein, *Arbitrariness Review, with Special Reference to the Social Cost of Carbon* 1, 20–23 (2021), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3874312 (“A decision to use the domestic number, as opposed to the global number, would be difficult to defend against an arbitrariness challenge; a decision to use the global number, as opposed to the domestic number, would be straightforward to defend against an arbitrariness challenge”).

⁵² Revesz, Arrow et al., *supra* note 33.

⁵³ Trevor Houser & Kate Larsen, *Calculating the Climate Reciprocity Ratio for the US* (2021), <https://perma.cc/4XD7-KTR9>. The estimate is conservative because it omits any conditional pledges, any pledges that are not readily quantified into specific reductions, any actions from countries that have not formally submitted Nationally Determined Contributions to the United Nations, any reductions occurring after 2030, and any foreign actions already achieved before 2014 that may have motivated U.S. pledges in the first place. *Id.* Note that this estimate is based on pledges as of 2016, which may now be outdated. *See id.*

⁵⁴ *Id.*

⁵⁵ *See California v. Bernhardt*, 2020 WL 4001480 (N.D. Cal. July 15, 2020).

⁵⁶ *Id.* at *27.

What is more, existing methodologies for calculating a “domestic-only” value of the social cost of greenhouse gases are deeply flawed and result in severe and misleading underestimates. Using the results of one economic model (FUND) and the U.S. share of global gross domestic product, the Working Group generated an “approximate, provisional, and *highly speculative*” range of 7–23% of the global social cost of carbon as an estimate of the purely direct climate effects to the United States.⁵⁷ Yet, as the Working Group itself acknowledged, this range is almost certainly an underestimate because it ignores significant, indirect costs to trade, human health, and security that are likely to spill over into the United States as other regions experience climate change damages, among other effects.⁵⁸ Hence why, in 2015, the Working Group concluded that “good methodologies for estimating domestic damages do not currently exist.”⁵⁹

The Working Group’s estimates reflect this strong consensus in favor of a global estimate.⁶⁰ Indeed, the Working Group itself observes that a global figure carries a number of advantages to American interests. As the Working Group has explained, “[e]xamples of affected interests include: direct effects on U.S. citizens and assets located abroad, international trade, tourism, and spillover pathways such as economic and political destabilization and global migration.”⁶¹ The Working Group also cited the advantages of global estimates in promoting global reciprocity in reducing greenhouse gas emissions, which further benefit Americans.⁶² The Working Group recognized and incorporated these critical considerations in adopting a global perspective in its social-cost estimates, and the FAR Council should follow suit.

d. The Working Group’s Estimates Use Appropriate Discount Rates for Interim Purposes, Though the FAR Council Should Apply Forthcoming Updates to the Working Group’s Guidelines

The Working Group has endorsed a range of discount rates for the social cost of greenhouse gases, along with a high-end estimate for sensitivity analysis. Until the Working Group updates this guidance, this range is appropriate for social cost estimates within the FAR context. More specifically, until the Working Group updates its guidelines, agencies should use discount rates the Working Group recommends, while also considering the use of lower discount rates consistent with recent evidence. At the very least, as detailed below, agencies should consider these lower discount rates in sensitivity analyses.

While numerous agencies have recently applied the Working Group’s full range of discount rates, agencies most frequently use the 3% values, which the Working Group has previously referred to as “central” estimates.⁶³ Last year, however, the Working Group explained that considerable evidence now exists that intergenerational consumption discount rates—the

⁵⁷ 2010 TSD, *supra* note 20, at 11 (emphasis added).

⁵⁸ *Id.* (explaining that the integrated assessment models underlying this estimate do “not account for how damages in other regions could affect the United States (e.g., global migration, economic and political destabilization)”).

⁵⁹ *Response to Comments, supra* note 24, at 36.

⁶⁰ *See* 2021 TSD, *supra* note 6, at 3 (“[T]he [Working Group] found previously and is restating here that a global perspective is essential for [social cost of greenhouse gas] estimates . . .”).

⁶¹ *Id.*

⁶² *Id.*

⁶³ *See, e.g.,* 2010 TSD, *supra* note 20, at 23.

relevant rates to apply for policies with strong intergenerational impacts, like climate change—are actually well below 3% or even 2.5%, potentially in the range of 1–2%.⁶⁴ That conclusion is well in line with recent research.⁶⁵ Largely because of this evidence, the Working Group acknowledged that its current social cost valuations “likely underestimate societal damages from [greenhouse gas] emissions”⁶⁶ and recommended that agencies “consider conducting additional sensitivity analysis using discount rates below 2.5%.”⁶⁷ The Working Group is currently updating its estimates to reflect this research and other scientific updates, and the FAR Council should instruct agencies to adopt the Working Group’s updated valuations when they are released later this year.

