No. 24-7

In the Supreme Court of the United States

DIAMOND ALTERNATIVE ENERGY, LLC, ET AL.,

Petitioners,

v.

ENVIRONMENTAL PROTECTION AGENCY ET AL.,

Respondents.

ON PETITION FOR WRIT OF CERTIORARI TO THE UNITED STATES COURT OF APPEALS FOR THE DISTRICT OF COLUMBIA CIRCUIT

BRIEF FOR THE SULPHUR INSTITUTE AS *AMICUS CURIAE* IN SUPPORT OF THE PETITION FOR WRIT OF CERTIORARI

PATRICK F. PHILBIN
Counsel of Record
CHASE HARRINGTON
TORRIDON LAW PLLC
801 Seventeenth Street, N.W.
Suite 1100
Washington, DC 20006
(202) 249-6900
pphilbin@torridonlaw.com

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TABLE OF CONTENTS

TABLE OF AUTHORITIES

Page(s)

Cases

Statutes

Regulations

Other Authorities

Other Authorities—continued

Other Authorities—continued

INTEREST OF *AMICUS CURIAE*

The Sulphur Institute (TSI) is a non-profit trade organization representing sixty global member companies involved with producing, consuming, marketing, transporting, or otherwise adding value to elemental sulfur, sulfuric acid, and sulfur-related agricultural products.[1] Founded in 1960, TSI currently focuses on: (i) sharing and promoting within TSI's membership excellence in supply chain operations, including the safe and efficient handling, storage, and logistics practices for sulfur; (ii) providing information to governmental authorities in the U.S. and abroad as they contemplate and develop regulatory frameworks for sulfur and its value-added applications; and (iii) expanding the public's knowledge regarding the benefits of sulfur and sulfur-related issues.

Sulfur is a valuable commodity and integral component of the U.S. and world economies. It is used to manufacture numerous products, including fertilizers, chemicals, paints, rubber products, medicines, fibers, sugar, detergents, plastics, paper, and many other products. Sulfur also is a vital nutrient for the crops making up much of our Nation's food chain. Without adequate sulfur supplies, stakeholders in supply and distribution chains in these other industries, including the consuming public, will be significantly affected.

America no longer mines sulfur. Rather, sulfur is recovered from oil and natural gas in the refining process to

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[1] Pursuant to Rule 37.2, TSI timely notified counsel of record of its intent to file this brief. This brief was not authored in whole or in part by counsel for any of the parties; no party or party's counsel contributed money for preparing or submitting this brief; and no one other than *amicus curiae* and its counsel have contributed money for preparing or submitting this brief. *See* Sup. Ct. R. 37.6.

reduce emissions of the chemical into the environment. The Biden Administration has recently issued three rules designed to force the motor vehicle industry to shift from internal combustion engines to electric vehicles. As fuel consumption plummets, so will sulfur supplies.

Petitioners challenge one of those rules: the EPA's reinstatement of California's preemption waiver under the Clean Air Act which allows the State to impose strict greenhouse gas tailpipe emissions standards and mandate the sale of electric vehicles. *See* 87 Fed. Reg. 14,332 (Mar. 14, 2022). Other States are authorized to opt into California's restrictions.

TSI, as the global advocate for sulfur and sulfur-related products, has a strong interest in the outcome of this litigation. TSI is well-positioned to provide the Court with insight into the industrial and social benefits of this chemical, as well as how the D.C. Circuit's standing decision will affect manufacturers (like the members of TSI) who operate in integrated production streams. TSI can also explain the adverse consequences of limiting sulfur supplies available to other industrial sectors—all factors that were not adequately considered by EPA in its rulemaking.

Accordingly, TSI offers this amicus brief in support of Petitioners' petition for a writ of certiorari to challenge EPA's grant of California's CAA waiver request.

BACKGROUND

Sulfur Supply Chains Are A Critical Component of the Economy.

