

No. 25-170

IN THE

Supreme Court of the United States

SUNCOR ENERGY (U.S.A.) INC., ET AL.,

Petitioners,

v.

COUNTY COMMISSIONERS OF BOULDER COUNTY, ET AL.,

Respondents.

**On Petition for a Writ of Certiorari to the
Supreme Court of Colorado**

**BRIEF OF *AMICUS CURIAE*
PROFESSOR JASON JOHNSTON
IN SUPPORT OF PETITIONERS**

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STATEMENT OF INTEREST¹

Professor Jason Johnston is the Blaine T. Phillips Distinguished Professor of Law and Director of the Olin Program in Law and Economics at the University of Virginia School of Law. He has authored numerous peer-reviewed articles and books on environmental law, energy policy, and the economic implications of regulatory frameworks. His scholarship has been cited by courts and policymakers in the United States and abroad.

Professor Johnston submits this brief as *amicus curiae* to offer the Court an economic and legal perspective on the far-reaching consequences of climate-change litigation. His interest in this case stems from a longstanding academic commitment to analyzing the intersection of law, economics, and energy policy, particularly as it relates to the national and global effects of fossil-fuel regulation. He has no personal or financial stake in the outcome of this litigation.

¹ Pursuant to Supreme Court Rule 37.6, *amicus curiae* states that no counsel for a party authored this brief in whole or in part, that no counsel for a party or party made a monetary contribution intended to fund the preparation or submission of the brief, and that no entity or person, aside from *amicus curiae*, its members, or its counsel, made a monetary contribution to fund the preparation or submission of this brief. Counsel of record for all parties received timely notice of the intent to file this brief pursuant to Rule 37.2.

INTRODUCTION AND SUMMARY OF ARGUMENT

This case presents a question of exceptional national importance: whether state and local governments may invoke state and local law to impose sweeping liability on fossil-fuel producers for global climate change. The claims advanced by Respondents—seeking to hold energy companies liable for the alleged cumulative, worldwide effects of the lawful production and sale of fossil fuels—are emblematic of a broader litigation trend that threatens to destabilize the national economy, undermine energy security, and erode federalism.

If permitted to proceed, these suits will expose producers to retroactive liability for decades of lawful conduct, chilling investment, curtailing supply, and driving up prices across sectors that depend on affordable and reliable energy. The economic consequences would be severe and far-reaching, affecting everything from transportation and agriculture to manufacturing and consumer goods.

What is more, the lawsuits risk exacerbating the very harms that they purport to redress. By shifting production to less regulated jurisdictions, they would likely increase global emissions—a phenomenon known as “emissions leakage”—while punishing domestic producers operating under the rule of law. By enabling municipalities to externalize the costs of local adaptation onto non-resident taxpayers and businesses, state and local climate lawsuits distort

incentives that otherwise would have led them to optimally adapt to climate change, increasing the harm from adverse weather events. By shifting costs onto non-residents with no electoral voice in influencing adaptation decisions by plaintiff jurisdictions, such interstate cost-shifting also raises serious concerns about democratic accountability.

This Court has long served as a guardian of the national marketplace, ensuring that matters of interstate and international consequence are governed by a uniform rule of law. The claims at issue here implicate core federal interests and demand federal adjudication. This Court should grant review to reaffirm the constitutional limits on state authority and to prevent an assortment of local judgments from dismantling the national energy framework.

ARGUMENT

Respondents' claims in this case arise from the production and sale of fossil fuels and seek to impose liability on fossil-fuel companies because of their production and sale of this vital resource. If successful, Respondents' claims—and similar claims that have been asserted in a number of climate-change lawsuits pending across the Nation—will have a significant, detrimental impact on the national and global economies, as well as the Nation's energy security. For decades, fossil fuels have played a central role in the United States' national and global economies. This case is thus one that has far-

reaching, national significance, and this Court should grant the petition for a writ of certiorari.

