No. 24-1087
Consolidated with Nos. 24-1100, 24-1132, 24-1158, 24-1195, 24-1196, 24-1197, 24-1206

IN THE UNITED STATES COURT OF APPEALS FOR THE DISTRICT OF COLUMBIA CIRCUIT

COMMONWEALTH OF KENTUCKY, ET AL.,
Petitioners,

V.

ENVIRONMENTAL PROTECTION AGENCY, ET AL.,
Respondents.

On Petitions for Review from the United States Environmental Protection Agency

AMICUS CURIAE BRIEF OF THE BUCKEYE INSTITUTE IN SUPPORT OF PETITIONERS

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CERTIFICATE OF PARTIES, RULINGS, AND RELATED CASES

Counsel for *amicus curiae* certifies the following:

A. Parties and *Amici*

All parties, intervenors, and amici currently appearing in this Court are listed in State Petitioners' Opening Brief at i-iii, in Initial Brief for Private at i-iv, and on the docket.

B. Rulings Under Review

The final action of the Administrator of the United States Environmental Protection Agency is found at 89 Fed. Reg. 27,842 (Apr. 18, 2024) and is entitled "Multi-Pollutant Emissions Standards for Model Years 2027 and Later Light-Duty and Medium-Duty Vehicles."

C. Related Cases

Eight consolidated cases in the U.S. Court of Appeals for the District of Columbia Circuit involve challenges to the agency action challenged here: Kentucky v. EPA, No. 24-1087; Texas v. EPA, No. 24-1100; Petersen v. EPA, No. 24-1132; Western States Trucking Ass'n, Inc. v. EPA, No. 24-1158; American Fuel & Petrochemical Manufacturers v. EPA, No. 24-1195; American Petroleum Institute v. EPA, No. 24-1196; American Free Enterprise Chamber of Commerce v. EPA, No. 24-1197; and Renewable Fuels Association v. EPA, No. 24-1206.

CERTIFICATE PURSUANT TO CIRCUIT RULE 29(D)

Pursuant to D.C. Circuit Rule 29(d), the undersigned counsel for *amicus curiae* certifies that a separate brief is necessary to provide the unique perspective of The Buckeye Institute.

CORPORATE DISCLOSURE STATEMENT

Pursuant to Rules 26.1 and 29(c) of the Federal Rules of Appellate Procedure, The Buckeye Institute states that it has no parent company and no publicly held company owns 10% or more of its stock.

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GLOSSARY

APA	Administrative Procedure Act
EPA	Environmental Protection Agency
EV	Electric Vehicle
IWB	Interagency Working Group
OMB	Office of Budget and Management
SC-GHG	Social Costs of Greenhouse Gases

INTEREST OF AMICUS CURIAE[1]

The Buckeye Institute was founded in 1989 as an independent research and educational institution—a think tank—to formulate and promote free-market policy in the states. The Buckeye Institute accomplishes its mission by performing timely and reliable research on key issues, compiling and synthesizing data, formulating free-market policies, and marketing those policy solutions for implementation in Ohio and replication across the country. The Buckeye Institute works to restrain governmental overreach at all levels of government. In fulfillment of that purpose, The Buckeye Institute files lawsuits and submits amicus briefs. The Buckeye Institute is a nonpartisan, nonprofit, tax-exempt organization, as defined by I.R.C. section 501(c)(3).

The Buckeye Institute seeks to protect individual liberties, especially those liberties guaranteed by the Constitution of the United States against government overreach. That government overreach increasingly comes in the form of agency rules and regulations imposed by unelected bureaucrats. The result is the insulation of important public policy decisions from any political or judicial accountability. This is incompatible with the representative democracy guaranteed by the Constitution. In this case, the Environmental Protection Agency exceeded its

[1] No party's counsel authored this brief in whole or in part, and no person other than amicus and their counsel contributed money intended to fund the preparation or submission of this brief. A motion for leave to file accompanies this brief.

statutory authority and ignored key facts and issues to justify a regulatory scheme that American consumers do not want, which Congress has not authorized, and which harms Ohioans and Americans.

SUMMARY OF THE ARGUMENT

Freedom is the essence of America. Indeed, the people of the United States formed their government to "secure the Blessings of Liberty." U.S. Const. pmbl. Congress authorized the Environmental Protection Agency ("EPA") to combat acute environmental health risks—but not to run the automotive industry according to the personal predilections of its bureaucrats.