Sulfur is a critical commodity to many sectors of the American and world economy. The most widely used derivative of sulfur is sulfuric acid (H_2SO_4). While sulfuric acid is used as an industrial raw material for many

applications, its largest use is for the manufacture of phosphoric acid, a precursor to phosphate fertilizers and non-fertilizer phosphates.[2] Sulfur and its derivatives are also used in metallurgical ore leaching, caprolactam, pigments, hydrofluoric acid, pulp and paper chemicals, sulfur fertilizers, petroleum refining, batteries, detergents, fungicides, pharmaceuticals, personal care products, cosmetics, leather tanning, rubber vulcanization, plasticizers, dyestuffs, explosives, aramid fibers, construction materials, sugar manufacture, dehydrating agent in organic chemical and petrochemical processes, water treatment, and steel pickling.[3]

The array of industrial products derived from sulfur is so vast that no comprehensive value estimates exist. Industries and product groups enabled by sulfur and sulfuric acid cut a large swath through the U.S. economy: construction materials, traditional batteries, rubber (vulcanization), pharmaceuticals, paper bleaching, water treatment, cosmetics/skin care, detergents, nylon, pigments, leather tanning, explosives and, most importantly, fertilizers.

A. Sulfur Is Produced As A Byproduct of Refining Gasoline and Natural Gas.

In the past, sulfur was primarily mined from native sources in Texas and Louisiana. But the technique of extracting sulfur from underground deposits takes enormous energy to melt the sulfur and pump the molten product to the earth's surface. This method, called the Frasch process, ceased in America in 2000. In fact, this type of

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[2] *See* S&P Global, Chemical Economics Handbook: Sulfur (Mar. 2024), https://tinyurl.com/mrj3dpy3.

[3] TSI, *Glossary* "Sulphur uses," https://perma.cc/2DKM-M9HM.

sulfur extraction has declined over the last decade to less than 2% of world production.[4]

Today, sulfur is principally extracted from oil and gas refining. The Clean Air Act (CAA), 42 U.S.C. §7401 *et seq.*, requires the energy industry to reduce the amount of "criteria pollutants," emitted from motor vehicles and internal combustion engines. *See id.* at §§7408-7409. One of the criteria pollutants subject to the CAA is sulfur dioxide (SO_2), 40 C.F.R. §50.4, which is created by burning off naturally occurring sulfur contained in oil. To prevent SO_2 from entering the atmosphere and to comply with the CAA, the energy industry began recovering sulfur from the oil refining process using the Claus Recovery Method. This technique, implemented through a Sulfur Recovery Unit, extracts naturally occurring liquid sulfur from oil and gas streams to produce low-sulfur fuel used for internal combustion engines.[5]

Desulfurization of fossil fuels accounts for most sulfur production. According to one study, "[m]ore than 80% of the sulfur used industrially comes from the oil and natural gas."[6] The United States Geological Survey (USGS) reports that sulfur recovery produced about 8 million metric tons of sulfur in 2023.[7]

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[4] *See* TSI, *FAQ*, https://perma.cc/7RVX-5HZH.

[5] *See* B. G. Goar, *Sulfur Recovery Technology*, Conf-860447 (1986), https://perma.cc/T98R-R7KH.

[6] *See* Mark Maslin et al., *Sulfur: A potential resource crisis that could stifle green technology and threaten food security as the world decarbonizes*, 188 The Geographical J. 498, 498 (2022), https://perma.cc/23S8-XL2N.

[7] U.S. Geological Survey, Mineral Commodity Summaries—Sulfur (Jan. 2024), https://perma.cc/YF43-Q6WE.