**I. ENCOURAGING CLIMATE-CHANGE LAWSUITS
WILL LIKELY SHRINK DOMESTIC FOSSIL-
FUEL SUPPLY, INCREASE CONSUMER PRICES,
AND JEOPARDIZE U.S. NATIONAL ENERGY
SECURITY**

This case is one of many lawsuits pending throughout the Nation that seek to impose liability on certain members of the fossil-fuel industry related to greenhouse gas (“GHG”) emissions under various common law theories of liability. Some such suits have alleged that fossil-fuel producers’ GHG emissions constitute a public nuisance (*see, e.g., City of Oakland v. BP PLC*, 969 F.3d 895 (9th Cir. 2020); *State of Delaware v. BP Am. Inc.*, No. N20C-09-097 (Del. Super. Ct.)), while others allege that fossil-fuel producers’ failure to warn consumers about the potential harms of GHG emissions constituted negligence (*see, e.g., State of Minnesota v. Am. Petroleum Inst.*, No. 62-CV-20-3837 (Minn. Dist. Ct.)). All seek to impose liability for the alleged costs of climate change.

The City of Boulder, Colorado, for example, seeks monetary damages for past and expected future costs allegedly incurred to analyze, evaluate, mitigate, and abate climate change. According to Boulder, the “impacts” of climate change include virtually every extreme weather event that one could imagine, ranging from wildfires and droughts to floods, some of which—the City does not specify—have caused physical damage to Boulder’s buildings.

Although the City of Boulder plaintiffs have not set forth any particular sum that they seek to collect, a recent study estimates that by 2040, municipalities in Pennsylvania will spend about \$1 billion per year in adapting to the various impacts of climate change.² According to this study, by 2040 the average climate-change adaptation cost per capita in Pennsylvania municipalities will be \$4,930.³ This does not include the cost of adapting to wildfire impact,⁴ a serious natural hazard in the West. Rounding up the 2040 Pennsylvania per capita figure to \$5,000 to account for wildfire adaption and multiplying by the current U.S. population, if all U.S. municipalities, counties, or states sought to recover for the same costs, the aggregate *annual* liability imposed on fossil-fuel defendants would be \$1.65 *trillion*.

By contrast, according to the U.S. Energy Information Agency, the total value of domestic U.S. oil production in 2024 was between \$350 and \$360 billion.⁵ Thus, were such suits allowed to proceed, the annual liability imposition could reach nearly 5 times the value of aggregate U.S. domestic oil production.

² *Pennsylvania's Looming Climate Cost Crisis: The Rising Price to Protect Communities from Extreme Heat, Precipitation, and Sea Level Rise*, Ctr. for Climate Integrity, at 4 (July 2023), <https://perma.cc/CFZ4-V3A5>.

³ *See id.* at 7.

⁴ *See id.* at 5.

⁵ *See U.S. crude oil production rose by 2% in 2024*, U.S. Energy Info. Admin. (Apr. 16, 2025), <https://perma.cc/TT54-UL86>.

Hence it is not an exaggeration to say that the climate lawsuits pose an existential threat to U.S. domestic oil production.

Even if the climate lawsuits result in aggregate damages awards that do not exceed the value of U.S. domestic oil production, the cases still threaten to have a meaningful impact on the national economy. To illustrate, one basis that has been discussed for determining a particular fossil-fuel company's share of any liability is that company's past production—*i.e.*, its aggregate emissions over the past several decades.⁶ In New York and Vermont, such a liability system has already become law, in the form of state Climate Superfund laws.⁷ Under these statutes, large fossil-fuel companies are jointly liable for a fraction of costs incurred by the State, with the fraction equaling the company's total greenhouse gas emissions over a defined statutory period (2000–2018 in New York, 1995–2024 in Vermont) divided by total industry emissions over that period.⁸

⁶ One such case is *State of Rhode Island v. Chevron Corp. et al.*, No. PC-2018-4716, pending in Providence County Superior Court, Rhode Island.

⁷ See N.Y. Env't Conserv. Law §§ 76-0101–0105 (2024) ("Climate Change Superfund Act"); Vt. Stat. Ann. tit. 10, § 597 (2024) ("Climate Superfund Cost Recovery Program").

