



August 16, 2023

**To:** Pipeline and Hazardous Materials Safety Administration, U.S. Department of Transportation

**Subject:** Pipeline Safety: Gas Pipeline Leak Detection and Repair, 88 Fed. Reg. 31890 (PHMSA–2021–0039) (proposed May 18, 2023)

The Institute for Policy Integrity at New York University School of Law<sup>1</sup> respectfully submits the following comments on the Pipeline and Hazardous Materials Safety Administration’s (PHMSA) application of the social cost of greenhouse gases in its notice of proposed rulemaking for gas pipeline leak detection and repair (Proposed Rule)<sup>2</sup> and accompanying regulatory impact analysis.<sup>3</sup>

The proposed rule would reduce methane emissions resulting from pipeline leaks. In its regulatory impact analysis, PHMSA monetizes the benefits of those emissions reductions using the 2021 interim social cost of methane estimates from the Interagency Working Group on the Social Cost of Greenhouse Gases (Working Group).<sup>4</sup> PHMSA’s monetization of methane emission-reduction benefits supports its determination that the Proposed Rule’s benefits justify its costs, which is required by statute<sup>5</sup> and executive order.<sup>6</sup>

**PHMSA appropriately applies the Working Group’s valuations of the social cost of methane to conservatively estimate the Proposed Rule’s climate benefits.** The Working Group developed its climate-damage valuations through a rigorous and transparent process incorporating the best available science available at the time of their initial development.<sup>7</sup> These climate-damage valuations are widely agreed to underestimate the full social costs of greenhouse gas emissions.<sup>8</sup> For now, however, they remain appropriate to use as conservative

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<sup>1</sup> No part of this document purports to represent the views, if any, of New York University School of Law.

<sup>2</sup> Pipeline Safety: Gas Pipeline Leak Detection and Repair, 88 Fed. Reg. 31890 (PHMSA–2021–0039) (proposed May 18, 2023) [hereinafter “Proposed Rule”].

<sup>3</sup> Preliminary Regulatory Impact Analysis, Pipeline Safety: Gas Pipeline Leak Detection and Repair (Apr. 2023) [hereinafter “Preliminary TSD”].

<sup>4</sup> See RIA at 74–82.

<sup>5</sup> See 49 U.S.C. § 60102(a)(5) (“Except where otherwise required by statute, the Secretary shall propose or issue a standard under this chapter only upon a reasoned determination that the benefits, including safety and environmental benefits, of the intended standard justify its costs.”).

<sup>6</sup> Exec. Order 12,866 § 1(b)(6), 58 Fed. Reg. 51,735, 51,736 (Oct. 4, 1993) (requiring agencies to “propose or adopt a regulation only upon a reasoned determination that the benefits of the intended regulation justify its costs”).

<sup>7</sup> *Id.* at 6865–67.

<sup>8</sup> Interagency Working Group on the Social Cost of Greenhouse Gases, Technical Support Document: Social Cost of Carbon, Methane, and Nitrous Oxide – Interim Estimates under Executive Order 13,990 at 4 (2021); Richard L. Revesz et al., *Global Warming: Improve Economic Models of Climate Change*, 508 NATURE 173 (2014) (note that co-author Kenneth Arrow was a Nobel Prize-winning economist).

underestimates: they have been applied as such in dozens of rulemakings<sup>9</sup> and upheld in federal court.<sup>10</sup>

In November 2022, the Environmental Protection Agency (EPA) released a draft update to the social cost of greenhouse gases that faithfully implements the roadmap laid out in 2017 by the National Academies of Sciences and applies recent advances in the science and economics on the costs of climate change (“Draft Update”).<sup>11</sup> PHMSA should conduct sensitivity analysis using the social cost of methane estimates from the Draft Update. In the meantime, however, the Working Group’s valuations remain appropriate to use as conservative underestimates.

### **I. PHMSA Appropriately Applies the Working Group’s Climate-Damage Estimates**

PHMSA provides compelling justifications for adopting the Working Group’s estimates of the social cost of methane.<sup>12</sup> As detailed in the attached February 2023 comments on EPA’s performance standards for the oil and natural gas sector (Enclosure 1), which we incorporate by reference, numerous legal, economic, and policy justifications further support PHMSA’s adoption of the Working Group’s climate-damage valuations.<sup>13</sup>

The attached comments make three main points. First, they offer more detailed support for adopting a global framework for valuing climate impacts.<sup>14</sup> These include legal justifications based on the National Environmental Policy Act; the Administrative Procedure Act’s requirement to consider all important factors; executive orders; and international agreements.<sup>15</sup> The comments also explain that focusing on global climate damages furthers U.S. strategic interests by facilitating international reciprocity,<sup>16</sup> mitigating international spillover effects,<sup>17</sup> and protecting U.S. extraterritorial interests.<sup>18</sup> Moreover, the comments explain that focusing on global damages is consistent with the consideration of global costs.<sup>19</sup> That last argument applies similarly here: Because PHMSA implicitly assesses costs from a global perspective, it should also assess benefits from a global perspective.<sup>20</sup> PHMSA should add these further justifications for using global values.

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<sup>9</sup> 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).

<sup>10</sup> *Zero Zone v. Dept. of Energy*, 832 F.3d 654, 679 (7th Cir. 2016).

<sup>11</sup> EPA External Review Draft of Report on the Social Cost of Greenhouse Gases (Sept. 2022) (Docket No. EPA-HQ-OAR-2021-0317) (“Draft Update”).

<sup>12</sup> RIA at 74–82.