Decrease in gasoline consumption results in a decrease in sulfur supplies. According to the Bureau of Transportation Statistics, during the COVID-19 pandemic, there was a significant decrease in passenger travel.[8] With reduced demand for gasoline, there was also a direct correlation between refinery output and sulfur supply necessary for the dozens of industries that require the chemical as an industrial raw material. According to the USGS, U.S. sulfur production during 2020 dropped by 800,000 tons—apparently due to scaled back refining during the pandemic.[9]

Once extracted, the sulfur, now in molten form, is temporarily stored in a holding area at the refinery and then transported by either railcar or cargo tank truck to industrial facilities that make sulfuric acid. These facilities include fertilizer plants, pulp and paper mills, copper smelters, sulfuric acid regeneration plants, and other chemical processing facilities. In the form of sulfuric acid, sulfur ranks as one of the more important elements used as an industrial raw material. "It is of prime importance to major sectors in the world's industrial and fertilizer complexes. Indeed, consumption of sulfuric acid has been regarded as one of the best indexes of a nation's industrial development."[10] In fact, "[m]ore sulfuric acid is produced in America every year than any other chemical."[11]

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[8] U.S. Dep't of Transp., Bureau of Transp. Statistics, "Daily Vehicle Travel During the COVID-19 Public Health Emergency," (July 21, 2020), https://tinyurl.com/4r8kk23h.

[9] U.S. Geological Survey, *supra* note 7.

[10] U.S. Geological Survey, *Sulfur Statistics and Information*, https://tinyurl.com/a223krdk.

[11] *Ibid.*

B. Sulfur Is Critical To The U.S. Agricultural And Fertilizer Sectors.

Sulfur is one of the 17 essential plant nutrients and is indispensable to plant growth and crop development.[12] Among other benefits, sulfur: (i) aids in the formation of chlorophyll that permits photosynthesis through which plants produce starch, sugars, oils, fats, vitamins, and other compounds; (ii) serves as a building block for protein production; (iii) improves the synthesis of oils found in oilseeds; and (iv) increases crop yields and improves produce quality, which of course determine the market price ultimately realized by farmers.[13]

Ironically, while the CAA is the reason this country now has ample supplies of sulfur produced from oil and gas refining, it also had the unintended effect of reducing the amount of "free sulfur" available to farmers as a crop nutrient. When sulfur was removed from fuel in the refining process, sulfur from atmospheric deposition created from internal combustion engine exhaust and other industrial processes no longer fell from the sky onto farmers' fields, creating a sulfur deficiency in many crops. As atmospheric deposition decreased, there was not enough free sulfur to aid in the growth of crops that feed the world like wheat, canola, beans, and corn.[14]

Farmers had to replace these sulfur deficiencies, and the TSI, academia, and the fertilizer industry responded

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[12] TSI, *Sulphur – The Fourth Major Plant Nutrient*, https://perma.cc/6PQ8-MCMU.

[13] *Ibid.*

[14] *See generally* Eve-Lyn S. Hinckley & Charles T. Driscoll, *Sulfur fertilizer use in the Midwestern US increases as atmospheric sulfur deposition declines with improved air quality*, 3 Comm. Earth & Environ. 324 (2022), https://doi.org/10.1038/s43247-022-00662-9.

accordingly. Throughout the 1980s and 1990s, TSI, in cooperation with other agricultural research entities, conducted studies on sulfur crop nutrition, and the studies established that sulfur-enhanced fertilizer substantially increases crop yields.

As a result, one of the major applications of sulfuric acid is in the production of phosphate fertilizers. In 2019, 64% of all sulfur produced globally was used in the production of phosphate and other fertilizers.

All of this has a sizable impact on the U.S. economy. In 2019, the fertilizer industry contributed about $130 billion and nearly 500,000 jobs to the U.S. economy.[15] Likewise, major crops such as corn, wheat, and soybeans all benefit from a healthy sulfur supply chain, which in turn generates thousands of jobs and billions of dollars in economic output for the U.S. According to the United Soybean Board, the total economic impact from the soybean sector is $124 billion, contributing 223,000 paid, full-time equivalent jobs, as well as an additional 62,000 family members, beyond growers themselves, who support and are integral to soybean farming operations.[16] The total wage impact of the sector averaged $10 billion.[17] Similar economic benefits are seen with corn and wheat. The

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[15] *See* The Fertilizer Inst., "TFI Releases Fertilizer Industry Economic Impact Study: Contributes $130 Billion to US Economy," (Sept. 24, 2020), https://perma.cc/4L84-RLLZ.