⁸ As amended by S.B. 824, Leg. Sess. (N.Y. 2025), the Climate Change Superfund Act provides that companies with more than one billion tons of GHG emissions over the period January 1, 2000 to December 31, 2024 are subject to liability for their past emissions. Under Vermont's Climate Superfund Act,

Imposing a scheme of retroactive joint liability via litigation is functionally equivalent to imposing a fine for companies' past fossil-fuel production. Proponents of such fines for past behavior frequently argue that such fines will have no impact on oil production and prices.⁹ It is true that as a matter of basic economics, fixed costs—costs that do not vary with output—typically should not affect future pricing decisions, because a company cannot change what happened in the past and is always working to optimize its pricing decisions in the present.¹⁰ But this standard assertion is inapt with respect to the sort of massive retroactive liability that suits such as Boulder's would likely impose. As I have shown in recently published peer-reviewed work, multi-state retroactive fines for fossil-fuel production—whether through statute or litigation—will likely have two effects: (1) they will bankrupt many fossil-fuel producers; and (2) they will

fossil-fuel companies emitting more than one billion tons of GHG emissions over the period January 1, 1995, to December 31, 2024, are made liable. *See* Vt. Stat. Ann. tit. 10, § 596(8), (22).

⁹ Peter H. Howard and Minhong Xu, *Enacting the “Polluter Pays” Principle: New York’s Climate Change Superfund Act and Its Impact on Gasoline Prices*, N.Y.U. Inst. Pol’y Integrity, at 1, 7, 13 (Nov. 22, 2022), <https://perma.cc/5NUN-QHRD>.

¹⁰ For an interesting discussion explaining that whether a cost is fixed depends upon the relevant time period to the choice under consideration, *see* Gary S. Becker, *Economic Theory* 79–83 (2d ed. 2017).

cause those producers who are still viable to cut back drastically on exploration and drilling.¹¹

To understand the first effect, consider an existing oil well. The value of that well is determined by the profits that it will generate in the future, minus the costs it carries. Under retroactive liability for GHG emissions, every oil well carries a charge for past production. The longer a well has been in production, the bigger its accumulated liability cost, and the shorter its remaining productive lifetime and future value.¹² For all but the very newest oil wells, retroactive liability will exceed the value of future production. A firm owning many such wells could well become insolvent, transferring ownership of its wells to tort claimants.¹³

To understand the second effect, it is important to consider that once an oil or gas well is drilled, production from that well decreases with declining well pressure.¹⁴ Supply cannot suddenly be increased. The only way to increase supply is to drill new wells. Potential future liability for past production lowers

¹¹ Jason S. Johnston, *Fossil Fuel Production Under Liability for Climate Change*, Int'l J. Econ. Bus., at 4–10 (Mar. 31, 2025), <https://doi.org/10.1080/13571516.2025.2477688>.

¹² *Id.* at 5–6.

¹³ *Id.* Note that it is possible that production from such negative net value assets would still be economic. This would be true if the price per barrel exceeds the continuing liability charge per barrel.

¹⁴ *Id.* at 6.

the present owner's expected future profits, reducing the cost of delaying drilling (where the benefit of delay comes from cost-lowering technological change). This effect is even greater where future damages are so high that a future loss of ownership is expected. Delays in drilling and refining reduce present and near-term supply.¹⁵ These supply-side impacts of retroactive GHG liability will cause both a direct increase in fossil-fuel prices and cascading downstream price increases for the vast array of goods, such as farm products, for which fossil fuels are crucial to production.¹⁶

As for the direct effect on fossil-fuel prices, it is of course true that there is an international market for fossil fuels. Economists generally agree that the global oil market is best described as one in which a dominant cartel, OPEC+, manipulates oil production to control global oil prices.¹⁷ OPEC+ is not the only source of oil, however. Since around 2010, the major check on OPEC+'s power over global oil prices has

¹⁵ *Id.* at 12–13.

