



August 6, 2021

**Attn:** Office of Energy Efficiency and Renewable Energy, U.S. Department of Energy

**Subject:** Consideration of Greenhouse Gas Emissions in Proposed Environmental Impact Statement for Energy Conservation Standards for Manufactured Housing

The Institute for Policy Integrity at New York University School of Law (Policy Integrity) respectfully submits the following comments on the Department of Energy’s (DOE or the Department) Notice of Intent to Prepare an Environmental Impact Statement for Energy Conservation Standards for Manufactured Housing (the Notice).<sup>1</sup> Policy Integrity is a nonpartisan think tank dedicated to improving the quality of government decisionmaking through advocacy and scholarship in the fields of administrative law, economics, and public policy. Policy Integrity regularly submits comments to the Department on rulemakings and actions related to energy conservation standards,<sup>2</sup> as well as to federal agencies on the consideration of climate change impacts under the National Environmental Policy Act (NEPA).<sup>3</sup>

In the Notice, DOE announces its plans to prepare an environmental impact statement “to evaluate the potential impacts to the human environment associated with the proposed energy conservation standards for manufactured housing.”<sup>4</sup> The environmental impact statement will examine the proposed action (new standards) as well as an action alternative and a no-action alternative.<sup>5</sup> According to the Notice, the proposed new energy conservation standards are forthcoming,<sup>6</sup> and will address updates to the International Energy Conservation Code,<sup>7</sup> with which such standards must comport.<sup>8</sup> The draft environmental impact statement will build on an environmental assessment released by DOE in June 2016,<sup>9</sup> which was conducted in connection with a notice of proposed rulemaking (NPR) that set proposed energy conservation standards

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<sup>1</sup> Notice of Intent to Prepare an Environmental Impact Statement for Energy Conservation Standards for Manufactured Housing, 86 Fed. Reg. 35,773 (July 7, 2021).

<sup>2</sup> *E.g.*, Inst. For Pol’y Integrity, Comments to Dep’t of Energy on Energy Conservation Program: Procedures for Use in New or Revised Energy Conservation Standards and Test Procedures for Consumer Products and Commercial/Industrial Equipment; Prioritization Process (March 11, 2021).

<sup>3</sup> *E.g.*, Inst. For Pol’y Integrity, Comments to the Tennessee Valley Authority on Consideration of Greenhouse Gas Emissions in Upcoming Environmental Impact Statement for the Kingston Fossil Plant (July 15, 2021).

<sup>4</sup> 86 Fed. Reg. 35,773.

<sup>5</sup> *See id.* at 35,774–75.

<sup>6</sup> On or before August 16, 2021. *Id.* at 35,773.

<sup>7</sup> *Id.*

<sup>8</sup> *Id.*

<sup>9</sup> Dep’t of Energy, Draft Environmental Assessment for Notice of Proposed Rulemaking, 10 CFR Part 460, “Energy Conservation Standards for Manufactured Housing” with Request for Information on Impacts to Indoor Air Quality (June 2016), [https://www.energy.gov/sites/default/files/2016/06/f33/EA-2021-DEA-2016\\_0.pdf](https://www.energy.gov/sites/default/files/2016/06/f33/EA-2021-DEA-2016_0.pdf).

for manufactured housing.<sup>10</sup> In the NOPR, the Department used the social cost of greenhouse gases to assess the benefits of emissions reductions attributable to the proposed standards.<sup>11</sup>

Policy Integrity urges DOE to continue to use the social cost of greenhouse gas metric whenever it analyzes the effects of greenhouse gas emissions, whether in a regulatory impact analysis, environmental impact statement, or other decisionmaking process.

### **DOE Should Contextualize the Climate Impacts of Each Alternative Using the Social Cost of Greenhouse Gases**

In the draft environmental impact statement, the Department will assess environmental effects related to “outdoor emissions of air pollutants and greenhouse gases,” as well impacts on “climate change,” among other issues.<sup>12</sup> As it undergoes the NEPA review process, the Department should provide context to the potential greenhouse gas implications of the alternatives being considered using the social cost of greenhouse gases—a set of monetized values developed by a federal interagency working group that assess the economic and human-health impacts from an incremental increase or decrease in emission of greenhouse gases. Though DOE has used the social cost of greenhouse gases in the past in the rulemaking context, it should recognize that the metric is also appropriate for use under NEPA.

As a federal appeals court has explained, the “impact of greenhouse gas emissions on climate change is precisely the kind of cumulative impacts analysis that NEPA requires,” and thus agencies must “provide the necessary contextual information about the[se] cumulative and incremental environmental impacts.”<sup>13</sup> To fulfill their obligation to take a “hard look” under NEPA, agencies should assess the impact of a project on climate change and resulting health and welfare impacts such as mortality or property damage. The U.S. Supreme Court has called impact disclosure the “key requirement of NEPA,” and held that agencies must “consider and disclose the *actual environmental effects*” of a proposed project in a way that “brings those effects to bear on [the agency’s] decisions.”<sup>14</sup> The actual effects of greenhouse gas emissions (or emission reductions) are not those emissions themselves, but rather the incremental climate impacts caused by those emissions.<sup>15</sup> For this reason, numerous federal courts have held that

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<sup>10</sup> Dep’t of Energy, Energy Conservation Standards for Manufactured Housing, 81 Fed. Reg. 39,756 (June 17, 2016).

