21-2116

UNITED STATES COURT OF APPEALS
FOR THE TENTH CIRCUIT

DINÉ CITIZENS AGAINST RUINING OUR ENVIRONMENT, *et al.*,

Plaintiff-Appellants,

v.

DEBRA HAALAND, *et al*.,

Defendant-Appellees,

and

DJR ENERGY HOLDINGS, LLC, *et al.*,

Intervenor Defendant-Appellees.

On Appeal from the U.S. Court for the District of New Mexico
1:19-cv-00703-WJ-JFR
Hon. William P. Johnson, Chief District Judge

BRIEF OF *AMICUS CURIAE* INSTITUTE FOR POLICY INTEGRITY AT NEW YORK UNIVERSITY SCHOOL OF LAW IN SUPPORT OF PLAINTIFF-APPELLANTS AND REVERSAL

Max Sarinsky
139 MacDougal Street, 3rd Floor
New York, New York 10012
(212) 992-8932
Counsel for Amicus Curiae
Institute for Policy Integrity

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[i] Under Federal Rule of Appellate Procedure 29(a)(4)(E), the Institute for Policy Integrity states that no party's counsel authored this brief in whole or in part, and no person contributed money intended to fund the preparation or submission of this brief.

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INTEREST OF AMICUS CURIAE

The Institute for Policy Integrity at New York University School of Law ("Policy Integrity") submits this brief as *amicus curiae* in support of Plaintiffs' challenge to the Bureau of Land Management's ("BLM's") approval of over 300 applications for permits to drill ("APDs") in the Mancos Shale ("the Project").

Policy Integrity is a nonpartisan think tank dedicated to improving government decisionmaking through advocacy and scholarship in the fields of administrative law, economics, and environmental policy. An area of particular concern for Policy Integrity is the proper consideration of environmental impacts, including greenhouse gas emissions, in administrative decisionmaking. Policy Integrity has published numerous reports and scholarly articles advising agencies on the best methods to assess an action's environmental impacts and to rationally weigh these impacts along with other costs and benefits.

In particular, Policy Integrity has published considerable scholarship on the methodological tools that are available to administrative agencies to assess the significance of climate impacts from administrative actions. Our director, Professor Richard L. Revesz, has co-authored articles with Nobel Prize winner Kenneth Arrow and other prominent economists on the assessment of climate impacts, among his

more than eighty articles and books on environmental and administrative law.[3] Richard L. Revesz, Kenneth Arrow, et al., *The Social Cost of Carbon: A Global Imperative*, 11 Rev. Env't Econ. & Pol'y 172 (2017); Richard L. Revesz, Kenneth Arrow, et al., *Global Warming: Improve Economic Models of Climate Change*, 508 Nature 173 (2014). Senior attorney Max Sarinsky, the undersigned, has also published scholarship and reports on the best methods for agencies to assess the climate impacts of project-level determinations. *See, e.g.*, Richard L. Revesz & Max Sarinsky, *The Social Cost of Greenhouse Gases: Legal, Economic, and Institutional Perspective*, 39 Yale. J. on Regul. (forthcoming 2022).[4]

Harnessing this academic expertise, Policy Integrity regularly participates in administrative and judicial proceedings involving federal decisions with major implications for greenhouse gas emissions, including those challenging environmental assessments under the National Environmental Policy Act ("NEPA"). *See, e.g.*, Briefs for Institute for Policy Integrity as *Amicus Curiae*, *Vecinos Para el Bienestar de la Comunidad Costera v. Fed. Energy Regul. Comm'n*, 6 F.4th 1321 (D.C. Cir. 2021) (challenging sufficiency of agency consideration of climate impacts

[3] A full list of publications can be found on Prof. Revesz's faculty profile, https://its.law.nyu.edu/facultyprofiles/index.cfm?fuseaction=profile.publications&personid=20228.

[4] A pre-publication version is available at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3903498.

in approving natural-gas pipeline); *WildEarth Guardians v. Bureau of Land Mgmt.*, 870 F.3d 1222 (10th Cir. 2017) (criticizing finding that approved coal production would not contribute to climate change). Most relevant for this proceeding, Policy Integrity submitted comments on the Draft Environmental Assessment Addendum for the Project. AR33815–48.

Echoing those comments, Plaintiffs here argue that BLM violated NEPA by failing to meaningfully evaluate the scope or severity of the Project's climate impacts. Opening Br. 31–37. Policy Integrity's expertise on the assessment of greenhouse gas emissions in analyses conducted under NEPA give it a unique perspective on this claim.