¹⁶ While short-term price movements for agricultural commodities are explained primarily by short-run shifts in supply and demand caused by factors such as growing-season weather, oil prices and agricultural-commodity prices are closely linked over longer periods. See Kevin M. Camp, *The relationship between crude oil prices and export prices of major agricultural commodities*, U.S. Bureau of Labor Statistics (April 2019), <https://perma.cc/FZ28-NX6D>.

¹⁷ Rolf Golombeck et al., *OPEC's market power: An empirical dominant firm model for the oil market*, 70 *Energy Econ.* 98, 112 (2018), <https://perma.cc/D9XR-U3K3>.

been provided by U.S. shale oil producers, whose production has soared as costs have fallen due to the fracking revolution.¹⁸ That revolution has made the U.S. a leading producer and even exporter of oil and liquid natural gas.¹⁹ The vast majority of the increase in U.S. oil production since 2015 has come from fracking in the Permian Basin and similar shale regions, with the share of U.S. oil production from fracking increasing to account for two-thirds of total U.S. oil production by 2022.²⁰ Not only has the shale boom accounted for a huge share of the increase in U.S. production, it has also created a new industry segment that is enormously responsive to attempts by OPEC+ to raise global prices.²¹ In Texas, for example, oil supply became more than three times more responsive to price increases after the shale boom.²²

When OPEC+ raises prices, U.S. shale producers quickly drill new wells and raise production, forcing prices back down. The effect is large, with one recent study finding that the increase in shale oil production accompanying the so-called shale revolution will ultimately lower oil prices by 48 percent once the

¹⁸ W.D. Walls and Xiaoli Zheng, *Fracking and Structural Shifts in Oil Supply*, 43 Energy J. 1, 9–10 (2022).

¹⁹ See *The United States exported 30% of the energy it produced in 2024*, U.S. Energy Info. Admin. (Aug. 12, 2025), <https://perma.cc/RYH8-NY43>.

²⁰ *How much oil is produced in the US?*, USA Facts (Aug. 21, 2023), <https://perma.cc/3WYJ-WXZB>.

²¹ Walls and Zheng, *supra* note 18, at 9–10.

²² *Id.*

shale oil transition is complete.²³ Many Permian basin shale oil wells are owned by oil companies who are defendants in suits such as Boulder's and are subject to retroactive fines under existing and proposed state Climate Superfund laws. By causing the shutdown of wells owned by such producers and by the postponement of supply increase brought about by drilling new wells, the retroactive liability imposed by climate-change lawsuits such as Boulder's would eliminate what has become the most effective market check on OPEC+'s ability to raise oil prices.

At least two pieces of evidence concretely demonstrate how abrupt changes in oil supply quickly ripple through to the prices paid by consumers.

The first example is the shock to oil supply caused by Russia's 2022 invasion of Ukraine. Russia's war on Ukraine is estimated to have caused a 56 percent increase in oil prices that began almost immediately with the onset of war.²⁴ Prices did not return to pre-war levels until many months later.²⁵

A second example is provided by the State of California's regulatory approach to oil production and refining. With the explicit goal of ending oil production and refining in California, that state has

²³ Nathan S. Balke et al., *The Shale Revolution and the Dynamics of the Oil Market*, 134 Econ. J. 2252–89 (2024), <https://doi.org/10.1093/ej/ueae013>.

²⁴ Qi Zhang et al., *The impact of Russia–Ukraine war on crude oil prices: an EMC framework*, Human. Soc. Sci. Comm'n, at 2 (Jan. 2, 2024), <https://perma.cc/TJ4R-7YGG>.

²⁵ *Id.*

promulgated regulations that impose large lump sum costs.²⁶ One California law, Cal. Pub. Res. Code § 25354.4, requires refiners to maintain minimum inventories of refined fuels and also restricts selling reserves. According to the industry, this will cause the buildup of huge inventories that will not be released and sold, thus exacerbating supply and price pressures and possibly leading to the deliberate destruction of unsold inventory.²⁷ California's Low Carbon Fuel Standard ("LCFS"), one of many programs required under the California Global Warming Solutions Act of 2006,²⁸ forces refineries to blend low and zero carbon fuels like ethanol and to buy credits if carbon targets are not met. The cost of such credits has likely increased fuel prices, and the cost of LCFS compliance is among the reasons given by both Phillips 66 and Valero for their decisions to close refineries in California.²⁹ As these regulations have caused local oil production and refining to crash, California's gasoline prices have soared, with the

²⁶ See *California Further Restricts Oil Production with Three New Bills*, Inst. Energy Rsch. (Oct. 3, 2024), <https://perma.cc/MH28-UEZW>.