[16] *See* "The Economic Impact of U.S. Soybeans and End Products on the U.S. Economy—2023 Update," Report for United Soybean Bd. & Nat'l Oilseed Processors Ass'n at 3 (Aug. 2023), https://perma.cc/PNH4-YCFE.

[17] *Ibid.*

National Corn Growers Association reports that, in 2023, the total U.S. corn crop value was $73.6 billion.[18]

Yet, without adequate sulfur stocks generated by the petroleum and natural gas refining sector, such economic benefits will be placed in jeopardy.

SUMMARY OF ARGUMENT

1. The D.C. Circuit's ruling on standing warrants review in this Court. It is well established that Article III standing can rest on causation of injury traced through the predictable reactions of third parties to government regulation. And the redressability prong of standing is the flip side of the causation coin.

In this case, it did not require any speculative leap to recognize that regulatory actions (like California's zero-emission-vehicle mandate) expressly designed to steer the Nation towards an all-electric vehicle fleet would cause injury for those, like Petitioners, who produce liquid fuel—and that the injury would be redressed by removing the mandate. Indeed, EPA's waiver allowing California to adopt a zero-emissions-vehicle mandate was expressly *intended* to force lower consumption of liquid fuels than otherwise would have occurred. The D.C. Circuit's decision requiring proof of redressability—especially in the form of affidavits from the regulated entities themselves explaining how they would react to lifting the California mandate—conflicts with this Court's standing jurisprudence, conflicts with the decisions of several other circuits, and will interfere with the ability of businesses in integrated supply or production chains to challenge regulatory actions that affect them through the predictable

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[18] Nat'l Corn Growers Ass'n, *World of Corn 2024* at 3, https://perma.cc/BHB4-V8MR.

reactions of other regulated entities in the interconnected chain.

2. The Court should also grant review to address the merits of EPA's decision granting California a waiver under section 209(b) of the Clean Air Act. That waiver determination is unmoored from the text of section 209(b), which authorizes EPA to grant a waiver only upon a showing that California needs a separate emissions standard to "meet compelling and extraordinary conditions." 42 U.S.C. §7543. "Extraordinary conditions" necessarily means conditions that are "out of the ordinary" conditions faced by the rest of the Nation—that is, conditions that are unique and local to California. Because California's mandate was expressly designed to address global climate change, not local conditions, it does not meet the statutory standard for the waiver. Besides this error of law, EPA's decision would have far-reaching consequences on the U.S. economy. In particular, it will overstretch the sulfur market by depressing domestic production while at the same time increasing the demand for sulfur to produce electric vehicles.

ARGUMENT

I. The D.C. Circuit's Standing Decision Warrants this Court's Review.

The D.C. Circuit's standing decision warrants review because it upends settled principles of standing law. In particular, it threatens to hobble the ability of myriad companies that operate in linked production or supply chains—like members of TSI—to establish standing to challenge regulations that affect their interests by controlling the actions of others. In such situations, the challengers themselves are not immediately subject to the regulations, but they nevertheless bear the effects of the regulations through the predictable actions of regulated

third parties. Until now, such predictable effects have clearly been sufficient to establish standing.

Under this Court's familiar three-part standing inquiry, a plaintiff need only show (1) "injury in fact"; (2) a "causal connection" making that injury "fairly traceable" to the defendant's action; and (3) a likelihood "that the injury will be redressed by a favorable decision." *Lujan* v. *Defs. of Wildlife*, 504 U.S. 555, 561 (1992).

Applying those factors, this Court's decisions have made clear that a plaintiff can establish standing based on "the predictable effect of Government action on the decisions of third parties." *Dep't of Commerce* v. *New York*, 588 U.S. 752, 768 (2019). Indeed, it is well established that government regulation may cause injury to others who are economically interconnected with the directly regulated entity and that setting aside such a regulation satisfies the redressability prong of standing, especially given that causation and redressability are "flip sides of the same coin." *FDA* v. *All. for Hippocratic Med.*, 602 U.S. 367, 380 (2024).

