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**MITRE Response to Federal Acquisition Regulatory Council's Request for
Information on Minimizing the Risk of Climate Change in Federal Acquisitions**

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*MITRE Response to Federal Acquisition Regulatory Council's Request for Information on
Minimizing the Risk of Climate Change in Federal Acquisitions
(FAR Case 2021-016)*

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Introduction and Background

The MITRE Corporation is a not-for-profit company that works in the public interest to tackle difficult problems that challenge the safety, stability, security, and well-being of our nation. We operate multiple federally funded research and development centers, participate in public-private partnerships across national security and civilian agency missions, and maintain an independent technology research program. Working across federal, state, and local governments—as well as industry and academia—gives MITRE a unique vantage point. MITRE works in the public interest to discover new possibilities, create unexpected opportunities, and lead by pioneering together for public good to bring innovative ideas into existence in areas such as artificial intelligence, intuitive data science, quantum information science, health informatics, policy and economic expertise, trustworthy autonomy, cyber threat sharing, and cyber resilience.

Supporting federal agencies with complex and innovative acquisition activities has long been one of MITRE's core capabilities, and we are continuously working to develop and promote improved acquisition practices. Our goal is to help federal organizations adopt more cost-efficient, agile, and rigorous acquisition processes. MITRE's burgeoning climate program provides innovative solutions and frameworks to strengthen environmental security and build national resilience to environmental challenges. It offers systems-based evaluation of policy and technology interventions to mitigate greenhouse gas (GHG) emissions and is developing new methods to assess and mitigate exposure to climate financial risk. Given our work in both of these areas we have recognized the importance of expanding acquisition processes to consider climate factors.

Overarching Recommendations

Establish a uniform standard for greenhouse gas, social cost, and other climate-related factors. There are currently multiple domestic, international, government, and non-government greenhouse gas emission collection, reporting, and rating standards that can be considered as part of planned federal procurements. Without a uniform standard for both greenhouse gas and social costs implemented, federal procurement agency offices and officials will develop unique approaches, thus creating new undue burdens on private industry to review, understand, and abide by within procurement activities.

Leverage existing acquisition approaches in the interim. In advance of the uniform standard being developed, greenhouse gas and social cost factors can be incorporated within federal procurement planning and decision-making processes via the following methods:

- Other Transaction Authority (OTA). The U.S. government (USG) should create a new Public Private Partnership Consortium allowing USG and private industry participants (small and other than small businesses) across multiple industries (products, services, construction, defense, etc.) to collaborate and develop solutions as USG options for use of greenhouse gas, social costs, and other climate-related factors as part of its federal procurement planning and decision-making process.
- Letter Contracts. Use Letter Contracts to plan and award new federal procurements establishing standards through collaboration with private industry vendors for use of

greenhouse gas, social costs, and other climate-related factors as part of its federal procurement planning and decision-making process.

- **Challenge-based Acquisitions (ChBA).** ChBAs help government agencies perform acquisitions by presenting the solution to be acquired as a need (the challenge), giving potential providers the opportunity to propose innovative solutions that fill the need. Challenges are issued in terms of operational needs and are accompanied by mechanisms for evaluating proposed solutions and contractual terms for provider participation. More information is available in the fifth edition of MITRE's ChBA Handbook.¹

Questions Posed in the Request for Information

(a) How can greenhouse gas emissions, including the social cost of greenhouse gases, best be qualitatively and quantitatively considered in Federal procurement decisions, both domestic and overseas? How might this vary across different sectors?

Determining qualitative and quantitative costs of greenhouse emissions, as would be required in a procurement action, remains a nascent concept. In 2010, and in response to Executive Order (EO) 13514, the General Services Administration (GSA) conducted a feasibility study on the ability for the federal government to collect GHG emissions data from government suppliers.² This study concluded that it is feasible to collect this information from suppliers with a reasonable implementation timeline. While there have been many advances in GHG reporting standards and reporting methods since then, the basic discussion of the use of existing government procurement rules and infrastructure to collect this data is likely still valid. Further, this analysis also concluded that it is feasible to use emissions data in procurement decisions as long as it is done in an equitable and defensible way. While this GSA feasibility study focused solely on measuring GHG emissions, it is reasonable to expect that including the social cost of carbon follows the same feasibility logic. Some additional analysis would be needed to update the feasibility study recommendations and incorporate factors related to the social cost of carbon.