The discount rates the Working Group uses to calculate climate damages are appropriate to use even though they differ from other figures that underpin the discount rates that agencies are instructed to use elsewhere in procurement analysis.⁶⁸ For procurement decisions, agencies are instructed to apply discount rates “using a comparable-maturity Treasury rate.”⁶⁹ Depending on the precise length of the internal investment, that often means that agencies are applying discount rates reflecting near-term treasury rates, which can vary over time. At present, for instance, real interest rates for treasury bonds are negative, with the real rate on a three-year bond standing at -1.8%.⁷⁰ This is generally low by historical standards, as for much of the past several decades, real interest rates on treasury bonds have been positive by a few percentage points.⁷¹

Whereas short- or medium-term investment returns should be discounted using current treasury yields, climate-related harms that greenhouse gases impose accrue over centuries and affect multiple generations. The discount rate for such harms should therefore not be based solely on current treasury yields, but should also account for long-term trends.⁷² These long-term trends point to discount rates in the range of about 2%, which as the Working Group recently recognized, represents “[t]he average rate of return on inflation adjusted 10-year Treasury Securities over the last 30 years.”⁷³ Indeed, the Working Group has explained, in light of this evidence from the past three decades, that its original discount rate range of 2.5%–5% is likely too high. Accordingly, the FAR Council should treat the Working Group’s interim discount rate

⁶⁴ *Id.* at 16–21 (surveying literature).

⁶⁵ Peter Howard & Jason A. Schwartz, Inst. for Policy Integrity, *About Time: Recalibrating the Discount Rate for the Social Cost of Greenhouse Gases* 8–10 (2021) (reporting such research and concluding that “the best empirical estimate of the discount rate based on long-term interest rates in the current period is under 1%—and is likely to remain under 2% or less for the foreseeable future”) (a version of this report, titled *Valuing the Future: Legal and Economic Considerations for Updating Discount Rates*, is forthcoming in the *Yale Journal on Regulation*).

⁶⁶ See 2021 TSD, *supra* note 6, at 4.

⁶⁷ *Id.* at 21.

⁶⁸ See, e.g., Howard & Schwartz, *supra* note 65, at 6–8 (explaining why a capital-based discount rate is inapplicable to the social cost of greenhouse gases, even if it is applicable elsewhere).

⁶⁹ See Off. of Mgmt. & Budget, *Circular A-94: Guidelines and Discount Rates for Benefit-Cost Analysis of Federal Programs* 11 (1992), <https://perma.cc/56MT-YUUE>.

⁷⁰ See Off. of Mgmt. & Budget, *Circular A-94: Appendix C* (2020), <https://perma.cc/9SGH-D87V>.

⁷¹ Off. of Mgmt. & Budget, *Budget Assumptions: Nominal Treasury Interest Rates for Different Maturities 2*, <https://perma.cc/3RCB-X9WX> (last updated Nov. 19, 2020).

⁷² See, e.g., Howard & Schwartz, *supra* note 65, at 7 (explaining why “[l]ong-term time horizons in general counsel strongly against application of a capital-based rate”).

⁷³ 2021 TSD, *supra* note 6, at 19–20.

range of 2.5%–5% as a conservative, upper-bound range. And again, it should instruct agencies to apply any updated values that the Working Group releases in the future.

II. Where Estimates of the Social Cost of Greenhouse Gases Are Available, Agencies Should Assess a Proposal’s Social Cost by Adding the Climate Cost to the Purchase Price

The most economically rigorous and technically defensible way to apply the social cost of greenhouse gases involves treating these climate costs as comparable to other costs. A good’s purchase price reflects the value of that good to the parties to the transaction, but it does not reflect the transaction’s possible benefits or harms to society, known as the transaction’s externalities. Climate harms are quintessential externalities because parties to any transaction experience only a *de minimis* share of these harms. To understand—and respond appropriately to—a transaction’s full costs to society, an agency must “internalize” any externalities, or add them to the rest of the costs. By adding the social cost of greenhouse gases to the purchase price, agencies can gain a fuller picture of a procurement decision’s consequences.

To illustrate, suppose an agency is deciding between two products to buy: Product A, which costs \$960 per unit, and Product B, which costs \$1000 per unit. Producing Product A entails one ton of carbon dioxide emissions per unit, and producing Product B entails no emissions. The products are otherwise identical. Without the social cost of greenhouse gases to guide this decision, agencies have no clear reason to pick one product over the other; Product A is less expensive, but Product B is more environmentally friendly. Different agencies could very well arrive at different decisions.