SUMMARY OF ARGUMENT

While Plaintiffs raise numerous compelling challenges to BLM's assessment of the Project's greenhouse gas emissions, this brief focuses on just one: Plaintiffs' contention that BLM violated NEPA by only quantifying the volume of greenhouse gas emissions without meaningfully assessing the impact of those emissions.

Under NEPA, an agency must "consider and disclose the *actual environmental effects*" of a project's greenhouse gas emissions "in a manner that . . . brings those effects to bear" on the agency's decision. *Balt. Gas & Elec. Co. v. NRDC*, 462 U.S. 87, 96 (1983) (emphasis added). Yet despite the fact that the Project is expected to generate over 31 million metric tons of carbon dioxide equivalent

("CO2e")[5]—which, according to widely-used government estimates, will likely cause more than $1.6 billion in economic damages from climate change[6]—BLM irrationally dismisses these impacts as "de minimis," AR45102.

BLM bases its conclusion on a misleading comparison of the Project's greenhouse gas emissions "to the reasonably foreseeable past, present, and future potential emissions of the state and nation." *See, e.g.*, AR00060 (FONSI); AR45102 (EA Addendum). But such a comparison makes virtually any project with significant environmental consequences seem trivial. As other courts have noted, "[t]he global nature of climate change and greenhouse-gas emissions means that any single . . . project likely will make up a negligible percent of state and nation-wide greenhouse

[5] For the purposes of this brief, we have adopted BLM's estimates of the greenhouse gas emissions associated with the Project. However, Plaintiffs also raise challenges to the methodologies used to arrive at these estimates, Opening Br. 27–31, and we do not concede the accuracy of BLM's estimates.

[6] BLM reports total greenhouse gas emissions from the Project as 31.48 million metric tons of CO2e. AR45061. The federal Interagency Working Group on the Social Cost of Greenhouse Gases currently estimates that a metric ton of carbon dioxide released into the atmosphere in the year 2020 will cause a central estimate of $51 in economic damages. Interagency Working Grp. on the Social Cost of Greenhouse Gases, Technical Support Document: Social Cost of Carbon, Methane, and Nitrous Oxide 5 tbl. ES-1 (2021) (applying 3 percent average discount rate). 31.48 million * $51= $1.605 billion in economic damages from climate change. This figure is likely an underestimate for multiple reasons. For one, economic damages from greenhouse gas emissions increase with each passing year, *see id.*, and the emissions from this project occur over 20 years. Second, the Working Group recognizes that the $51 value "likely underestimate[s] societal damages from [greenhouse gas] emissions." *Id.* at 4. And third, as Plaintiffs highlight, BLM's emission figures are likely underestimates. Opening Br. 27–31.

gas emissions." *WildEarth Guardians v. Bureau of Land Mgmt.*, 457 F. Supp. 3d 880, 894 (D. Mont. 2020). Such an approach fails to "provide the necessary contextual information about the cumulative and incremental environmental impacts" that NEPA demands. *Ctr. for Biological Diversity v. Nat'l Highway Traffic Safety Admin.*, 538 F.3d. 1172, 1216–17 (9th Cir. 2008).

For these reasons, numerous courts have rejected analyses that trivialize emissions through comparison to larger totals. *See, e.g., id.*; *High Country Conservation Advocates v. U.S. Forest Serv.*, 52 F. Supp. 3d 1174, 1190 (D. Colo. 2014) (rejecting analysis that "quantif[ied] the amount of emissions relative to state and national emissions"); *California v. Bernhardt*, 472 F. Supp. 3d 573, 623 (N.D. Cal. 2020) (rejecting analysis that "dismisses . . . climate impacts by concluding that they are less than 1% of total United States methane emissions"). Other established methodologies would satisfy BLM's responsibility to "take a hard look at the environmental consequences of proposed actions utilizing . . . the best available scientific information." *Custer Cty. Action Ass'n v. Garvey*, 256 F.3d 1024, 1034 (10th Cir. 2001) (internal quotation marks and citations omitted).

Because BLM did not sufficiently assess the actual climate impacts of the Project, its approval is arbitrary and capricious.