Operating under the assumption that USG currently does not, and will not have, established greenhouse gas, social cost, and other climate-related factor standards for required use when planning new federal procurements, the following are available approaches federal procurement offices and officials could use to utilize greenhouse gas, social costs, and climate-related factors as part of its procurement planning and decision-making process in partnership with private industry vendors:

Leverage GSA's framework. Use GSA's established framework to development approaches on how to consider qualitative and quantitative greenhouse gas, social costs, and other climate-related factors as part of the federal procurement planning and decision-making process.

¹ S. Roe, et al. Challenge-Based Acquisition. 2020. MITRE, <https://www.mitre.org/sites/default/files/publications/pr-20-0745-challenge-based-acquisition-version-5.pdf>.

² Executive Order 13514 Section 13: Recommendations for Vendor and Contractor Emissions. 2010. General Services Administration, https://www.gsa.gov/cdnstatic/GSA_Section13_FinalReport_040510_v2.pdf.

Existing greenhouse gas emission standards and established values. There are currently multiple domestic, international, government, and non-government greenhouse gas emission collection, reporting, and rating standards that can be considered as part of planned federal procurements. Federal procurement offices and officials could utilize already established domestic and international greenhouse gas emission reporting standards, such as the GHG Protocol or the Global Reporting Initiative (GRI).^{3,4} Using established standards can facilitate reporting consistency and reduce the burden to private industry.

The Interagency Working Group (IAWG) was created in 1997 to make recommendations to the President for improving the coordination, efficiency, and effectiveness of the USG. The IAWG is comprised of members from up to 70 federal departments and agencies. The IAWG is committed to reflecting the best available science and methodologies into their social cost of carbon estimates. In February 2021, IAWG updated the social cost of carbon, methane, and nitrous oxide with interim values. After considering comments on recent developments in science and economics, a comprehensive update is expected in January 2022.⁵ MITRE recommends using the estimates for the social cost of carbon developed by IAWG.

If each USG federal agency is left to interpret and define its own unique qualitative and quantitative greenhouse gas emission standards used as part of its procurement decision-making process, the federal government would be creating an unreasonable burden on private industry by forcing vendors to staff qualified employees to review, document understanding, and navigate different greenhouse gas standards depending on the soliciting federal agency when considering proposal submission.

Creative uses of contracting authorities. Existing OTAs, Letter Contracts, and ChBA can be leveraged, as discussed in the Overarching Recommendations section of this response. While these existing frameworks and approaches enable the government to move forward in the short-term, MITRE recommends they be leveraged judiciously and federal efforts instead be focused on enabling a new, paradigm that is consistent and sustainable.

To ensure transparency in soliciting new federal procurements for fair and equal competition, federal agencies would require new rules, laws, codes, statutes, and/or procurement regulations (e.g., the Federal Acquisition Regulations [FAR]) that define what the greenhouse gas qualitative and quantitative standards are, further define how they apply domestic vs international procurements, and how USG intends to use them as part of its solicitation and evaluation of submitted proposals through formal Source Selection procedures, making these factors part of its federal procurement decision making process while accounting for fair and equal competition and a vendor's ability to protest.

Without new rules, laws, codes, statutes, and/or procurement regulations (e.g., the FAR), federal agency contracting offices/officers and program offices/officers lack critically required authority to define, let alone require, these new factors be utilized as part of new procurement performance requirements and evaluation factors for award consideration.

³ Greenhouse Gas Protocol. 2022. Greenhouse Gas Protocol, <https://ghgprotocol.org/>. Last accessed January 9, 2022.

⁴ The global standards for sustainability reporting. 2022. Global Reporting Initiative, <https://www.globalreporting.org/standards/>. Last accessed January 9, 2022.

⁵ Technical Support Document: Social Cost of Carbon, Methane, and Nitrous Oxide: Interim Estimates under Executive Order 13990. 2021. The White House, https://www.whitehouse.gov/wp-content/uploads/2021/02/TechnicalSupportDocument_SocialCostofCarbonMethaneNitrousOxide.pdf.

(b) What are usable and respected methodologies for measuring the greenhouse gases emissions over the lifecycle of the products procured or leased, or of the services performed?

Two existing standards can be helpful. The Greenhouse Gas Protocol reporting standards are the most widely used and accepted for accurately reporting emissions data.⁶ A second common standard is the Global Reporting Initiative (GRI) reporting standards, which are aligned with the Greenhouse Gas Protocol standards for emission reporting.⁷ These standards include elements for reporting all Scope 3 emissions, including product lifecycle emissions, procures item emissions, and emissions from services. As these standards are widely accepted across governments and industry, MITRE recommends that they be considered as the standards for reporting emissions.