<sup>11</sup> *Id.* at 39,761

<sup>12</sup> 86 Fed. Reg. at 85,775.

<sup>13</sup> *Ctr. for Biological Diversity v. Nat’l Highway Traffic Safety Admin.*, 538 F.3d 1172, 1217 (9th Cir. 2008); *see also id.* (“[T]he fact that climate change is largely a global phenomenon that includes actions that are outside of [the agency’s] control . . . does not release the agency from the duty of assessing the effects of *its* actions on global warming within the context of other actions that also affect global warming.”); *Border Power Plant Working Grp. v. U.S. Dep’t of Energy*, 260 F. Supp. 2d 997, 1028–29 (S.D. Cal. 2003) (failure to disclose project’s indirect carbon dioxide emissions violates NEPA).

<sup>14</sup> *Balt. Gas & Elec. Co. v. NRDC*, 462 U.S. 87, 96 (1983).

<sup>15</sup> For a more complete discussion of actual climate effects, including air-quality mortality, extreme temperature mortality, lost labor productivity, harmful algal blooms, spread of West Nile virus, damage to roads and other infrastructure, effects on urban drainage, damage to coastal property, electricity demand and supply effects, water supply and quality effects, inland flooding, lost winter recreation, effects on agriculture and fish, lost ecosystem services from coral reefs, and wildfires, *see* EPA, *Multi-Model Framework for Quantitative Sectoral Impacts Analysis: A Technical Report for the Fourth National Climate Assessment* (2017); U.S. Global Change Research

mere quantification of greenhouse gas emissions and comparisons to geographic inventories is insufficient because this fails to capture the project’s incremental climate effects.<sup>16</sup>

An available and widely-used tool—the social cost of greenhouse gases—allows for the assessment of incremental climate benefit or cost. The social cost of greenhouse gases calculates how the emission or offset of an additional unit of greenhouse gases affects atmospheric greenhouse concentrations, how that change in atmospheric concentrations affects temperature, and how that change in temperature incrementally contributes to the various impacts resulting from climate change.<sup>17</sup> The social cost of greenhouse gases tool therefore captures the factors that actually affect public welfare and assesses the degree of impact to each factor, in ways that merely estimating the volume of emissions cannot. In fact, various agencies have used the social cost of greenhouse gases to assess a project’s climate impacts.<sup>18</sup> For example, the Bureau of Ocean Energy Management used the metric in a 2016 environmental impact statement, noting that the social cost of greenhouse gases provides “a useful measure” that enables the agency “to incorporate the social benefits of reducing carbon dioxide emissions into its decisionmaking.”<sup>19</sup> And just last month, DOE called the social cost metric “useful in estimating the social benefits of reducing [carbon dioxide] emissions.”<sup>20</sup>

Applying the social cost of greenhouse gases is straightforward and provides information that would be very useful to DOE’s assessment. The most widely used social cost estimates were developed by the federal Interagency Working Group on the Social Cost of Greenhouse Gases (Working Group), a coordinated effort among twelve federal agencies and White House offices. The National Academies of Sciences has issued two reports that broadly supported the use of the

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Program, *Climate Science Special Report: Fourth National Climate Assessment* (2017); EPA, *Climate Change in the United States: Benefits of Global Action* (2015); Union of Concerned Scientists, *Underwater: Rising Seas, Chronic Floods, and the Implications for U.S. Coastal Real Estate* (2018).

<sup>16</sup> See, e.g., *Ctr. for Biological Diversity*, 538 F.3d at 1216–17 (rejecting analysis under NEPA when agency “quantifie[d] the expected amount of [carbon dioxide] emitted” but failed to “evaluate the incremental impact that these emissions will have on climate change or on the environment more generally,” noting that this approach impermissibly failed to “discuss the *actual* environmental effects resulting from those emissions” or “provide the necessary contextual information about the cumulative and incremental environmental impacts” that NEPA requires); *High Country Conservation Advocates v. U.S. Forest Serv.*, 52 F. Supp. 3d 1174, 1190 (D. Colo. 2014) (“Beyond quantifying the amount of emissions relative to state and national emissions and giving general discussion to the impacts of global climate change, [the agencies] did not discuss the impacts caused by these emissions.”); *Mont. Env’t Info. Ctr. v. U.S. Office of Surface Mining*, 274 F. Supp. 3d 1074, 1096–99 (D. Mont. 2017) (rejecting the argument that the agency “reasonably considered the impact of greenhouse gas emissions by quantifying the emissions which would be released if the [coal] mine expansion is approved, and comparing that amount to the net emissions of the United States”).