Nevertheless, EPA has attempted to restructure the American car market by forcing electric vehicles on all American consumers. EPA purports to do this under Section 202 of the Clean Air Act, 42 U.S.C. § 7521, by setting greenhouse gas emission standards for light-duty vehicles. But those incredibly stringent standards amount to a *de facto* electric-vehicle ("EV") mandate. That is an unwelcome change for American consumers and EPA simply has no authority to make it.

Amicus agrees with Petitioners that the "question of whether and how internal-combustion vehicles should be phased out in favor of electric vehicles is hugely consequential: it involves millions of jobs, the restructuring of entire industries, and the Nation's energy independence and relationship with hostile powers." Private Pet. Br. 3. *Amicus* also agrees with Petitioners that "Congress has not authorized any of

the steps that EPA has taken. . . .” *Id.* Those major national policy questions are for “the people”—via their elected representatives in Congress—to decide. *See West Virginia v. EPA*, 597 U.S. 697 (2022).

EPA’s cost-benefit analysis is deeply flawed and forced electrification will harm American consumers. First, EPA wrongly relied on an alleged “market failure,” which it now calls an “energy paradox,” in the demand for electric cars to justify the extraordinary costs of the rule. EPA found it perplexing that American consumers have not widely adopted electric vehicles despite the supposed potential savings associated with doing so. But Congress never authorized EPA to use this nebulous concept of market failure or energy paradox to impose the government’s will upon consumers and manufacturers.

Second, EPA improperly relied on an inter-agency report and OMB’s revised Circular A-4 to include global rather than the domestic benefits of reduction of “greenhouse gas” emissions. By including those global benefits, EPA ignored the well-established presumption that Congressional statutes are primarily concerned with domestic application and that the purpose of the Clean Air Act is “to protect and enhance the quality of *the Nation’s* air resources so as to promote the public health and welfare and the productive capacity of *its population*.” 42 U.S.C. § 7401(b)(1) (emphasis added).

EPA’s cost-benefit analysis is also based on speculation of the final rule’s

impact over a 30-year time frame, coupled with opinions of the valuation of intangible personal values rather than scientific facts. EPA then uses a grossly inadequate discount rate to create a present value of those benefits 30 years distant. EPA's speculation does not satisfy the Administrative Procedure Act ("APA").

Finally, EPA ignores the harm forced electrification will inflict on American consumers. Most Americans do not want electric vehicles for many reasons, including concerns about performance, range, and charging capabilities. That is their prerogative as free Americans. The rule forces American consumers to purchase electric vehicles, whether they want them or not. That is not American freedom.

The Court should hold the rule unlawful and set it aside.

ARGUMENT

I. EPA's cost-benefit analysis is deeply flawed.

A. EPA wrongly relied on an alleged "energy paradox" in the demand for fuel efficiency to justify the extraordinary costs of the rule.

The idea of an "energy paradox" or "energy efficiency gap" is that existing technologies that reduce fuel consumption are not widely adopted even though the supposed benefits of these technologies outweigh the costs to buyers. Multi-Pollutant Emissions Standards for Model Years 2027 and Later Light-Duty and Medium-Duty Vehicles, 89 Fed. Reg. 27842, 28316–317 (Apr. 18, 2024) ("Model Years 2027 and Later Rule"). "The topic of the 'energy paradox' or 'energy efficiency gap' has been extensively discussed in many previous vehicle GHG

standards' analyses." *Id.* at 28316. EPA previously referred to this "paradox" as an "apparent market failure." Revised 2023 and Later Model Year Light-Duty Vehicle Greenhouse Gas Emissions Standards, 86 Fed. Reg. 74434, 74501 (Dec. 30, 2021) ("2023 and Later Model Year Rule"). As some commenters remarked regarding the proposed rule, EPA provided "less analysis in this rule than provided in previous rules" regarding this "paradox." *See* Env't Prot. Agency, EPA-420-R-24-005, *Multi-Pollutant Emissions Standards for Model Years 2027 and Later Light-Duty and Medium-Duty Vehicles Response to Comments* 2403 (2024). Nevertheless, EPA apparently relied on its previous "market failure" analysis from its prior light-duty vehicle regulations. *See id.* at 2404.