But the social cost of greenhouse gases adds a critical layer of detail and rigor to this analysis. Because one ton of carbon dioxide emissions today imposes \$53 worth of harms, according to the Working Group’s current valuations under a 3% discount rate,⁷⁴ Product A’s total quantified costs are \$1013 (\$960 plus \$53), which is greater than \$1000.⁷⁵ Put differently, while Product B’s purchase price is higher, from society’s perspective, Product A is actually costlier. Thus, at least under a 3% (or lower) discount rate, Product B offers the “best value.”

For simplicity, this hypothetical assumes that Products A and B are otherwise identical, but real-life products are rarely identical. Thus, the FAR Council could instruct agencies to treat the option that has the lowest quantified cost—considering both the purchase price and social cost of greenhouse gases—as *presumptively* offering the “best value.” Because other factors also contribute to a product’s “value,” that presumption is surmountable. For instance, a higher-emitting option may perform better along other dimensions. While application of the social cost of greenhouse gases would thus not always lead to the purchase of the least-emitting option, it

⁷⁴ 2021 TSD, *supra* note 6, at app. tbl.A-1. The 3% discount rate represents the “middle” estimate that the Working Group, in its interim guidelines, recommends using for policies with strong implications for intergenerational topics like climate change. *See id.* at 19. More specifically, this figure represents the cost of a ton of carbon emitted and analyzed in 2022, using 2020 dollars. *See id.* at app. tbl.A-1. As discussed above, this figure could plausibly change when the Working Group updates its social-cost estimates. While \$53 represents the interim value under these parameters for a 2022 emission, the FAR Council should incorporate the fact that the Working Group’s damage valuations increase over time. *See id.*

⁷⁵ Because, in this example, the products are otherwise identical, any other externalities cancel out.

would add rigor to agency assessment of climate damages and enable agencies to consider climate impacts in a straightforward manner.

Using the social cost of greenhouse gases to aid the selection of similar goods or services is most applicable in sectors for which widely accepted methodologies are readily available or adaptable to calculate the marginal tons of greenhouse gases that a procurement would cause. Many such estimates exist, or are derivable using existing methodologies, including for:

- “Off-the-shelf” vehicles;⁷⁶
- Newly designed vehicles;⁷⁷
- Buildings;⁷⁸
- Certain foods;⁷⁹ and
- Electricity.⁸⁰

Because these contexts entail large “carbon footprints,” developing state-of-the-art models to estimate emissions implications would be critical to meeting the federal government’s climate commitments. To meet the national goal of net-zero emissions from federal procurement in the coming decades,⁸¹ a clear picture of where emissions stand and how the government can make the most progress is essential. The FAR Council should therefore consult with appropriate agencies to aid in its modeling, including, for instance, the Department of Energy for electricity and the Environmental Protection Agency for automobiles.

⁷⁶ See, e.g., Amgad Elgowainy et al., Argonne Nat’l Lab’y, *Cradle-to-Grave Lifecycle Analysis of U.S. Light-Duty Vehicle-Fuel Pathways: A Greenhouse Gas Emissions and Economic Assessment of Current (2015) and Future (2025–2030) Technologies* (2016), <https://perma.cc/5UGZ-MZN3>.

⁷⁷ See, e.g., U.S. Postal Serv., *Draft Environmental Impact Statement: Next Generation Delivery Vehicle Acquisitions 4-17 to -28* (2021), <https://perma.cc/U88Q-KWFM> (reporting such estimates prospectively for newly built U.S. Postal Service vehicles).

⁷⁸ See, e.g., Monique Schmidt et al., *Integrating Life-Cycle GHG Emissions into a Building’s Economic Evaluation*, 1 BUILDINGS & CITIES 361, 367–68 (2020) (discussing literature on how to quantify life-cycle greenhouse gas emissions for buildings); Michael Kenney et al., Cal. Energy Comm’n, *California Building Decarbonization Assessment* (2021), <https://perma.cc/LMB4-PU8G> (performing this kind of calculation for all Californian buildings).

⁷⁹ See, e.g., Joseph Poore & Thomas Nemecek, *Reducing Food’s Environmental Impacts Through Producers and Consumers*, 360 SCI. 987 (2018) (reporting greenhouse gas emissions data across different foods’ supply chains).