²⁷ See *California Fuels + Convenience Alliance (CFCA) Warns of Significant Consumer Costs and Market Disruptions Under ABX2-1*, CFCA (Sep. 17, 2024), <https://perma.cc/6NFU-QFHL>.

²⁸ Cal. Health & Safety Code, § 38500, et seq.

²⁹ *Stillwater LCFS 101*, Stillwater Publ'n (Sep. 10, 2025), <https://perma.cc/S94L-UP7R>.

average price in California running more than a third higher than the national average since at least 2019.³⁰

The examples of Russia's war in Ukraine and California's aggressive regulatory stance on oil underscore the important lesson that, even though the oil market is global, localized shocks to oil supply, which are likely to follow from allowing municipalities to impose retroactive fines, may well increase domestic U.S. oil prices.

The second set of adverse effects from retroactive liability for fossil-fuel production will occur because of the undeniable fact that fossil fuels underpin the entire national economy. Oil is essential to interstate and international transportation; in 2023, transportation alone contributed \$1.8 trillion to the U.S. gross domestic product (about 6.5 percent).³¹ When diesel, aviation fuel, and/or oil prices increase, those price increases ripple across the entire economy.³²

³⁰ See *Petroleum & Other Liquids: Weekly Retail Gasoline and Diesel Prices*, U.S. Energy Info. Admin., <https://perma.cc/UCG2-SFPE> (last visited Oct. 7, 2025).

³¹ *Transportation Economic Trends: Contribution of Transportation Services to the Economy and the Transportation Satellite Accounts*, U.S. Dep't of Transp., Bureau Transp. Stat., <https://perma.cc/3AGF-MHRT> (last visited Oct. 7, 2025).

³² Kangni R. Kpodar and Boya Liu, *The Distributional Implications of the Impact of Fuel Price Increases on Inflation*, Int'l Monetary Fund, at 13–16 (Nov. 12, 2021) (estimating the pass through of fuel price increases to consumer price inflation).

Likewise, fossil fuels are estimated to provide 93 percent of the energy used in the American food system,³³ both directly—as fuel for the machinery used in crop planting, harvesting, and irrigation—and indirectly—by providing the source of energy for the production of fertilizers, pesticides, and herbicides.

The process of refining crude oil also generates a number of petrochemical feedstocks that are processed into a huge variety of products,³⁴ including plastics (such as polyethylene, polypropylene, and polystyrene plastics used in bottles, bags, containers, toys, water pipes, packaging, etc.); nylon and polyester fibers for clothing, carpets, and upholstery; acrylic resins for dentures and various medical products; medical plastics used in things such as syringes, tubing, and bottles; resins used in drug production; and other derivatives used in food preservatives and flavor additives (such as vanillin, benzaldehyde, and paraffin wax for coating candy and fruits), cosmetics and fragrances (lipsticks, perfumes, makeup, aftershaves, and shampoos often containing paraffin wax and other derivatives), detergents, adhesives, rubbers, dyes, and paints.³⁵ As illustrated once again by market changes since 2022, an abrupt

³³ Patrick Canning et al., *The Role of Fossil Fuels in the U.S. Food System and the American Diet*, U.S.D.A., at 8–12, 21 (Jan. 2017), <https://perma.cc/CUV7-YRQ4>.

³⁴ See, e.g., Kalen Goodluck, *10 Everyday Products Derived from Petroleum*, PBS SoCal (Apr. 27, 2019), <https://perma.cc/944M-P82H>.