ARGUMENT

I. BLM's Evaluation of Climate Damages Irrationally Disregards the Incremental Impacts on Climate Change and Lacks the Meaningful Assessment that NEPA Requires

"[T]he key requirement of NEPA" is to "consider and disclose the *actual environmental effects* in a manner that . . . brings those effects to bear on [the agency's] decisions." *Balt. Gas & Elec. Co.*, 462 U.S. at 96 (emphasis added). Merely listing the quantity of emissions is insufficient if the agency "does not reveal the meaning of those impacts in terms of human health or other environmental values," since "it is not releases of [pollution] that Congress wanted disclosed" but rather "the effects, or environmental significance, of those releases." *NRDC v. NRC*, 685 F.2d 459, 486–87 (D.C. Cir. 1982), *rev'd on other grounds, Balt. Gas & Elec. Co.*, 462 U.S. at 106–07.[7]

BLM's environmental assessment makes this very mistake. As in *Center for Biological Diversity*, "the [agency's] EA quantifies the expected amount of CO2 emitted" and compares this volume to national emissions, but "does not discuss the

[7] NEPA regulations in place at the time of the decision under review reflect this mandate by requiring agencies to assess "effects and their significance," 40 C.F.R. § 1502.16 (2019), which "requires consideration of both context and intensity," *id*. § 1508.27, of the "ecological . . ., economic, social, or health" impacts of the action, *id*. § 1508.8. Although these regulations were recently revised, Update to the Regulations Implementing the Procedural Provisions of the National Environmental Policy Act, 85 Fed. Reg. 43,304 (July 16, 2020), they govern this determination and, in any event, their replacement cannot affect NEPA's statutory requirements.

actual environmental effects resulting from those emissions." 538 F.3d at 1216. In its analysis, BLM estimates that the Project will generate over 31 million metric tons of CO2e, but it does not explain how these emissions will affect the environment. AR45061. What BLM offers instead is a generic recitation of facts about climate change and its projected effects on the Earth and, to a lesser extent, New Mexico. AR45055–56. BLM then states that the Project will "contribute to" these general effects, AR45060, and that the volume of emissions from the Project is small compared to total state and national emissions. AR45059–62, AR45102. Yet both observations would be true of virtually any permitting decision, and it is unclear what either "brings . . . to bear on decisions to take *particular actions*." *Balt. Gas & Elec. Co.*, 462 U.S. at 96 (emphasis added).

BLM's comparison of the Project's emissions to such massive totals suggests that a large volume of emissions may be unimportant, but closer inspection reveals the flaw with this logic. Although BLM does not make this specific comparison, here the Project's total emissions equate to approximately 0.48% of annual domestic greenhouse gas emissions.[8] Consider an analogy to economic effects: A hypothetical action that resulted in $108 billion in economic impact—about the gross domestic

[8] According to BLM, the Project's total greenhouse gas emissions equals 31.48 million metric tons of CO2e. AR45061. Annual U.S. emissions total 6,511 million (i.e. 6.511 billion) metric tons. AR45059. 31.48 million divided by 6.511 billion equals 0.0048, or 0.48%.

product of New Mexico—would have the same relative effect (0.48 percent) if presented as a percentage of U.S. gross domestic product.[9] Of course, however, that impact is not "de minimis." AR45102.

As this example illustrates, the mere fact that the Project's emissions are a small fraction of the nationwide total hardly means that they are insignificant, as even a seemingly "very small portion of a gargantuan source of . . . pollution" may "constitute[] a gargantuan source of . . . pollution on its own terms." *Sw. Elec. Power Co. v. EPA*, 920 F.3d 999, 1032 (5th Cir. 2019) (internal quotation marks omitted). Comparisons to a geographic area's total greenhouse gas emissions are also misleading for another reason: An agency can arbitrarily change the denominator to shrink or expand an action's apparent significance.

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[9] U.S. gross domestic product was $22.7 trillion in the second quarter of 2021 (the most recent quarter for which estimates are available). U.S. Bur. of Econ. Analysis, News Release: Gross Domestic Product by State, 2nd Quarter 2021, 8 tbl. 3, https://www.bea.gov/sites/default/files/2021-09/qgdpstate1021.pdf (last visited Dec. 22, 2021). $22.7 trillion multiplied by 0.0048 (i.e. 0.48 percent) equals approximately $108.96 billion. The gross domestic product of New Mexico is $108.24 billion. *See id.*

Other glaring examples abound. For instance, an action that resulted in more than 13,680 fatalities would account for 0.48 percent of the approximately 2.85 million annual deaths in the United States. Deaths and Mortality, Ctrs. for Disease Control & Prevention, https://www.cdc.gov/nchs/fastats/deaths.htm (last visited Dec. 22, 2021). Nobody would think that such an action would have "de minimis" consequences. It would be a tragedy leading to more than four times as many deaths as occurred from the terrorist attacks on September 11, 2001.