<sup>13</sup> Ctr. for Climate & Energy Solutions et al., Comments on the Consideration of the Interagency Working Group’s Social Cost of Greenhouse Gases Valuations in Standards of Performance for New, Reconstructed, and Modified Sources and Emissions Guidelines for Existing Sources: Oil and Natural Gas Sector Climate Review (proposed Dec. 6, 2022) (Docket No. EPA-HQ-OAR-2021-0317) (Feb. 13, 2023), <https://www.regulations.gov/comment/EPA-HQ-OAR-2021-0317-2208>.

<sup>14</sup> *Id.* at 3–15.

<sup>15</sup> *Id.* at 3–6.

<sup>16</sup> *Id.* at 6–8.

<sup>17</sup> *Id.* at 8–11.

<sup>18</sup> *Id.* at 11–12.

<sup>19</sup> *Id.* at 12–13.

<sup>20</sup> Off. of Mgmt. & Budget, Circular A-4: Draft for Public Review 10 (Apr. 6, 2023).

Second, the comments offer additional justification for adopting the range of discount rates endorsed by the Working Group including its decision not to apply a 7% discount rate to climate impacts.<sup>21</sup> Besides climate effects presenting distinct legal, economic, and policy considerations for the discount rate, it is appropriate generally for PHMSA to focus its analysis of this rule on consumption-based rates given that most costs and benefits are projected to fall to consumption rather than to capital investments. Indeed, the Office of Management and Budget's draft update to Circular A-4 confirms this approach.<sup>22</sup> PHMSA should add these further justifications for its approach to discounting. In any event, PHMSA conducts an analysis of all costs and benefits using a consistent 3% discount rate and finds annual monetized net benefits of over \$340 million.<sup>23</sup>

Third, the comments offer further justification for relying on the Working Group's other methodological choices, including the fact that the Working Group applied a transparent and rigorous process that relied upon the best-available and most widely cited models for monetizing climate damages. The attached comments provide detailed rebuttals to criticisms of the Working Group's methodology from opponents of sensible climate regulation.<sup>24</sup>

Accordingly, for the reasons further set out in the attached comment letter, it is appropriate for PHMSA to rely on the Working Group's estimates of the social cost of methane. Nonetheless, given that they understate climate benefits, the true benefits of the Proposed Rule are presumptively higher than is captured in PHMSA's estimates. PHMSA should more clearly observe that this provides further justification for the Proposed Rule.

## **II. PHMSA Should Conduct Further Analysis Using EPA's Draft Updated Estimates**

While PHMSA's application of the Working Group's valuations is legally justified, the agency should conduct additional analysis using EPA's draft updated social cost of methane valuations.<sup>25</sup> While PHMSA should apply the updated valuations in sensitivity analysis if it finalizes this regulation prior to EPA's finalization of that update, it should apply those valuations in its primary analysis (with the Working Group's estimates in sensitivity analysis) should EPA finalize its update before PHMSA finalizes this rule.

EPA's draft valuations faithfully implement the roadmap laid out in 2017 by the National Academies of Sciences for updating the social cost of greenhouse gases<sup>26</sup> and apply recent advances in climate science and economics. EPA's methodology and valuations are consistent with those applied by a range of expert independent researchers, and while EPA's draft

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<sup>21</sup> Ctr. for Climate & Energy Solutions et al., *supra* note 13, at 16–23.

<sup>22</sup> Off. Of Mgmt. & Budget, *supra* note 20, at 75–80 (endorsing a central discount rate of 1.7% based on the consumption rate of interest, scrapping the 7% discount rate, and endorsing the shadow price of capital approach rather than the capital-based discount rate to account for impacts to capital).

<sup>23</sup> RIA at 4.

<sup>24</sup> Ctr. for Climate & Energy Solutions et al., *supra* note 13, at 23–33.

<sup>25</sup> Draft Update, *supra* note 11.

<sup>26</sup> Nat'l Acads. Sci., Engineering & Med., *Valuing Climate Damages: Updating Estimation of the Social Cost of Carbon Dioxide* (2017).

valuations remain underestimates,<sup>27</sup> they more fully account for the costs of climate change by incorporating the latest available research on climate science, damages, and discount rates.

We attach another comment letter from February 2023, signed by Policy Integrity and nine other groups, that explains in further detail how EPA’s draft climate-damage valuations faithfully implement the National Academies of Sciences roadmap and apply recent advances in climate science and economics (Enclosure 2).

Sincerely,

Peter Howard, Economics Director  
Max Sarinsky, Senior Attorney

**Enclosures:**

- 1) Ctr. for Climate & Energy Solutions et al., Comments on the Consideration of the Interagency Working Group’s Social Cost of Greenhouse Gases Valuations in Standards of Performance for New, Reconstructed, and Modified Sources and Emissions Guidelines for Existing Sources: Oil and Natural Gas Sector Climate Review (proposed Dec. 6, 2022) (Docket No. EPA–HQ–OAR–2021–0317) (Feb. 13, 2023)
- 2) Ctr. for Climate & Energy Solutions et al., Comments on the EPA External Review Draft of Report on the Social Cost of Greenhouse Gases (Docket No. EPA-HQ-OAR-2021-0317) (Feb. 13, 2023)

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<sup>27</sup> Draft Update, *supra* note 11, at 4 (“[B]ecause of data and modeling limitations . . . estimates of the SC-GHG are a partial accounting of climate change impacts and, as such, lead to underestimates of the marginal benefits of abatement.”); *id.* at 72.