As the Court recently explained, "the Court has identified a variety of familiar circumstances where government regulation of a third-party individual or business may be likely to cause injury in fact to an unregulated plaintiff." *Id.* at 384. In particular, the Court has routinely recognized that, in the context of businesses in an economically interconnected chain, "when the government regulates (or under-regulates) [one] business, the regulation (or lack thereof) may cause downstream or upstream economic injuries to others in the chain, such as certain manufacturers, retailers, suppliers, competitors, or customers." *Ibid.*

In such situations, the predictable effects that regulation on one entity will have for other entities has been

understood as sufficient to create standing—that is, it is sufficient as to both causation and redressability. A plaintiff need only show that "'third parties will likely react in predictable ways'" due to the challenged regulatory action and that their reactions "in turn will likely injure plaintiffs." *Id.* at 387 (quoting *California* v. *Texas*, 593 U.S. 659, 675 (2021)); *see also Bennett* v. *Spear*, 520 U.S. 154, 169 (1997) (standing can rest on the "determinative or coercive effect" of the agency action on a third party); *Corner Post, Inc.* v. *Board of Governors of the Fed. Rsrv. Sys.*, 144 S. Ct. 2440, 2464 (2024) (Kavanaugh, J., concurring) ("[E]ntire classes of administrative litigation . . . have traditionally been brought by unregulated parties.").

In this case, the "predictable effect" of the EPA waiver is straightforward. California's greenhouse gas emission standards and zero-emissions vehicle mandate are designed to reduce consumption of liquid fuels. EPA granted California a preemption waiver so that California could address global climate change based on the link between the combustion of liquid fuels and greenhouse gases. App.207a. The goal of the waiver and the mandate are the same: to reduce the consumption of liquid fuels by reducing the number of cars manufactured that use liquid fuels. That necessarily impacts the business of Petitioners. And setting aside the waiver (and thereby blocking California's mandate) would redress the injury because it would "likely" avert the predictable drop in demand for liquid fuels that the waiver (and California mandate) are expressly designed to create. *See Lujan*, 504 U.S. at 561. The court of appeals' requirement that Petitioners provide *evidence* from auto manufacturers that they would produce fewer liquid-fuel automobiles cannot be reconciled with this Court's prior decisions, which consistently permit reliance on such "predictable effects." *See* Pet. 18-21.

The decision below also conflicts with decisions of other courts of appeals. For example, in *NRDC* v. *NHTSA*, 894 F.3d 95 (2d Cir. 2018), the Second Circuit explained that causation and redressability need not be proved "with absolute certainty" and that a "substantial likelihood" is all that is required "even in cases where the injury hinges on the reactions of . . . third parties . . . to the agency's conduct." *Id.* at 104. The court found that environmental groups had standing to challenge agency action delaying an increase in civil penalties for third-party automakers without any affidavits and instead based largely on the view that "common sense and basic economics tell us that the increased cost of unlawful conduct will make that conduct less common." *Id.* at 105 (citation omitted). In other words, the court relied on the "predictable effect" of the agency action on the conduct of third parties.

Similarly, the Fifth Circuit found that Texas had standing to challenge DHS's decision to divert funds from border wall construction because of its predicable effect on illegal immigration. *General Land Office* v. *Biden*, 71 F.4th 264, 273 (5th Cir. 2023).

The decision also conflicts with the D.C. Circuit's own prior rulings. The D.C. Circuit has previously held that, "when redress for a plaintiff's injury depends on a third party's independent action and the third party stands to profit by doing as the plaintiff hopes, we have found that the third party's 'pecuniary interests' and the basic dynamic of 'naked capitalism' are enough to satisfy the redressability requirement." *Teton Historic Aviation Found.* v. *Dep't of Def.*, 785 F.3d 719, 728 (D.C. Cir. 2015) (per curiam) (quoting *Abigail Alliance for Better Access to Development Drugs* v. *Eschenbach*, 469 F.3d 129, 135 (D.C. Cir. 2006)). In other words, without any need for

affidavits, "financial incentives provide an independent basis to find standing" because the court can "trust in [a third party's] economic self-interest to assume that it would likely" behave in accordance with those interests. *Ibid.*; *see also, e.g.*, *In re Idaho Conservation League*, 811 F.3d 502, 510 (D.C. Cir. 2016) (explaining that the "court has long relied on . . . economic and other incentives to find standing").