EPA finds it puzzling that American consumers have not widely adopted electric vehicles despite claims that "fuel savings quickly outweigh the costs in the absence of standards." 2023 and Later Model Year Rule, 86 Fed. Reg. at 74501. "If the benefits to vehicle buyers outweigh the costs to those buyers of the new technologies," EPA explains, "conventional economic principles suggest that automakers would provide them, and people would buy them." *Id.* at 74500. *Accord* Model Years 2027 and Later Rule, 89 Fed. Reg. at 28316–317. Yet instead of crediting the many reasons why consumers prefer traditional gas-powered cars—and that customers like what they like—EPA concluded that the lack of demand for

electric cars is due to an "apparent market failure." 2023 and Later Model Year Rule, 86 Fed. Reg. at 74501.

But Congress never authorized EPA to use this nebulous concept, however labeled, to impose the government's will upon consumers and manufacturers. Congress specifically limited EPA's considerations to "cost, energy, and safety factors associated with the application of [available] technology." 42 U.S.C. § 7521(3)(A)(i). And the only statutes that even reference "market failures" do so in the context of industry annual reports or foreign investments. *See, e.g.*, 12 U.S.C. 635g-1 and 22 U.S.C. 9621. As a result, an alleged "market failure"—whether labeled as such or as an "energy paradox" or "energy efficiency gap"—is an inappropriate concept for the EPA to consider when analyzing "costs" under its statutory authority to regulate vehicle emissions.

To be sure, the Office of Management and Budget's (OMB) revised Circular A-4 purports to authorize agencies to evaluate "market failures" when conducting the economic-impact analysis. *See* Office of Management & Budget, *Circular No. A-4* 19 (2023), https://www.whitehouse.gov/wp-content/uploads/2023/11/CircularA-4.pdf ("*2023 A-4*"). But revised Circular A-4's guidance is neither binding nor are its directives well-founded in the original executive order that established such guidance.

Executive Order 12866 was designed to increase freedom, not decrease it.

"The American people deserve a regulatory system that works for them, not against them . . ." 58 C.F.R. 190 (1993). It emphasized that "regulatory policies [should] recognize that the private sector and private markets are the best engine for economic growth . . . ." *Id.* In 1993, the executive branch recognized that "[w]e do not have such a regulatory system today." *Id.* But instead of working for the people, EPA's final rule denigrates them and insists that they are not intelligent enough to make smart choices for themselves.

Further, Circular A-4 is guidance not binding on the Court. And even A-4's guidance on the use of the so-called market failure theory is limited. It applies to the economic analysis required by Executive Order 12866, and subsequent executive orders, for all new agency actions that are reviewed by OMB. It does not give the EPA such broad authority as to effectively phase-out combustion-engine vehicles in favor of electric ones. An executive directive cannot override Congress's choice to limit EPA's analysis to certain factors. And a "market failure" is not one of those factors.

OMB's directive had previously warned against relying heavily on "market failures" as EPA has done: "Government actions can be unintentionally harmful, and even useful regulations can impede market efficiency," which is why the order imposes "a presumption against certain types of regulatory action" on that basis. Office of Management & Budget, *Circular A-4* (2003), bit.ly/3FXXSo1 ("*2003 A-*

4"). While government officials "point to instances of apparently imperfect markets and assume that government . . . regulation can seamlessly perfect them," "economists have long doubted this way of thinking." *See* Ryan Bourne, *How 'Market Failure' Arguments Lead to Misguided Policy*, Cato Institute (Jan. 22, 2019), bit.ly/3WE4gGR

Further, EPA has "provided no[] actual evidence" of a market failure. *See Am. Pub. Gas Ass'n v. United States Dep't of Energy*, 22 F.4th 1018, 1027 (D.C. Cir. 2022). EPA contrives a "market failure" by discounting—even ignoring—the preferences of American consumers. There is a "market failure," EPA contends, because Americans are not taking advantage of the fact that "fuel savings quickly outweigh the costs in the absence of standards." 2023 and Later Model Year Rule, 86 Fed. Reg. at 74501. *Accord* Model Years 2027 and Later Rule, Fed. Reg. at 28136–137. EPA's conclusion rests on the notion that consumers do not understand how electric vehicles and other emissions technologies work. *See id.* at 28137.

Yet there is no shortage of information on the pros and cons of electric vehicles in the internet age. There are countless online studies, reviews, and news articles explaining that information. And auto manufacturers have relentlessly promoted the claimed benefits of their EVs. *See, e.g., Should I Buy an Electric Vehicle?*, Ford, https://www.ford.com/electric/should-i-buy-an-electric-vehicle/?intcmp=ev-seconNav-sib-ev (last visited Sept. 5, 2024); *Benefits and Advantages*, Honda,

https://automobiles.honda.com/vehicle-electrification#advantages (last visited Sept. 5, 2024); *Why electric vehicles are so hot in the 2022 Super Bowl ads*, Association of Metropolitan Planning Organizations, https://ampo.org/why-electric-vehicles-are-so-hot-in-the-2022-super-bowl-ads/(last visited Sept. 5, 2024). The concept of "market failure" based on lack of information has little credibility here.