³⁵ See *id.*

decrease in fossil-fuel supply causes not only an increase in fossil-fuel prices, but also an increase in the general price level.³⁶

And even that list of the effects of fossil-fuel production shocks on the economy is incomplete, for it omits the impact of reduced supply and increased price of natural gas. It is impossible to incorporate large amounts of electricity from wind and solar and still retain the reliability of electricity supply without heavy reliance on natural gas.³⁷ Across the globe, every jurisdiction that has become heavily reliant on wind and solar as source of energy for electric power—from California to Germany—has also become completely reliant upon natural gas to provide power when the wind doesn't blow and the sun doesn't shine.³⁸ Natural gas supply restrictions will threaten the reliability of electricity supply in such places, and natural gas price increases will be passed on directly to electric utility customers.

In the aftermath of congressional investigations into several catastrophic electric grid blackouts during the 1960s, the large investor-owned U.S. electric utilities created the North American Electric

³⁶ Harun Alp et al., *Second-Round Effects of Oil Prices on Inflation in the Advanced Foreign Economies*, Bd. Governors Fed. Rsrv. Sys. (Dec. 15, 2023), <https://perma.cc/63MH-YATU>.

³⁷ See, e.g., *Natural Gas: The Backbone of Reliable Power*, Nw. Gas Ass'n (Apr. 9, 2025), <https://perma.cc/44W4-Q3QF>.

³⁸ See Jason S. Johnston, *Climate Rationality: From Bias to Balance* 149–85 (2021).

Reliability Corporation.³⁹ Today, the regional reliability councils created by this corporation ensure the reliability of the regionally interconnected U.S. electricity production and distribution system.⁴⁰ No single state or city could do this job. If allowed to impose retroactive liability on the U.S. fossil-fuel industry, individual states and cities would likely severely harm and potentially even destroy not only the existing interstate system for U.S. electricity production and transmission, but also the host of other interstate U.S. industries just discussed.

For all these reasons, the question of whether state and local lawsuits punishing the production of energy vital to the national economy must be preempted is clearly a question of national importance.

II. CLIMATE-CHANGE LAWSUITS WILL INCREASE THE SOCIAL COST OF CLIMATE CHANGE, FURTHER BURDENING THE NATIONAL AND GLOBAL ECONOMIES

The climate-change lawsuits represent an attempt by states and localities not centrally involved in fossil-fuel production, refining, and use to punish companies in those economic sectors. But in punishing those companies, state and local climate-change lawsuits will quite directly harm the defendant companies' employees, their shareholders,

³⁹ *Id.* at 154–55.

⁴⁰ *Id.* at 155.

and consumers of fossil-fuel-based products⁴¹—the vast majority of whom reside outside the plaintiff states and municipalities. The lawsuits would force non-citizens of plaintiff jurisdictions to fund all sorts of public projects undertaken by those jurisdictions. They thus are inimical to the system of democratic federalism enshrined in the Constitution of the United States.

Not only are cities such as Boulder attempting to foist the cost of public projects on non-voting non-citizens, but their lawsuits also ignore their own contribution to whatever costs they may incur due to changing climate.⁴² Fossil-fuel producers and refiners only refine and produce to meet market demand. They do not design or produce the autos and other internal-combustion-fired products that burn fossil fuels. They

⁴¹ Recent work has shown that between 25 and 75 percent of an increase in firm energy costs are passed through in the form of higher prices to consumers, with firm shareholders and employees bearing the remainder. See Sharat Ganapati et al., *Energy Cost Pass-Through in US Manufacturing: Estimates and Implications for Carbon Taxes*, 12 Am. Econ. J.: Applied Econ. 303, 325–37 (2020), <https://doi.org/10.1257/app.20180474>.

⁴² According to the Australian Institute for Disaster Resilience, local government land-use planning that considers natural hazards, including decisions such as prohibiting development in known hazard areas and preserving open space, is the “single most important mitigation measure” for minimizing future disaster losses due to weather events. See *Land Use Planning for Disaster Resilient Communities*, Austl. Inst. Disaster Resilience, Dep’t of Home Aff., at vii (1st ed. 2020), <https://perma.cc/K74T-56VG>.

do not make decisions about how to generate electricity. They have nothing to do with construction and design decisions that determine the vulnerability of cities and towns to the weather and globally uniform GHG concentrations attendant upon everyday life in such places. Climate-change lawsuits essentially exclude every entity responsible for determining the demand for fossil fuels and the costs of any climate change attributable to GHG emissions.