⁸⁰ For a list of literature calculating distributed energy resources’ energy efficiency—which could serve as model calculations for other energy sources—see Lawrence Berkeley Nat’l Lab’y, *Time- and Locational-Sensitive Value*, <https://perma.cc/4FZC-SA5L>. For a deeper discussion of how to perform such calculations rigorously, see Jeffrey Shrader et al., Inst. for Pol’y Integrity, *Valuing Pollution Reductions: How to Monetize Greenhouse Gas and Local Air Pollutant Reductions from Distributed Energy Resources* (2018), <https://policyintegrity.org/publications/detail/valuing-pollution-reductions>. For example applications of that methodology, see Justin Gundlach & Burcin Unel, Inst. for Pol’y Integrity, *Getting the Value of Distributed Energy Resources Right: Using a Societal Value Stack* (2019), <https://policyintegrity.org/publications/detail/getting-the-value-of-distributed-energy-resources-right>; Matt Butner et al., Inst. for Pol’y Integrity, *Making the Most of Distributed Energy Resources: Subregional Estimates of the Environmental Value of Distributed Energy Resources in the United States* (2020), <https://policyintegrity.org/publications/detail/making-the-most-of-distributed-energy-resources>. Another valuable resource could be the models developed by WattTime. See generally *Get the Data*, WattTime, <https://www.watttime.org/get-the-data/>.

⁸¹ See Exec. Order No. 14,057 § 102(a)(v), 86 Fed. Reg. 70,935, 70,935 (Dec. 13, 2021).

Once agencies know how many tons of greenhouse gas emissions a purchase entails, the only remaining step involves multiplying that number by each gas's per-ton social cost, using the Working Group's figures. Then, as discussed above, agencies should add the resulting figure to an item's purchase price and presumptively favor the least "costly" alternative considering the resulting sum. While relatively simple, these additional steps would greatly improve the rigor of assessing climate impacts in procurement decisions.

III. Where the Above Analysis Is Infeasible, Agencies Should Assess Climate Impacts Using Other Available Mechanisms and Include Binding Emission-Reduction Contractual Commitments

For some procurement decisions, emissions estimates are not readily available. In such cases, agencies should consider whether generating such estimates would be feasible. If so, those estimates can be used as outlined above, adding important rigor to the decisionmaking process. Generating estimates for procurement decisions may also carry external benefits, including providing key data to inform climate-sensitive purchasing decisions by consumers and private organizations. The FAR Council would do well to leverage the federal government's expertise to help develop these sorts of estimates wherever possible.

Agencies should also require that contractors share greenhouse gas emissions data whenever such data are readily obtainable. They could also consider prioritizing purchases from suppliers that share auditable emissions data, such as through the Carbon Disclosure Project.⁸² That would allow agencies to perform these more rigorous analyses. Disclosing these emissions can carry spillover benefits for other decisions, including, again, those by consumers and private organizations who are sensitive to greenhouse gas emissions.

But, in some cases, generating estimates may not be worthwhile because the analytical burden would be high, the differences in emissions rates would be low, or relevant data are not practically attainable. In those cases, while the social cost of greenhouse gases cannot formally factor into agency decisions, agencies should, at a bare minimum, consider different emission rates as a qualitatively significant factor in its decisionmaking. If, for instance, two proposals are relatively close in purchase price, but one proposal appears to entail much lower greenhouse gas emissions than the other, then agencies should prioritize the lower-emitting proposal. Agencies might infer lower greenhouse gas emissions based on factors like lighter materials being shipped, shorter shipping distances, less carbon-intensive materials, a company that is known to produce other goods or services with emissions below industry standards, and similar factors. Agencies should particularly prioritize the lower-emitting option when the emission difference appears large or the price difference is relatively small.

Where good reasons exist to expect lower emissions from one alternative, but data are insufficient to quantify those emissions precisely, agencies could also give that alternative preference in its decisionmaking process using a "price evaluation preference." Agencies already use that mechanism to give preference to small businesses in their evaluations under the FAR. Specifically, the "price evaluation preference" adds a 10% increase for evaluation purposes to the costs of large businesses, but not to small businesses, which makes large businesses appear

⁸² See Carbon Disclosure Project, *About Us*, <https://perma.cc/ZEN2-3R43>.

comparatively less attractive.⁸³ Agencies could use an analogous mechanism—or any other mechanism that accomplishes the same end—to give preference to alternatives roughly proportionally to the degree to which they likely entail lower greenhouse gas emissions. Agencies could also perform a simple breakeven analysis, explicitly calculating how much less one alternative would need to emit to justify prioritizing it.