One might easily conclude that the EPA's "market failure" or "energy paradox" designation boils down to a suggestion that American consumers are not smart enough to put adequate "emphasis on future fuel savings compared to up-front costs (a form of 'myopic loss aversion')" because they do "not hav[e] a full understanding of potential cost savings, or [are] not prioritizing fuel consumption in the complex process of selecting a vehicle." 2023 and Later Model Year Rule, 86 Fed. Reg. at 74501. But what consumers do or do not prioritize in this "complex process" does not concern the EPA and is out of their expertise, responsibility, and authority to regulate.

Indeed, EPA disregarded comments and studies showing that consumers generally value performance (bigger, faster, stronger vehicles) over more fuel-efficient vehicles. For example, the National Automobile Dealers Association raised concerns that vehicle buyers must forgo enhanced performance to get improved fuel economy. It explained that "[w]hen assessing the value of fuel economy improvements to prospective purchasers, the financial benefits of future fuel savings

cannot be separated from the utility lost by necessary reductions to other vehicle qualities and performance." National Automobile Dealers Association, Comment on Model Years 2027 and Later Rule at 8 (July 10, 2023). According to one study, EPA's previous fuel economy mandates

> resulted in foregone performance, upon which consumers placed a value approximately equal to that of any fuel-savings benefits resulting from the standards. And it found that models attempting to assess the new vehicle buying public's willingness to purchase fuel economy, without controlling for performance tradeoffs, likely suffered from omitted variables bias.

Id. According to another study, "consumers are willing to pay just $94 for a 1% increase in performance arising from fuel saving technology adoption. This contrasts with a willingness to pay $1,100 for a 1-second reduction in 0-60 acceleration time." National Automobile Dealers Association, Comment on 2023 and Later Model Year Rule at 8 (Sep. 27, 2021) (citation omitted). That tradeoff does not mean there is a market failure; it just shows that consumers prefer one thing over another.

Americans simply have different priorities than what EPA would prefer. EPA ignored Americans' priorities, including the harm American consumers will suffer if forced to go electric. As a result, EPA concluded that Americans do not know what's good for them and labeled that perceived ignorance as a "market failure." EPA's speculation "is not enough to justify" EPA's market failure/energy paradox analysis. *Am. Pub. Gas Ass'n*, 22 F.4th at 1027. Assertions of consumer ignorance do not meet

an accepted statutory or regulatory definition of "market failure." EPA simply does not want to allow consumers to choose their mode of transportation.

B. EPA improperly included global benefits in its cost-benefit analysis.

EPA's cost-benefit analysis suffers from other significant flaws. One of those flaws was EPA's inclusion of the global (rather than domestic) benefits from the reduction of ostensible greenhouse gas emissions. To that end, EPA explicitly relied on the Interagency Working Group's ("IWG") Technical Support Document on the Social Cost of Greenhouse Gases ("SC-GHG"). Env't Prot. Agency, EPA-420-R-24-004, *Multi-Pollutant Emissions Standards for Model Years 2027 and Later Light-Duty and Medium-Duty Vehicles Regulatory Impact Analysis* 6-6, 6-67 (2024) ("*Regulatory Impact Analysis*"); *see also* Interagency Working Group on Social Cost of Greenhouse Gases, *Technical Support Document: Social Cost of Carbon, Methane, and Nitrous Oxide Interim Estimates under Executive Order 13990* (Feb. 2021) ("*IWG SC-GHG Document*"). And the IWG's conclusions rest on the global metrics. For example, it believes that global impacts "will have a direct impact on [overseas] U.S. citizens and the investment returns on those assets owned by U.S. citizens and residents;" that global issues "impact the welfare of individuals and firms that reside in the United States through their effect on international markets, trade, tourism, and other activities;" and that "allow[ing] the U.S. to continue to

actively encourage other nations, including emerging major economies, to take significant steps to reduce emissions." *IWG SC-GHG Document*, *supra*, at 15, 16.

EPA also relied on OMB's recently revised Circular A-4 analysis. The revised Circular A-4 authorizes regulatory agencies to balance the domestic costs of regulations with benefits to noncitizens living outside the United States. OMB provided no statutory authorization for agencies to include such benefits during rulemaking cost-benefit analyses for proposed regulations. Indeed, the executive orders underlying A-4 (and its predecessors) have expressed the opposite.