In addition, the climate-change lawsuits exclude the vast majority of past and present fossil-fuel producers—specifically, OPEC+ members. In fact, the major OPEC+ fossil-fuel producers are all state owned, with very few exceptions (*e.g.*, Rosneft, Gazprom, and Lukoil in Russia and Petrobras in Brazil).⁴³ If successful, climate-change lawsuits will cut or eliminate OPEC+'s competition, likely increasing output by fossil-fuel producers in OPEC+.⁴⁴ In this way, climate-change lawsuits will boost the economies of OPEC+ members such as Russia, Iran, and Venezuela. Few OPEC+ countries have GHG reduction policies with teeth.⁴⁵ Thus shifting production from the firms targeted by

⁴³ See Abigail Gerry, *Inside the Oil Alliance: OPEC vs. OPEC+*, Mansfield Energy (Apr. 14, 2025), <https://perma.cc/WJB8-NYNX>.

⁴⁴ See Johnston, *supra* note 11, at 11–14.

⁴⁵ A Damodaran and Shamta Thakkar, *A Preliminary Survey of the Climate Policy of OPEC and OPEC+ Countries - Discussion Paper* (Dec. 10, 2020), <https://perma.cc/TH5J-H6AM>.

climate-change litigation to OPEC+ producers may well generate a net increase in global GHG emissions, a well-known phenomenon known as “emissions leakage.”⁴⁶

Defenders of climate-change litigation may argue that what matters is ensuring that the costs of adapting to changing climate are borne by some responsible entity, and that even if many such responsible entities carry no share of the burden, what matters is funding climate adaptation by whatever means necessary. Beyond the fundamental unfairness of such an argument, the argument ignores the destructive incentives created by these lawsuits’ liability-sharing scheme. From an economic point of view, optimal climate adaptation occurs when the actor which benefits from adaptation internalizes the costs of adaptation. If the actor choosing adaptation expenditures bears only a fraction of the costs, and is compensated for damages it has incurred because it has failed to optimally adapt, then it will not have the correct economic incentive and may either spend too little⁴⁷ or too wastefully on

⁴⁶ For a succinct but accurate definition, see *Emissions Leakage*, Sustainability Directory (Apr. 7, 2025), <https://perma.cc/DS2J-F97Z>.

⁴⁷ A vivid example of this problem is provided by the empirical analysis by Francis Annan and Wolfram Schlenker, *Federal Crop Insurance and the Disincentive to Adapt to Extreme Heat*, 105 Am. Econ. Rev. 262, 264–66 (2015), who find that federal crop insurance subsidies have cut the incentives of U.S. corn and soybean farmers to adapt to extreme heat.

adaptation.⁴⁸ The climate lawsuits create precisely such perverse incentives: they foist the cost of adaption on a small set of fossil-fuel producers and refiners who have no control over plaintiffs' climate adaptation choices, while making those choices cost-free for the plaintiffs.

* * *

As illustrated above, this case and the other climate-change lawsuits pending throughout the Nation may have a significant, detrimental impact on the U.S. economy, as well as on this Nation's economic security. To allow climate-change lawsuits such as Boulder's to proceed is essentially to play a game of chance with the economic health and national security of the United States, gambling that these cases will not begin a cascade of judgments that lead to the contraction of fossil-fuel supply and price increases across the entire United States economy. Over the centuries, among the core functions of the Court has been the protection of the interstate economy of the United States from internecine state overreach. The question presented implicates this core function and is of grave national significance.

⁴⁸ William F. Shughart II, *Disaster Relief as Bad Public Policy*, 15 *Indep. Rev.* 519, 521, 529–531 (2011) (explicating harmful effects of disaster-relief programs, including incentivizing continued overdevelopment of disaster-prone areas).

CONCLUSION

For these reasons, this Court should grant the petition for a writ of certiorari.

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