From a procurement perspective, the Office of Management and Budget could consider expanding the use of FAR 52.223-22 – Public Disclosure of Greenhouse Gas Emissions and Reduction Goals-Representation.⁸ This currently only applies to federal procurements with a total dollar value equal to or exceeding \$7.5M and requires vendors to self-report that they do, or do not, publicly disclose greenhouse gas emissions. If this FAR clause were expanded to include any federal procurement regardless of total dollar value, federal procurement offices and officials could collaborative with private industry vendors through pre-award activities on identifying and establishing known, (and unknown) respected methodologies for measuring greenhouse gas emission over the life of a product or service.

(c) How can procurement and program officials of major Federal agency procurements better incorporate and mitigate climate-related financial risk? How else might the Federal Government consider and minimize climate-related financial risks through procurement decisions, both domestic and overseas?

Climate-related financial risk can manifest as a risk to the viability of government vendors as well as risks to federal budgets. To minimize these risks, the federal government must first create an understanding of the link between the procurement of goods and services and climate-related financial risks. A study by an independent party should be conducted to better define, detail, and quantify the links to climate-related financial risks. This study should define and document the links across multiple categories of the goods and services that the government procures in order to better describe and quantify both general financial risks as well as those that are specific to certain goods and services categories. The results of this study should focus on the root causes of those risks and determining how the government can use existing or modified policy and procurement tools to minimize or eliminate those risks. As an example, federal procurement offices and officials could use historic federal procurement data from acquisitions with climate-related requirements to identify financial risks related to planned procurements. Data resources with this information include, but are not limited to the list below:

⁶ Greenhouse Gas Protocol, 2022

⁷ Global Reporting Initiative, 2022

⁸ 52.223-22 Public Disclosure of Greenhouse Gas Emissions and Reduction Goals-Representation. Acquisition.gov, <https://www.acquisition.gov/far/52.223-22>. Last accessed January 7, 2022.

- SAM.gov
- CPARS
- GSA Acquisition Gateway
- MAX.gov
- Government to Government Discussions/Knowledge Transfer

Federal procurement offices and officials could use information from these data sources to better incorporate and mitigate climate-related financial risks and/or mitigate climate-related financial risks through federal procurement decision-making processes for both domestic and international procurements.

Federal procurement offices and officials, as part of standard procurement planning processes, could include cost incentives to incentivize private industry (small and other than small) businesses to document how, through submission of a technical proposal, they can provide USG with climate-related financial risk mitigation support or both domestic and international procurements. Private industry has historically been more capable to innovate or create new approaches through challenges identified by USG via federal procurement opportunities.

When defining contract requirements for new awards, federal procurement offices and officials can require that offerors identify their means of providing climate-related financial risk mitigation as part of their technical and cost/price proposal submissions. Upon receipt and evaluation of said technical and cost/price proposal submission, the USG federal procurement office and officials can negotiate in good faith with offerors on collaborative approaches to mitigating climate-related financial risks for both domestic and international procurements.

(e) How might the Federal Government best standardize greenhouse gas emission reporting methods? How might the Government verify greenhouse gas emissions reporting?

There are currently multiple domestic, international, government, and non-government greenhouse gas emission collection, reporting, and rating standards that can be considered as part of planned federal procurements. Federal procurement offices and officials could utilize already established domestic and international greenhouse gas emission reporting standards, such as the GHG Protocol or the GRI.^{9,10} Using established standards can facilitate reporting consistency and reduce the burden to private industry.

The government should align with other corporate reporting standards to reduce the burden on industry as well as leverage existing data verification. USG may require that vendors submit proof of third-party verification from a list of approved verification companies that have been accredited by the American National Standards Institute (ANSI) National Accreditation Board.¹¹ This provides flexibility for the vendors to select the third-party verifier and reduces of the

⁹ Greenhouse Gas Protocol, 2022.

¹⁰ Global Reporting Initiative, 2022.

¹¹ Accreditation Program for Greenhouse Gas Validation and Verification Bodies. 2022. American National Standards Institute (ANSI) National Accreditation Board, <https://anab.ansi.org/greenhouse-gas-validation-verification> Last accessed January 9, 2022.

burden for USG to verify the reported GHG emissions. Within any of these, the government should take care to recognize the burden of reporting and verification on small business enterprises. Specific support for these suppliers may be needed to allow full reporting and emissions verification.