E.O. 12866, for example, states that it is "vital" that the "regulatory planning and review process" "serves the American people," because "[t]he American people deserve a regulatory system that works for them . . . ." Consistent with that notion, OMB had previously issued a universal instruction that an agency's analysis "should focus on benefits and costs that accrue to citizens of the United States," *2003 A-4*, *supra*. Federal agencies exist to protect the rights and interests of taxpaying Americans, not noncitizens living in other countries.

It was an error for EPA to rely on OMB's revised A-4's and IWG's global-impact directives because "Congress generally legislates with domestic concerns in mind." *RJR Nabisco v. Eur. Cmty.*, 579 U.S. 325, 336 (2016) (quoting *Smith v. United States*, 507 U.S. 197, 204, n. 5 (1993)). This includes the Clean Air Act. Congress declared that one of the "purposes" of the Clean Air Act is "to protect and enhance

the quality of *the Nation's* air resources so as to promote the public health and welfare and the productive capacity of *its population*." 42 U.S.C. § 7401(b)(1) (emphasis added). That directive extends to the Administrator's authority to prescribe "standards applicable to the emission of any air pollutant from any class or classes of new motor vehicles or new motor vehicle engines, which in his judgment cause, or contribute to, air pollution which may reasonably be anticipated to endanger public health or welfare." 42 U.S.C. § 7521(a)(1).

Despite all this, EPA determined that the SC-GHG estimates are "the theoretically appropriate value to use in conducting benefit-cost analyses of policies that affect GHG emissions," but "likely *underestimate*" the global costs of greenhouse gas emissions. *Regulatory Impact Analysis*, *supra*, at 6-6 (emphasis added). But including global impacts produces drastically different calculations. The initial IWG Report estimated that the social cost of greenhouse gases ranged from $30 to $46 per ton for 2025. *See* Mimi Drozdetski & Samir Qadir, *Social Cost of Carbon: Seven Takeaways About the Most Important Climate Policy Metric You've Never Heard Of*, PHE (Aug. 24, 2022), bit.ly/3WLruew. But the former administration, which "only factored in domestic damages as opposed to global impacts," estimated costs to range from $1 to $7 per ton. *Id.* EPA fails to address that massive disparity.

Including noncitizens—who do not pay for compliance or enforcement

costs—in a cost-benefit analysis exaggerates a regulation's benefits while diluting its costs. As with EPA's new rule, noncitizens living abroad bear none of the regulation's costs but arguably reap the purported benefit of cleaner air. Adding noncitizens to one side of the cost-benefit analysis and not the other dramatically skews the results, allowing regulators to consider the regulatory benefits to 8 billion noncitizens while only considering costs imposed on some small fraction of the 337 million U.S. residents who pay the regulatory price tag. *U.S. and World Population Clock*, U.S. Census Bureau (Sept. 4, 2024), https://www.census.gov/popclock/. In other words, regulated Americans bear 100% of the costs and reap only 4.2% of the benefits.[2]

Thus, considering global perspectives was "in excess of statutory [ ] authority" under the APA. 5 U.S.C. § 706.

C. EPA's monetization calculation is speculative and scientifically flawed.

The final rule presents a lengthy and complicated analysis of the costs and benefits of EPA's *de facto* EV mandate. But the validity of the opinion of an expert—i.e. EPA—is based on "whether the reasoning or methodology underlying the [expert's] testimony is scientifically valid and of whether that reasoning or

[2] 337 million U.S. residents divided by the world population of about 8 billion is roughly equal to 4.2%.

methodology properly can be applied to the facts in issue." *Daubert v. Merrell Dow Pharms., Inc*., 509 U.S. 579, 592–93, (1993). Moreover,

> a key question to be answered in determining whether a theory or technique is scientific knowledge . . . [and] whether it can be (and has been) tested. "Scientific methodology today is based on generating hypotheses and testing them to see if they can be falsified; indeed, this methodology is what distinguishes science from other fields of human inquiry."

Id. at 593 (quoting Michael D. Green, *Expert Witnesses and Sufficiency of Evidence in Toxic Substances Litigation: The Legacy of Agent Orange and Bendectin Litigation*, 86 Nw. U. L. Rev. 643, 645 (1992)). EPA's cost-benefit analysis does not satisfy the Supreme Court's test.