By disregarding the Project's greenhouse gas emissions because they comprise a small percentage of global emissions, BLM falls victim to a bias akin to probability neglect, a common mental heuristic whereby small probabilities are irrationally minimized. *See* Cass R. Sunstein, *Probability Neglect: Emotions, Worst Cases, and Law*, 112 Yale L.J. 61 (2002). This heuristic is particularly problematic for assessing climate impacts, as "[t]he global nature of climate change and greenhouse-gas emissions means that any single . . . project likely will make up a negligible percent of state and nation-wide greenhouse gas emissions." *WildEarth Guardians*, 457 F. Supp. 3d at 894. Accordingly, several courts have rejected analyses that trivialize emissions through comparison to larger totals. *See, e.g., Ctr. for Biological Diversity*, 538 F.3d at 1216–17; *San Juan Citizens All. v. U.S. Bureau of Land Mgmt.*, 326 F. Supp. 3d 1227, 1248 (D.N.M. 2018); *High Country*, 52 F. Supp. 3d at 1190; *Bernhardt,* 472 F. Supp. 3d at 623.

In its decision, the district court also inappropriately relied on two circuit court decisions that purportedly provide persuasive authority supporting BLM's approach. First, the court cited *Barnes v. U.S. Department of Transportation*, 655 F.3d 1124 (9th Cir. 2011), in which plaintiffs challenging an airport expansion argued the agency "dilute[d]" its analysis of greenhouse gases impacts because it was "*not specific to the locale*." *Id.* at 1139 (emphasis added). The Court rejected the argument, noting that "the effect of greenhouse gases on climate is a *global*

problem." *Id.* Because Plaintiffs here do not seek an analysis of greenhouse gas emissions "specific to the [Project] locale," *Barnes* is inapposite. Indeed, when it comes to an agency's assessment of a project's full climate impacts—the relevant issue here—the same court has held that the agency cannot just project greenhouse gas emissions and compare them to nationwide or global totals. *Ctr. for Biological Diversity*, 538 F.3d at 1215–16. As the court explained, such an approach fails to "provide the necessary contextual information about [an action's] cumulative and incremental environmental impacts" that NEPA demands. *Id.* at 1216–17.

Second, the district court cited *WildEarth Guardians v. Jewell*, 738 F.3d 298 (D.C. Cir. 2013), which drew extensively upon a now-outdated draft guidance from the Council on Environmental Quality ("CEQ") to conclude that "[b]ecause *current* science does not allow for the specificity demanded by the [plaintiffs], the BLM was not required to identify specific effects on the climate." *Id.* at 309 (emphasis added). At the time, the CEQ draft guidance cautioned that EPA did "not *currently* believe that it is possible to quantify with great specificity . . . the various health effects of climate change." CEQ, *Draft NEPA Guidance on Consideration of the Effects of Climate Change and Greenhouse Gas Emissions* 11 (Feb. 18, 2010) (emphasis added).[10] However, climate science has improved, better tools and methodologies

[10] *Available at* https://ceq.doe.gov/docs/ceq-regulations-and-guidance/20100218-nepa-consideration-effects-ghg-draft-guidance.pdf.

have emerged, and the most recent final CEQ guidance specifically rejects BLM's approach. As that guidance explains, "a statement that emissions from a proposed Federal action represent only a small fraction of global emissions . . . [is] not an appropriate method for characterizing the potential impacts associated with a proposed action . . . because this approach does not reveal anything beyond the nature of the climate change challenge itself." CEQ, *Final Guidance for Federal Departments and Agencies on Consideration of Greenhouse Gas Emissions and the Effects of Climate Change in National Environmental Policy Act Reviews* 11 (Aug. 1, 2016).[11] BLM cannot excuse its analytical approach by acting as though climate science is stuck in the past. *See Custer Cty. Action Ass'n v. Garvey*, 256 F.3d 1024, 1034 (10th Cir. 2001) ("[A]gencies must take a hard look at the environmental consequences of proposed actions utilizing . . . the *best available scientific information*.") (emphasis added) (internal quotations and citation omitted).