Where allowed, agencies should also consider post-award requirements—in other words, binding contractual commitments to reduce greenhouse gas emissions as a condition of receiving federal funds. Optimal specific requirements would vary by industry, product, and company, and centralized regulation or guidance from the FAR Council would be useful in this respect. But generally, these requirements should include mandatory emission disclosures where feasible, emission-reduction targets, and climate-sensitive corporate decisionmaking processes. The FAR Council could consider incorporating, for instance, provisions from GSA’s Alliant 2 Unrestricted Master Contract, which requires greenhouse gas emission disclosures, inventories, emissions-reduction targets, and documented progress toward those targets.⁸⁴ Annual milestones and reporting requirements for multiyear contracts could help ensure consistent progress. Example measures that could be incorporated include using more renewable energy, improving production efficiency, reducing vehicle- or airplane-miles traveled, using more fuel-efficient or zero-emission delivery vehicles, and using less-polluting packaging and other resources. These sorts of measures are possible even when contractors do not know precisely how much they emit, as they will almost certainly contribute to emitting *less*, no matter the baseline.

In addition to setting mandatory minimum requirements as a condition of receiving a federal contract, agencies using the FAR could give formal preference to companies that agree to additional emission-reduction targets above those requirements. Insofar as these promises yield measurable and verifiable greenhouse gas reductions, agencies could monetize those reductions using the social cost of greenhouse gases, as described above. Agencies could also consider monetized emission-reduction commitments from companies that are not directly related to the product or service they are procuring. For example, a company providing an agency one product could reduce emissions associated with another product—and, as long as the agency takes care not to “double count” such reductions, it could consider such reductions as commensurable with reductions associated more directly with the product being acquired. Again, centralized guidance or regulation from the FAR Council on incorporating such commitments into decisionmaking under the FAR could help agencies implement this proposal.

IV. The FAR Council Has Ample Legal Authority to Require Formal Consideration of Greenhouse Gas Emissions

The FAR Council derives its authority to promulgate the FAR from several statutes, including, most relevantly, the Office of Federal Procurement Policy Act (OFPPA)⁸⁵ and the

⁸³ See 48 C.F.R. § 19.1307 (2020).

⁸⁴ See GSA, *Alliant 2 GWAC Unrestricted Master Contract* § G.25 (2021), <https://perma.cc/BC5Y-MLD6>.

⁸⁵ See 41 U.S.C. § 1121(b) (providing the Administrator of the Office of Federal Procurement Policy with authority to promulgate the FAR in order to “carr[y] out the policies and functions” set forth in the OFPPA); *id.* § 1303(a), (c) (directing the FAR Council, which includes the Administrator of the OFPP, to “jointly issue” the FAR).

Federal Property and Administrative Services Act (Procurement Act).⁸⁶ Both statutes provide the FAR Council with ample authority to implement the above recommendations.

a. The OFPPA Provides the FAR Council Authority to Procure Goods and Services that Provide the “Best Value,” Which Is Construed Broadly

The OFPPA provides the Administrator of the Office of Federal Procurement Policy (OFPP) with broad authority to “prescribe Government-wide procurement policies”—which are “implemented in . . . the Federal Acquisition Regulation”—to “the extent that the Administrator considers appropriate in carrying out the policies and functions set forth” in the statute.⁸⁷ The purpose of the OFPPA is to “promote economy, efficiency, and effectiveness” in procurement practices and to “provide overall direction of Government-wide procurement policies.”⁸⁸ This mandate includes ensuring that the Federal Government procures “best value products” that “achieve appropriate public policy objectives.”⁸⁹

Consistent with these statutory directives, the current FAR’s guiding principles aim to “deliver on a timely basis the best value product or service to the customer, while maintaining the public’s trust and fulfilling public policy objectives.”⁹⁰ As discussed above, the FAR explains that “best value must be viewed from a broad perspective”⁹¹ and defines “best value” as “the expected outcome of an acquisition that, in the Government’s estimation, provides the greatest overall benefit in response to the requirement.”⁹² The FAR also reiterates that the federal acquisition “[s]ystem must support the attainment of public policy goals adopted by the Congress and the President.”⁹³ Courts have long acknowledged that the government has broad discretion to determine what constitutes “best value” when awarding contracts.⁹⁴

⁸⁶ See *id.* § 1303(a) (directing the members of the FAR Council, which includes the Administrator of General Services, to “jointly issue” the FAR “pursuant to their respective authorities”); 40 U.S.C. § 121(c) (providing the Administrator of General Services the authority to “prescribe regulations to carry out” the Procurement Act); see also, e.g., Federal Acquisition Regulation: High Global Warming Potential Hydrofluorocarbons, 81 Fed. Reg. 30,429, 30,434 (May 16, 2016) (citing 40 U.S.C. § 121(c) as authority for promulgating amendments to the FAR).