The court of appeals' error will have a broad effect on businesses operating in industries with linked production chains or supply and demand relationships. Until now, it was clear that if a regulation was designed to induce a particular action by a regulated entity and that action would necessarily impact another company (for example, by reducing demand for its products), the company affected would have standing to bring a challenge based on "the predictable effect of Government action on the decisions of third parties." *Dep't of Commerce*, 588 U.S. at 768. The D.C. Circuit's decision erroneously casts that basic principle in doubt.

The D.C. Circuit's apparent requirement, *see* App.30a-32a, that, to show standing, a potential challenger must secure affidavits from the companies directly subject to a regulation—to prove how the regulated entities will react to setting aside the regulation—is particularly wrongheaded. Even where companies are inextricably linked in interconnected production chains or supply relationships, their interests are not necessarily entirely aligned. A regulated entity may have reasons for acquiescing in a particular action by its regulator, including an effort to secure more favorable regulatory treatment on some other matter. Requiring a company that inexorably will be affected by a regulatory change to secure cooperation from the directly regulated entities—those who

have an ongoing relationship with the regulator—raises a gatekeeping restriction that would stifle legitimate challenges to government action. It makes the gatekeeper a regulated entity whose need to maintain a relationship with the regulator necessarily gives it a different set of incentives from others who may be affected by regulation.[19]

The decision below will also have a particularly significant chilling effect on regulatory challenges because the D.C. Circuit is traditionally the court that handles a lion's share of administrative litigation. A novel requirement in the D.C. Circuit dialing back on the ability of entities to bring challenges based on the "predictable effects" of regulation, *Dep't of Commerce*, 588 U.S. at 768, will have an outsized effect insulating a broad swath of federal regulatory actions from review. For that reason as well, the decision warrants review in this Court.

II. EPA's Waiver Decision Also Warrants This Court's Review.

The Court should also grant review on the second question presented in the Petition addressing the merits

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[19] Indeed, the theory of regulatory capture suggests that the relationship between regulator and regulated entity may, in some instances, produce regulations that bend toward the interests of the regulated entity. *See PHH Corp.* v. *CFPB*, 881 F.3d 75, 185 (D.C. Cir. 2018) (Kavanaugh, J. dissenting) ("With every agency, the fear of regulatory capture is ever-present.") (quoting Elizabeth Warren, *Unsafe at Any Rate: If It's Good Enough for Microwaves, It's Good Enough for Mortgages. Why We Need a Financial Product Safety Commission*, Democracy, Summer 2007, at 8, 18); James Q. Wilson, *The Politics of Regulation* 357-94 (1980). That possibility makes it particularly dangerous to make the regulated entity the gatekeeper for regulatory challenges brought by other parties whose interests are affected through the regulated entity's actions.

of EPA's waiver decision. EPA is authorized to grant California a waiver under Section 209(b) when a more stringent state-level emissions standard is "need[ed]" to "meet compelling and extraordinary conditions." 42 U.S.C. §7543. As Petitioners explain, that standard requires a showing of "compelling and extraordinary conditions" *unique to California* to justify granting California an exemption from otherwise uniform, national standards. Pet. 29-30.

California's regulations, however, fail to meet that statutory standard. They are expressly "designed to address global climate change," 84 Fed. Reg 51,310, 51,344 (Sept. 27, 2019); *cf.* Pet. 29-30, which is clearly not a condition unique to California.