The federal government could also create a greenhouse gas emission reporting platform, similar to how the Department of Health and Human Services (HHS) set reporting methods and standards for COVID-19 reporting and transparency through HHS Protect.¹² This would enable businesses to submit greenhouse gas and other climate-related information in a uniform and streamlined manner.

(f) How might the Federal Government give preference to bids and proposals from suppliers, both domestic and overseas, to achieve reductions in greenhouse gas emissions or reduce the social cost of greenhouse gas emissions most effectively?

The federal government currently gives preferences to suppliers for a number of factors, including business size, location, Veteran workforce, and many others. Including preferences for GHG emissions is consistent with existing preferences but would likely need a modification to the FAR. MITRE recommends establishing a new policy that specifies expectations of suppliers. Measurement of suppliers could be specific to each request; as with other preferences, procurement officers and buyers can prioritize the preferences against operational and other government requirements. The specific criteria for the preferences must be selected carefully, however. For example, measuring reductions in GHG may penalize companies that have previously reduced emissions aggressively on their own and have little additional reductions to make vs. companies that can demonstrate significant reductions from “low hanging fruit” reductions due to a lack of prior action. Options considered by GSA in the EO 13514 report include preferences for meeting specific labeling criteria, robust reporting of GHG emissions and impacts, or compliance with robust standards. These approaches are less subjective and more equitable. Using total GHG emissions or an emissions to business size (e.g., revenue or employees) is usually difficult due the complexity of comparing emissions from large conglomerate companies to smaller, more focused businesses.

It will take time for suppliers to align with the requirements and become competitive, thus a phased approach and higher scoring for suppliers that are able to comply soonest (while still being cost competitive). Federal procurement offices and officials could use performance-based acquisitions as a means of giving preference to offerors who submit proposals against domestic and international federal procurements.

Federal agencies should specifically work with small businesses that likely do not have the resources to conduct comprehensive GHG emissions reports. Agencies can work with the Small Business Administration to tailor GHG reporting requirements to the capabilities of small businesses or provide reporting resources so that those businesses can remain competitive while providing GHG emissions data. Small businesses may also be more inclined to partner with USG on procurements where the awarding federal agency is looking to team and collaborate to identify and define greenhouse gas and climate-related factors that can be applied to contract

¹² HHS Protect Public Data Hub. 2021. HHS, <https://protect-public.hhs.gov/>. Last accessed January 7, 2022.

performance. As with all federal vendors, there may be benefits to customizing small business support to specific industries.

Agencies can also prioritize suppliers that make concerted efforts to ensure the longevity of the supplies they produce. Curbing the production of single-use products and goods with planned obsolescence is essential to reducing GHGs. GHGs are emitted into the atmosphere throughout the process of producing products and supplies. After goods no longer serve consumers, the goods typically further contribute to GHG emissions by accumulating in landfills. Giving preference to companies with business models that include solutions-oriented actions to (1) increase the likelihood that their goods do not end up in landfills (e.g., offering lengthy warranties or guarantees on goods, customer service to assist consumers with goods/supplies issues, product take-back programs whereby the supplier can reuse product materials); (2) reduce the need to continually make new products from scratch; and (3) ultimately promote a circular economy is one strategy USG can take.

(g) How might the government consider commitments by suppliers to reduce or mitigate greenhouse gas emissions?

Commitments by suppliers to reduce or mitigate greenhouse gas emissions would require third-party verification, such as science-based targets (SBTi), to ensure that companies aren't greenwashing or overstating steps they are taking to mitigate GHGs.¹³ SBTi requires targets for Scope 1 and Scope 2 GHG emissions that align with the Paris Agreement goals. Over 2,000 business globally are working with SBTi. USG may require that vendors submit proof of third-party verification from a list of approved verification companies that have been accredited by the ANSI National Accreditation Board.¹⁴ This provides flexibility for the vendors to select the third-party verifier and reduces of the burden for USG to verify the reported GHG emissions.

From a procurement perspective, MITRE recommends providing cost incentives within performance-based acquisitions to suppliers focused on reducing or mitigating greenhouse gas emissions. Through the standard FAR-based source selection process, federal procurement offices and officials could identify supplier performance requirements related to reducing or mitigating greenhouse gas emissions and drive performance through providing cost incentives.

(h) What impact would consideration of the social cost of greenhouse gases in procurement decisions have on small businesses, including small disadvantaged businesses, women-owned small businesses, service-disabled veteran-owned small businesses, and Historically Underutilized Business Zone (HUBZone) small businesses? How should the FAR Council best

¹³ Science Based Targets – Driving Ambitious Corporate Climate Actions. 2022. Science Based Targets Initiative, <https://sciencebasedtargets.org/>. Last accessed January 9, 2022.