Rigorous methods are available to quantify and assess the actual climate impacts associated with the Project. For instance, as the Plaintiffs recognize, BLM

[11] *Available at* https://ceq.doe.gov/docs/ceq-regulations-and-guidance/nepa_final_ghg_guidance.pdf. This guidance was withdrawn by 82 Fed. Reg. 16,576 (Apr. 5, 2017). President Biden has since called on CEQ to "review, revise, and update" this guidance "as appropriate and consistent with applicable law." Exec. Order No. 13,990 § 7(e), 86 Fed. Reg. 7037 (Jan. 25, 2021). This guidance is currently under review at CEQ, and in the interim CEQ has encouraged agencies to consult this guidance for advice on the consideration of greenhouse gas emissions under NEPA. *See, e.g.*, National Environmental Policy Act Implementing Regulations Revisions, 86 Fed. Reg. 55,757, 55,763 n.25 (proposed Oct. 7, 2021).

could have used a carbon budget to more rigorously assess the Project's contributions to climate change. Opening Br. 36–40. Another available method is the social cost of carbon (sometimes called the social cost of greenhouse gases), which was developed by a dozen federal agencies and departments, including the Department of the Interior, to assess the incremental economic and public-health damages from a unit of carbon dioxide emissions.[12] The tool has been used by federal agencies dozens of times.[13] As measured by the social cost of carbon, the Project would cause at least $1.6 billion in climate damages[14]—a figure that would surely assist BLM in assessing and contextualizing the Project's "environmental impact," 42 U.S.C. § 4332(2)(C)(i).

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[12] In the EA Addendum, BLM briefly argues that the social cost of carbon is inapposite to assess the Project's climate impacts. AR45105–06. While a full rebuttal of these arguments is beyond the scope of this brief, Policy Integrity countered these arguments in its comments submitted to the administrative record. AR33822–41. The Department of the Interior has since recognized that the social cost of carbon provides a "useful measure to assess the climate impacts of [greenhouse gas] emission changes for Federal proposed actions," emphasizing the tool as "relevant to the choice among different [project] alternatives." Department of Interior Secretarial Order 3399 § 5(b) (Apr. 16, 2021). And the U.S. Court of Appeals for the D.C. Circuit recently rejected an agency analysis for failing to adequately consider the social cost of carbon under NEPA, notwithstanding similar agency objections as here. *Vecinos Para el Bienestar de la Comunidad Costera v. Fed. Energy Reg. Comm'n*, 6 F.4th 1321, 1327–30 (D.C. Cir. 2021).

[13] Peter Howard & Jason Schwartz, *Think Global: International Reciprocity as Justification for a Global Social Cost of Carbon*, 42 Colum. J. Envtl. L. 203, 270–84 (2017) (listing all uses by federal agencies through mid-2016).

[14] See *supra* note 6.

Because BLM inappropriately and unjustifiably characterized these enormous climate damages as "de minimis," based on a limited and irrational assessment, its environmental assessment is arbitrary and capricious.

CONCLUSION

For the foregoing reasons, this Court should reverse the District Court's decision.

Dated: December 23, 2021

Respectfully submitted,

/s/ Max Sarinsky
Max Sarinsky
INSTITUTE FOR POLICY INTEGRITY
139 MacDougal Street, Third Floor
New York, NY 10012
(212) 992-8932
max.sarinsky@nyu.edu
Counsel for Amicus Curiae
Institute for Policy Integrity

CERTIFICATE OF COMPLIANCE WITH RULE 32(a)(7)

Counsel hereby certifies that, in accordance with Federal Rule of Appellate Procedure 32(a)(7), the foregoing Brief contains 3,066 words, as counted by counsel's word processing system, and this complies with the applicable word limit established by the Court.

This brief complies with the typeface requirements of Fed. R. App. P. 32(a)(5) and the type-style requirements of Fed. R. App. P. 32(a)(6) because this document has been prepared in a proportionally spaced typeface using Microsoft Word 2013 in 14-point Times New Roman font.

Dated: December 23, 2021

Respectfully submitted,

/s/ Max Sarinsky
Max Sarinsky
INSTITUTE FOR POLICY INTEGRITY
139 MacDougal Street, Third Floor
New York, NY 10012
(212) 992-8932
max.sarinsky@nyu.edu
Counsel for Amicus Curiae
Institute for Policy Integrity