<sup>17</sup> Interagency Working Group on the Social Cost of Greenhouse Gases, *Technical Support Document: Social Cost of Carbon for Regulatory Impact Analysis* 5 (2010).

<sup>18</sup> See, e.g., Bureau of Ocean Energy Mgmt., Final Environmental Impact Statement of Cook Inlet Planning Area Oil and Gas Lease Sale 244 (BOEM 2016-069) (Dec. 23, 2016) [hereinafter Cook Inlet EIS]; see also Peter Howard & Jason 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 by federal agencies through mid-2016, including numerous NEPA assessments).

<sup>19</sup> Cook Inlet EIS at 4-190 to 4-191

<sup>20</sup> Dep’t of Energy, Analysis Regarding Energy Efficiency Improvements in the 2021 International Energy Conservation Code (IECC), 86 Fed. Reg. 40,529, 40,533 (July 28, 2021) [hereinafter IECC Analysis].

Working Group’s estimates by federal agencies.<sup>21</sup> Distinguished economists have explained that the Working Group’s estimates are the best numbers available.<sup>22</sup> And the U.S. Court of Appeals for the Seventh Circuit has upheld the Department’s reliance on these estimates in setting energy conservation standards.<sup>23</sup>

The Working Group released estimates in 2010 and updated them in 2016 to “provide a consistent approach for agencies to quantify [climate change] damage in dollars.”<sup>24</sup> This past February, the Working Group once again reaffirmed its previous numbers as reflecting “the best available science,” though the Working Group acknowledged that these valuations “likely underestimate societal damages from [greenhouse gas] emissions,”<sup>25</sup> which DOE echoed in a notice of determination last month,<sup>26</sup> and began a process to update these valuations by January 2022.<sup>27</sup> And as the Working Group explained, agencies should apply the social cost metrics to any “relevant agency actions”—not just regulations.<sup>28</sup> This advice echoed similar language in Executive Order 13,990, in which President Biden recognized that the social cost of greenhouse gases could be useful for a wide range of agency processes including “decision-making, budgeting, and procurement.”<sup>29</sup> In that Executive Order, President Biden called on the Working Group to provide additional guidance by September 2021 on the decisions for which the executive branch should apply the social cost of greenhouse gases.<sup>30</sup> DOE itself has also effectively acknowledged the value in providing monetized estimates of climate damages from greenhouse gas emissions outside of regulatory cost-benefit analysis, for example by using the social cost metric in two recent assessments of international energy conservation standards.<sup>31</sup>

Accordingly, DOE should consider applying the Working Group’s social cost of greenhouse gases valuation to assess the potential climate impacts of each alternative under consideration.

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<sup>21</sup> Nat’l Acads. Sci., Eng’g & Med., *Valuing Climate Damages: Updating Estimates of the Social Cost of Carbon Dioxide* (2017); Nat’l Acads. Sci., Eng’g & Med., *Assessment of Approaches to Updating the Social Cost of Carbon: Phase 1 Report on a Near-Term Update* (2016).

<sup>22</sup> See, e.g., Richard L. Revesz et al., *Best Cost Estimate of Greenhouse Gases*, 357 Science 655 (2017) (co-authored with economists Michael Greenstone, Michael Hanemann, Peter Howard, and Thomas Sterner).

<sup>23</sup> *Zero Zone, Inc. v. U.S. Dep’t of Energy*, 832 F.3d 654, 678 (7th Cir. 2016).

<sup>24</sup> *Fla. Se. Connection, LLC*, 162 FERC ¶ 61,233, at P 45 (Mar. 14, 2018).

<sup>25</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 3–4 (2021) [hereinafter 2021 TSD].

<sup>26</sup> IECC Analysis at 40,533 (noting that “there is a likelihood that the [current social cost of carbon] is an underestimate of the true social cost of emissions.”).

<sup>27</sup> 2021 TSD at 3–4.

<sup>28</sup> *Id.* at 14; see also *id.* at 16 (recommending use of social cost of greenhouse gases “in analysis of Federal regulatory and other actions”).

<sup>29</sup> Exec. Order No. 13,990 § 5(b), 86 Fed. Reg. 7037 (Jan. 25, 2021).

<sup>30</sup> *Id.*

<sup>31</sup> IECC Analysis at 40,533; Dep’t of Energy, Final Determination Regarding Energy Efficiency Improvements in ANSI/ASHRAE/IES Standard 90.1-2019, 86 Fed. Reg. 40,543 (July 28, 2021).

Sincerely,

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Max Sarinsky, Senior Attorney  
Jason A. Schwartz, Legal Director

Attachment:

Max Sarinsky et al., Inst. for Pol'y Integrity, *Broadening the Use of Social Cost of Greenhouse Gases in Federal Policy* (2021).