⁸⁷ 41 U.S.C. § 1121(b).

⁸⁸ *Id.* § 1101(b).

⁸⁹ *Id.* § 1312 (establishing an interagency council composed of each agency’s Chief Acquisitions Officer to provide recommendations on the FAR and directing the council to “[p]romote *effective* business practices that ensure the timely delivery of *best value* products to the Federal Government and achieve appropriate *public policy objectives*” (emphasis added)).

⁹⁰ 48 C.F.R. § 1.102(a).

⁹¹ *Id.* § 1.102-1.

⁹² *Id.* § 2.101.

⁹³ *Id.* § 1.102-2.

⁹⁴ See *Taahut v. United States*, 849 F. App’x 260, 266 (Fed. Cir. 2021) (“It is well-established that contracting officers have a great deal of discretion in making contract award decisions, particularly when, as here, the contract is to be awarded to the bidder or bidders that will provide the agency with the best value.”); *Tyler Const. Grp. v. United States*, 570 F.3d 1329, 1334 (Fed. Cir. 2009) (“The Corps, like other federal procurement entities, has broad discretion to determine what particular method of procurement will be in the best interests of the United States in a particular situation.”); *E.W. Bliss Co. v. United States*, 77 F.3d 445, 449 (Fed. Cir. 1996) (noting that, in negotiated contracts, “[p]rocurement officials have substantial discretion to determine which proposal represents the best value for the government”); *Lockheed Missiles & Space Co. v. Bentsen*, 4 F.3d 955, 958 (Fed. Cir.1993) (“Effective contracting demands broad discretion.”).

b. The Procurement Act Provides the President Authority to Prescribe “Necessary” Policies, Which Is Also Construed Broadly, and Empowers Agencies to Implement Such Policies

The Procurement Act provides the President with broad discretion to “prescribe policies and directives that the President considers necessary,” so long as such policies are “consistent with” the purpose and goals of the Act.⁹⁵ Likewise, the Administrator of the GSA “may prescribe regulations to carry out” the Act.⁹⁶ The stated purpose of the Act is to “provide the Federal Government with an economical and efficient system” for procuring contracts and to enable procurement in a manner “advantageous to [it] in terms of economy, efficiency, or service.”⁹⁷

As the U.S. Court of Appeals for the District of Columbia Circuit has explained, “economy” and “efficiency” are “not narrow terms,” and encompass factors other than price, such as “quality, suitability, and availability of goods or services.”⁹⁸ These kinds of concerns can be seen in specific provisions of the Act that direct contracting officers to make awards to those bids that are “most advantageous to the Federal Government, price *and other factors* considered.”⁹⁹

Consistent with the statute’s broad mandate, courts apply a “lenient standard[.]” to determine whether a policy is “consistent with” the purposes of the Procurement Act.¹⁰⁰ Although this standard requires a “nexus” with the Act’s purposes,¹⁰¹ it permits “measures which certainly reach beyond any narrow concept of efficiency and economy in procurement.”¹⁰² Indeed, the D.C. Circuit has repeatedly upheld policies that impose “on the procurement process social and economic programs somewhat removed from a strict view of efficiency and economy.”¹⁰³ This has been true even where the court deemed the nexus “attenuated” and easily contested.¹⁰⁴

⁹⁵ 40 U.S.C. § 121(a).

⁹⁶ *Id.* § 121(c).

⁹⁷ *Id.* § 501(a)(1)(A).

⁹⁸ *Am. Fed’n of Lab. & Cong. of Indus. Orgs. v. Kahn*, 618 F.2d 784, 789 (D.C. Cir. 1979) (en banc).

⁹⁹ 40 U.S.C. § 545(a)(4) (emphasis added).

¹⁰⁰ *UAW-Lab. Emp. & Training Corp. v. Chao*, 325 F.3d 360, 367 (D.C. Cir. 2003); *Nat’l Ass’n of Mfrs. v. Perez*, 103 F. Supp. 3d 7, 20 (D.D.C. 2015) [hereinafter *NAM*]; *see also Env’t Def. Fund, Inc. v. Env’t Prot. Agency*, 82 F.3d 451, 457 (D.C. Cir. 1996) (noting that the phrase “consistent with” is “flexible statutory language” that “does not require exact correspondence”).

¹⁰¹ *UAW*, 325 F.3d at 366; *Kahn*, 618 F.2d at 792; *NAM*, 103 F. Supp. 3d at 20.

¹⁰² *Chamber of Com. v. Reich*, 74 F.3d 1322, 1333–34, 1337 (D.C. Cir. 1996).