EPA recognizes the up-front "[c]ompliance costs of $760 billion." Model Years 2027 and Later Rule, 89 Fed. Reg. at 27899. Then it speculates as to the costs and benefits for over 30 years, starting in 2027 and forward to 2055. While mythical soothsayers pretend to see 30+ years into the future, it is inconceivable that the government can do so accurately. Then EPA quantifies unquantifiable, intangible value-laden "benefits" to inflate the monetary benefits of its rule. It further inflates the benefits using an unreasonably small discount rate of 2%—without any apparent consideration of the impacts of inflation. Based on these stacked and unprovable opinions, EPA predicts a 99-billion-dollar societal benefit for the designated 30-year period. *Id.* at 27859. As with any other scenario, the Court should throw out that analysis as speculative and junk science.

First, extended, multi-year projections are seldom more than guesses or speculation. *See, e.g., Goodwin v. MTD Prod., Inc.*, 232 F.3d 600, 609 (7th Cir. 2000) (expert's proffered testimony not admissible because it was based on speculation); *Council of Parent Att'ys & Advocs., Inc. v. DeVos*, 365 F. Supp. 3d 28, 51 (D.D.C. 2019) (noting that "an agency's predictive judgments about the likely economic effects of a rule . . . must be based on some logic and evidence, not sheer speculation" (quotation marks and citations omitted)). EPA is now trying to predict a world in 2055—or over 30 years from now. And EPA even relies on a prediction of "100-year global warming potential values." Model Years 2027 and Later Rule, 89 Fed. Reg. at 27858.

Courts do not accept future projections "based upon 'a multitude of assumptions' that require 'speculation and conjecture.'" *Schonfeld v. Hilliard*, 218 F.3d 164, 172 (2d Cir. 2000) (citation omitted). Here, EPA sorted through many speculative projections presented by dozens of "experts" during the notice and comment period and selected its preferred speculations. It made assumptions for the next 30+ years on the price of gasoline, electricity, car insurance, car repairs, etc. Model Years 2027 and Later Rule, 89 Fed. Reg. at 27859–861. It speculated as to the availability of electrical power, transmission lines, consumer preferences, and a host of other variables. *See, e.g., id.* EPA's predictions of the future should be rejected just as the *Schonfeld* court rejected the predictions presented in that case.

EPA then quantified unquantifiable intangibles such as noise costs, congestion costs, health benefits, refueling time benefits, energy security benefits, and climate benefits. *See, e.g., id.* at 27859. These are opinions, not scientifically verifiable facts. And different people have different opinions on these intangibles, and those opinions change from month to month and year to year. EPA is not using "scientific methodology," it is using "[an]other field[] of human inquiry," *Daubert*, 509 U.S. at 593 (citation omitted), i.e. personal opinion, which cannot justify a regulation under the APA.

Finally, EPA's calculation uses a grossly incorrect discount rate of only 2% to calculate its alleged 99-billion-dollar benefit. Future benefits must be discounted to a present value by using a realistic interest rate. The longer the regulatory benefits are projected into the future, the greater the discount rate that is necessary to account for greater time preference, risk, and uncertainty. A thirty-year "intergenerational" benefits timeline strongly suggests a much higher discount rate is appropriate. EPA provides calculations based on 2%, 3%, and 7%, but ultimately uses the lowest discount rate—the one most beneficial to justifying its rule. But 7% represents the long run return on capital rooted in over a century of stock market data. Given the speculative nature of EPA's predictions, EPA should be using at least a 7% discount rate. And the 2% discount rate does not, and cannot possibly include, a discount

based on inflation. The final rule's preamble never explains if it considers inflation, or if so, what inflation rate it anticipates over the next 30+ years.

"The public must be able to trust the science and scientific process informing public policy decisions." Barack Obama, *Memorandum for the Heads of Executive Departments and Agencies*, The White House (Mar. 9, 2009), https://obamawhitehouse.archives.gov/the-press-office/memorandum-heads-executive-departments-and-agencies-3-9-09. The public cannot trust that the final rule is based on science, and neither should the Court.