¹⁴ ANSI National Accreditation Board, 2022.

align this objective with efforts to ensure opportunity for small businesses?

Depending on how federal procurement offices and officials define social cost factors related to greenhouse gas emissions, small business may not have the resources available to handle this increased performance requirement, eliminating their ability to propose on solicited procurement opportunities. As previously stated, MITRE recommends expanding the use of *FAR 52.223-22 – Public Disclosure of Greenhouse Gas Emissions and Reduction Goals-Representation* so that regardless of the total dollar value of a planned procurement, small business could self-report their ability to report their greenhouse gas emissions, thus making them viable for consideration as part of the federal procurement office planning and decision-making process.

Appendix – Information Sources

MITRE has gathered the following information sources that are relevant to this Request for Information, which also may be of value to the interagency working group.

1. White House Executive Order
 - a. May 20, 2021 – [Executive Order on Climate-Related Financial Risk | The White House](#)
2. White House Interagency Working Group on Social Cost of Greenhouse Gases
 - a. [Technical Support Document: Social Cost of Carbon, Methane, \(whitehouse.gov\)](#)
1. GSA Report – Executive Order 13514 — Federal Leadership in Environmental, Energy, and Economic, April 2010
 - a. [Executive Order 13514 Section 13: Recommendations for Vendor and Contractor Emissions \(gsa.gov\)](#)
3. Carbon Disclosure Project (CDP)
 - a. [Home - CDP](#)
4. Greenhouse Gas Protocol
 - a. [Greenhouse Gas Protocol | \(ghgprotocol.org\)](#)
5. Greenhouse Gas Reporting
 - a. [GRI - Home \(globalreporting.org\)](#)
2. Department of Energy Report – Executive Order 13514 — Federal Leadership in Environmental, Energy, and Economic Performance, September 2020
 - a. [Labor Standards for Construction \(energy.gov\)](#)
6. Environmental Protection Agency (EPA) – Overview of Greenhouse Gases
 - a. [Overview of Greenhouse Gases | U.S. EPA](#)
7. EPA – Greenhouse Gas Reporting Program
 - a. [Greenhouse Gas Reporting Program | U.S. EPA](#)

8. EPA – Avoided Emissions and generation Tool (AVERT)
 - a. [AVoided Emissions and geneRation Tool \(AVERT\) | U.S. EPA](#)
9. EPA – CO-Benefits Risks Assessment Health Impacts Screening and Mapping Tool (COBRA)
 - a. [CO-Benefits Risk Assessment Health Impacts Screening and Mapping Tool \(COBRA\) | U.S. EPA](#)
10. Intergovernmental Panel on Climate Change (IPCC)– Task Force on National Greenhouse Gas Inventories
 - a. [Publications - IPCC-TFI \(iges.or.jp\)](#)
11. The FAR clauses
 - a. [FAR 52.223-1 – Biobased Product Certification](#)
 - b. [FAR 52.223-2 – Affirmative Procurement of Biobased Products Under Service And Construction Contracts](#)
 - c. [FAR 52.223-3 – Hazardous Material Identification and Material Safety Data](#)
 - d. [FAR 52.223-5 – Pollution Prevention and Right-to-Know Information](#)
 - e. [FAR 52.223-9 – Estimate of Percentage of Recovered Material Content for EPA Designated Items](#)
 - f. [FAR 52.223-10 – Waste Reduction Program](#)
 - g. [FAR 52.223-11 – Ozone-Depleting Substances and High Global Warming Potential Hydrofluorocarbons](#)
 - h. [FAR 52.223-18 – Encouraging Contractor Policies to Ban Text Messaging While Driving](#)
 - i. [FAR 52.223-19 – Compliance with Environmental Management Systems](#)
 - j. [FAR 52.223-20 – Aerosols](#)
 - k. [FAR 52.223-22 – Public Disclosure of Greenhouse Gas Emissions and Reduction Goals-Representation](#)
12. Health Care Without Harm
 - a. [Why Sustainable Procurement | Health Care Without Harm \(noharm-global.org\)](#)
 - b. [Sustainable Procurement - Resources | Health Care Without Harm \(noharm-global.org\)](#)
 - c. [HealthCaresClimateFootprint_092319.pdf \(noharm-global.org\)](#)