¹⁰³ *See Kahn*, 618 F.2d at 789, 792–93 (upholding an Executive Order that imposed wage and price controls intended to reduce inflation); *UAW*, 325 F.3d at 367 (upholding an Executive Order requiring contractors to post notices about workers’ rights); *NAM*, 103 F. Supp. 3d at 20 (same).

¹⁰⁴ *See, e.g., UAW*, 325 F.3d at 366–67 (finding authority under the Procurement Act to promulgate a policy forcing contractors to notify employees about their rights to refuse to join a union or to pay certain union dues because “[w]hen workers are better informed of their rights,” that “facilitates the efficient and economical completion of [the government’s] procurement contracts”—even though the court deemed that connection “attenuated”); *Kahn*, 618 F.2d at 792–93 (finding authority under the Procurement Act to promulgate a policy forcing contractors to adopt anti-inflationary wage rates because, if that policy “is effective in slowing inflation in the economy as a whole, the Government will face lower costs in the future than it would have otherwise”); *Albuquerque v. Dep’t of Interior*, 379 F.3d 901, 914 (10th Cir. 2004) (holding that the Procurement Act authorized an Executive Order that requires agencies to give first consideration to community business areas in meeting federal

c. These Statutes Provide the FAR Council Ample Authority to Implement the Above Recommendations

Requiring agencies to consider the social cost of greenhouse gases in procurement decisions comfortably fits within the authority provided by both the OFPPA and the Procurement Act. As explained above, under the OFPPA, the FAR Council has discretion to determine that such a requirement “[p]romote[s] effective business practices” by ensuring that the federal government receives “best value products.”¹⁰⁵ As the FAR itself recognizes, “best value” is the outcome that “provides the greatest overall benefit” in “*the Government’s estimation*.”¹⁰⁶ Here, it is entirely reasonable for the FAR Council to determine that a social cost of greenhouse gas emissions tool will facilitate the procurement of “best value” products and services. Indeed, given how significant the social cost of greenhouse gases can be, ignoring this cost would entail ignoring a substantial portion of certain procurements’ “value.”

Implementing a social cost of greenhouse gases requirement also meets the OFPPA’s directive to “achieve . . . public policy objectives,”¹⁰⁷ including “policy goals adopted by . . . the President.”¹⁰⁸ Indeed, the FAR Council has previously promulgated climate change related requirements in response to executive orders. For example, following Executive Order 13,693, which set forth a plan for federal sustainability,¹⁰⁹ the FAR was amended to require agencies to “procure, when feasible, alternatives to high global warming potential” hydrofluorocarbons.¹¹⁰ In its rulemaking, the FAR Council explained that “DOD, NASA, and GSA have prepared this rule to implement and facilitate compliance with Executive Order 13693.”¹¹¹ Paralleling this logic, the FAR Council has similar authority to promulgate the above recommendations “to implement and facilitate compliance with Executive Order” 14,030.¹¹²

space requirements in urban areas); *Contractors Ass’n of E. Pa. v. Sec’y of Lab.*, 442 F.2d 159, 170 (3d Cir. 1971) (upholding an Executive Order issued pursuant to the Procurement Act that prohibited federal contractors from discriminating against workers and applicants on the basis of race, religion, and sex); *Chamber of Com. v. Napolitano*, 648 F. Supp. 2d 726, 737–38 (D. Md. 2009) (holding that the Procurement Act authorized an Executive Order requiring federal contractors to use a particular electronic verification system to confirm the eligibility of their employees to work in the United States); *United States v. Miss. Power & Light Co.*, 638 F.2d 899, 905 (5th Cir. 1981); *Eatmon v. Bristol Steel & Iron Works, Inc.*, 769 F.2d 1503, 1514 (11th Cir. 1985); *United States v. New Orleans Pub. Serv., Inc.*, 553 F.2d 459, 466–67 (5th Cir. 1977), *vacated on other grounds by* 436 U.S. 942 (1978); *Farkas v. Tex. Instr., Inc.*, 375 F.2d 629, 632 n.1 (5th Cir. 1967), *cert. denied*, 389 U.S. 977 (1967); *Farmer v. Phil. Elec. Co.*, 329 F.2d 3 (3d Cir. 1964); *Legal Aid Soc’y of Alameda Cnty. v. Brennan*, 381 F. Supp. 125, 130 (N.D. Cal. 1974).

¹⁰⁵ 41 U.S.C. § 1312(b)(4).

¹⁰⁶ 48 C.F.R. § 2.101 (emphasis added).

¹⁰⁷ 41 U.S.C. § 1312(b)(4).