EPA's decision especially warrants this Court's review not only because it is wrong on the law, but because of the extraordinarily widespread impact it will have on the U.S. economy. Indeed, its impact would go far beyond the direct effect on the automobile and oil and gas industries that Petitioners have described. EPA's waiver would deliver a one-two punch to domestic sulfur supply chains: it will both slash sulfur production (from diminished fuel refining) while simultaneously incentivizing the manufacture of electric vehicles that depend on sulfur for making electric batteries. The result will be an overstretch in the domestic sulfur supply that forces manufacturers to become dependent on foreign sources of sulfur.[20]

As explained above, *see supra* pp. 3-4, sulfur production in the United States is currently a direct product of fuel production. Sulfur is no longer mined but recovered from oil and gas as part of the refining process. By allowing California to set emissions standards, the EPA waiver

[20] *See* Maslin et al., *supra* note 6.

will, by design, slash the rate of U.S. fuel refining by reducing demand for liquid fuel. And that will inexorably slash the domestic production of sulfur.

At the same time, EPA's waiver will substantially increase the demand for sulfur. Green technologies, like electric vehicles, increase demand for cobalt, nickel, and lithium—all of which are extracted with sulfuric acid.[21]

The U.S. copper industry is anticipated to grow by 4% in 2024 and to continue to grow annually by over 3.4%.[22] Sulfur is consumed by U.S. copper manufacturers who burn sulfur to produce sulfuric acid for use in copper smelters. Approximately 1.4 million tons of sulfur is required for current U.S. copper production.[23] The increase in copper production just in 2022 and 2023 increased U.S. sulfur consumption for copper by 85,000 tons, in part to make electric batteries.

The production of lithium for use in batteries also depends on sulfur. Lithium is extracted from ore through a leaching process that relies on diluted sulfuric acid. On October 19, 2022, the White House launched the "American Battery Materials Initiative," with a goal of developing enough battery-grade lithium to supply approximately 2 million electric vehicles annually. As one of the key stakeholders for the President's initiative, the U.S. Department of Energy has set forth a "Vision for the Lithium-Battery Supply Chain" in which "[b]y 2030, the United States and its partners will establish a secure battery materials and technology supply chain that supports

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[21] Maslin et al., *supra* note 6, at 498, 501.

[22] "US Copper Supply to grow by 4% in 2024" Mining Technology (July 25, 2024), https://perma.cc/XEH2-ZRSJ.

[23] This number is based on confidential data reported from TSI member companies.

long-term U.S. economic competitiveness and equitable job creation, enables decarbonization, advances social justice, and meets national security requirements."[24]

Already, the lithium industry is expanding to meet this goal. Today, there is one active lithium mine in the U.S. and many other mines are in development to meet increasing demand for lithium-ion batteries in electric vehicles.

While the objective of the EPA waiver and the California mandate is to *reduce* consumption of liquid fuels in automobiles, sulfur recovered from the oil refining process is necessary to produce the lithium needed for electric vehicle batteries. Regulatory mandates for electric vehicles simultaneously increase demand for sulfur while they force an ever-decreasing supply environment in the United States. According to researchers, decarbonization coupled with the expansion of the green economy could result in a "shortfall in sulfuric acid between 100 and 320 million tonnes."[25]

In short, putting California effectively in charge of regulatory changes that mandate a transition to electric vehicles will depress domestic sulfur production, making the U.S. reliant on international supply chains.

A decision giving one State control over such far-reaching implications for the national economy plainly warrants review by this Court, especially where it appears on its face that the decision misapplied statutory standards.

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[24] Federal Consortium for Advanced Batteries, *Nat'l Blueprint for Lithium Batteries 2021-2030* at 9 (June 2021), https://perma.cc/BN4F-Y73X.

[25] Maslin et al., *supra* note 6, at 501.

CONCLUSION

The petition for a writ of certiorari should be granted.

Respectfully submitted.

PATRICK F. PHILBIN
Counsel of Record
CHASE HARRINGTON
TORRIDON LAW PLLC
801 Seventeenth Street, N.W.
Suite 1100
Washington, DC 20006
(202) 249-6900
pphilbin@torridonlaw.com

Counsel for Amicus Curiae
The Sulphur Institute