II. Ford miscalculated the long-term demand for electric vehicles and now wishes to have the government bail it out.

Demand for electric vehicles is not what it once was, and the auto industry knows it. Despite having a successful 2023, EV prices are dropping drastically, and demand has plateaued. *Why are EV sales slowing?*, Goldman Sachs (May 21, 2024), https://www.goldmansachs.com/insights/articles/why-are-ev-sales-slowing. Since 2022, the average price for a new EV declined by about 15%, from $65,000 to $56,648. Kristopher J. Brooks, *Electric vehicle prices are tumbling. Here's how they now compare with gas-powered cars*, CBS News (June 26, 2024), https://www.cbsnews.com/news/electric-vehicle-prices-falling-2024-ev-tax-credit/. From 2023 to 2024, the average price for a used EV dropped by 42%, from $40,783 to $28,767. *Id.* These price drops come as demand cools and dealership inventory builds. *Id.* This stalling demand is caused by the high price of EVs, compared to gas

cars, concerns about battery life, and the fact that most people who want an EV, already have one. Peter Lyon, *EV Sales Slow As Buyers Want 20-Minute Charging And 350-Mile Range*, Forbes (Mar. 24, 2024), https://www.forbes.com/sites/peterlyon/2024/03/24/why-arent-evs-selling-as-experts-predicted/.

Recognizing this trend, car manufacturers, including Ford, are preparing for EV demand to bottom out, causing many auto giants to abandon plans to produce all-electric fleets in the coming years. *Id.* Recognizing consumer aversion to EVs, Mercedes Benz elected to postpone its original goal for EVs and hybrids to make up 50% of sales by 2025 until 2030. *Id.* Likewise, General Motors "is pulling back on its plan to build 400,000 EVs by mid-2024," and abandoned plans to work with Honda to create more affordable EVs. *Id.* Even Tesla, which accounts for over half the EV sales annually, recently experienced its worst quarterly profits in two years—a decline that cost it $138 billion in the value of its shares. *Id.* Ford, which is "postponing billions of dollars in EV investment," is producing more EVs than it can sell. *Id.* Now, Ford seeks to have the government bail it out through the EPA's Multi-Pollutant Rule.

A. Ford's failed investment in EVs is just a bad bet, not a market failure.

Not all car manufacturers followed suit when Ford and others invested heavily in EVs. Toyota and Honda each produce one EV but offer many hybrids. *Id.* Those

brands are doubling down as they redesign some of their top selling hybrids, vehicles which have already been great successes. Aparna Narayanan, *Hybrid Cars Retake The Limelight As EV Sales Slow. What It Means For Ford, GM, Tesla.*, Investor's Business Daily (Apr. 5, 2024), https://tinyurl.com/4fstnrth. And this apparent bet on hybrids is paying off as Honda saw a 32% increase in sales in 2023 over 2022 and Toyota saw a 16% gain in the same period. Lyon, *supra*.

These numbers further evidence that while Ford claims it is interested in "preventing the possibility of flip-flopping or changing standards," Ford Mot. Intervene at 5, Ford is really interested in the government rescuing it from its bad investment. In the first quarter of 2024, Ford lost more than $100,000 on *every* EV it produced and expects losses exceeding $5.5 billion for the year. *Ford Cuts Battery Orders as EV Losses Top $100,000 Per Car (Bloomberg)*, National Automobile Dealers Association (May 13, 2024), https://www.nada.org/nada/nada-headlines/ford-cuts-battery-orders-ev-losses-top-100000-car-bloomberg. Ford wants the EPA's rule upheld and enforced, not to prevent "flip-flopping," but to prevent their EVs from flopping. The EPA rule will ultimately force consumers to buy the EVs that they do not want by requiring manufacturers to meet strict emissions standards. Meanwhile, Ford and other car manufacturers' poor investments will be rescued by the government mandate. Instead of ensuring all companies are held to the same standard, the rule will just give Ford a competitive

advantage over other car manufacturers, like Honda and Toyota, which did not gamble heavily on an EV boom.

Ford's statement that it desires "a stable regulatory landscape for corporate planning," Ford Mot. Intervene at 2, does not hold water either. Ford invested time and money in the EV market long before this rule was announced and its claim that the rule should be enforced for stability in corporate planning is specious. Starting in 2022, Ford began investing billions in new EV production facilities. *Ford Takes Bold Steps Toward All-Electric Future in Europe; 7 New Connected EVs Support Plans to Sell 600K+ EVs Annually by 2026*, Ford (Mar. 22, 2022), https://tinyurl.com/2uzar9zu. It was not until March 20, 2024, almost two years later to the day, that EPA's rule was promulgated. Model Years 2027 and Later Rule, 89 Fed. Reg. 27842.

Scraping the rule would not create a government mandate for Ford to change its plans or investments. EPA rules set *minimum* standards for car companies to meet, and Ford is free to go beyond the prior efficiency standards even if they lack legal mandate. *See* Model Years 2027 and Later Rule, 89 Fed. Reg. 27842. Again, Ford wants the rule enforced to save its bad investment.