¹⁰⁸ 48 CFR § 1.102-2.

¹⁰⁹ Exec. Order No. 13,693, 80 Fed. Reg. 15,869 (March 19, 2015).

¹¹⁰ 81 Fed. Reg. at 30,429.

¹¹¹ *Id.*; *see also* Federal Acquisition Regulation: Public Disclosure of Greenhouse Gas Emissions and Reduction Goals - Representation, 81 Fed. Reg. 83,092 (Nov. 18, 2016) (amending the FAR to require offerors to indicate if and where they publicly disclose greenhouse gas emissions and noting that “[t]he authority for this rule is E.O. 13693”).

¹¹² *See* Federal Acquisition Regulation: Minimizing the Risk of Climate Change in Federal Acquisitions, 86 Fed. Reg. 57,404, 57,405 (Oct. 15, 2021) (citing Executive Order 14,030 as the impetus for this ANPRM).

Similarly, as explained above, the Procurement Act provides the President and the GSA with broad authority to prescribe social and economic procurement policies so long as those policies have a plausible “nexus” with the Act’s purposes of promoting economy and efficiency. Such a nexus can be achieved where a policy indirectly lowers costs for the government via downstream effects.

Use of the social cost of carbon will help the government to procure products and services that mitigate the risk of climate change, which will in turn ensure that climate change imposes fewer costs on government operations. For example, in its 2021 Climate Change Risk Management Plan, the GSA makes clear that climate change impacts will pose significant and real costs to GSA-owned assets and operations, including real property,¹¹³ information and communications infrastructure,¹¹⁴ water and wastewater utilities,¹¹⁵ transportation infrastructure,¹¹⁶ and global supply chains.¹¹⁷ The Plan explains that managing these risks in advance will “save money” and “limit disruptions to the agency’s mission and program.”¹¹⁸ By procuring services and products that mitigate future climate change risk, “the Government will face lower costs in the future than it would have otherwise.”¹¹⁹ This relationship to future cost-savings satisfies the “lenient standard[]” for authority under the Procurement Act.¹²⁰

Conclusion

In this ANPRM, the FAR Council appropriately recognizes that considering the social cost of greenhouse gases in procurement decisions can add critical rigor and improve social welfare by making those decisions more sensitive to climate impacts. The FAR Council should therefore require agencies to incorporate the social cost of greenhouse gases from the Working Group in agency procurement whenever feasible. Specifically, the FAR Council should instruct agencies to add these social costs to purchase prices and apply a presumption in favor of acquiring the option that is least costly after considering those factors. If emission estimates are unavailable, agencies should consider emissions using other available mechanisms and should consider requiring emission-reduction contractual commitments as a condition of receiving federal funds, with commitments beyond such a “floor” to be considered favorably in contracting decisions.

¹¹³ GSA, *Climate Change Risk Management Plan 5* (2021), <https://www.sustainability.gov/pdfs/gsa-2021-cap.pdf> (noting that real property is made vulnerable by climate change due to increased storm surges, drought, wildfires, winter storms, sea-level rise, permafrost melting, increased mean temperature, and increased humidity).

¹¹⁴ *Id.* at 7–8 (noting that supply chains and infrastructure for information and communications technology are made more vulnerable by climate change because of increased wildfires, heavy winds, extreme precipitation, sea-level rise, winter storms, and storm surges).

¹¹⁵ *Id.* at 9 (noting that climate change will affect water and wastewater utilities due to “increased costs for services”).

¹¹⁶ *Id.* at 10 (with respect to transportation infrastructure, “[s]ea level rise and storm surge can cause moderate to severe loss of services, while extreme precipitation and wildfire can cause moderate loss of service”)

¹¹⁷ *Id.* at 11 (noting that the GSA’s ability to provide services relies on global supply chains, which are vulnerable to storm surge, extreme temperature, extreme precipitation, wildfire, and winter storms).

¹¹⁸ *Id.* at 1.

¹¹⁹ *Kahn*, 618 F.2d at 793 (upholding Executive Order that aimed to save the government money in the long run by “slowing inflation in the economy as a whole”).

¹²⁰ *UAW*, 325 F.3d at 367; *NAM*, 103 F. Supp. 3d at 20.

Sincerely,

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* No part of this document purports to present the views, if any, of New York University School of Law.

Attachments:

- 1) Iliana Paul & Max Sarinsky, *Playing with Fire: Responding to Criticism of the Social Cost of Greenhouse Gases* (2021)
- 2) Max Sarinsky et al., *Broadening the Use of Social Cost of Greenhouse Gases in Federal Policy* (2021)