B. This is not the first government bailout for EVs or the auto industry.

Government assistance is not a new concept to Ford or the rest of the auto industry, as there are already billions of dollars in subsidies and tax incentives

available to manufacturers and consumers to help prop up EVs. U.S. Dep't of Energy, *Biden-Harris Administration Announces $15.5 Billion to Support a Strong and Just Transition to Electric Vehicles, Retooling Existing Plants, and Rehiring Existing Workers*, energy.gov (Aug. 31, 2024), https://tinyurl.com/zu7d49pk. Consumers purchasing new EVs can be eligible for a tax credit worth up to $7,500, while consumers purchasing used EVs may be eligible for a credit of up to $4,000. U.S. Dep't of Energy, *Electric Vehicles*, energy.gov, https://www.energy.gov/save/electric-vehicles (last visited Aug. 29, 2024). The government even offers EV owners a credit worth up to $1,000 for installing a home charger. *Id.* Despite these benefits, consumers still have not embraced EVs.

In August 2023, the Biden Administration announced "a $15.5 billion package of funding and loans primarily focused on retooling existing factories for the transition to." U.S. Dep't of Energy, *Biden-Harris Administration Announces $15.5 Billion to Support a Strong and Just Transition to Electric Vehicles, Retooling Existing Plants, and Rehiring Existing Workers*, *supra*. The package includes $2 billion in grants and up to $10 billion in loans for manufacturers. *Id.* Without the government flooding the EV market with cash, EVs could not survive. But Ford demands even more—government mandates to keep its EV ventures afloat.

Energy companies and local governments across the country also offer consumers thousands of dollars of EV purchase incentives. Chantel Wakefield,

Electric Car Rebates and Incentives: What to Know by State, Kelley Blue Book (Aug. 16, 2024), https://www.kbb.com/car-advice/electric-vehicle-rebates-by-state/. Some incentives apply when customers buy electric vehicles or home chargers. *Id.* Other incentives are offered to customers who charge their vehicles during "off hours" to help reduce the growing burden felt by the electrical grid. *Id.*

Increased EV use has increased the wear and tear on the electrical grid. EJ Antoni & Anthony F. Esposito, *Taxpayers Are Subsidizing Rich Electric-Vehicle Owners—To the Tune of Billions,* The Heritage Foundation (Nov. 9, 2023), https://www.heritage.org/government-regulation/commentary/taxpayers-are-subsidizing-rich-electric-vehicle-owners-the-tune. Plus, "[m]ost major utilities have already conceded they won't be able to meet the significant capacity additions needed to support proposed EV mandates." *Id.* The grid cannot support EVs and American consumers do not want EVs, but Ford wants to force people to buy them anyway.

Ford next says it just wants a "level playing field." Ford Mot. Intervene at 7. Ford is the third largest automotive manufacturer in the U.S., occupying 13% of the market share, and only behind General Motors (16.89%) and Toyota (14.46%). Mathilde Carlier, *Estimated U.S. market share held by selected automotive manufacturers in 2023*, Statista (Mar. 11, 2024), https://tinyurl.com/yc5r77ke. This

is disingenuous at best—what Ford really wants is a bailout to prevent other brands who read the market better than Ford from surpassing its market share.

The car industry is well acquainted with government bailouts. After the 2008 financial crisis, the government bailed out GM and Chrysler with an $80 billion package. Braden Goyette, *What Is Obama's Actual Record on Creating Jobs?*, ProPublica (Oct. 5, 2011), https://tinyurl.com/3s27fyfa. Ford did not take any bailout money then, but now it seeks to cash in on the political capital it earned by having the EPA force consumers to buy Ford's unwanted EVs. Eugene Kiely, *Ford Motor Co. Does U-turn on Bailouts*, FactCheck (Sept. 20, 2011), https://www.factcheck.org/2011/09/ford-motor-co-does-u-turn-on-bailouts/; Michael Wayland, *Ford to spend $3 billion to expand large truck production to a plant previously set for EVs*, NBC News (July 18, 2024), https://www.nbcnews.com/business/autos/ford-spend-3-billion-expand-large-truck-production-plant-electric-cars-rcna162512. Perhaps this reveals a sense of entitlement by Ford, almost to say, "it's our turn to be saved now." The pattern of the government swooping in to save floundering car companies from their own poor decisions and planning should be broken and the EPA's rule thrown out without regard for the financial impact it would have on Ford or similar companies.

III. Forced electrification will harm American consumers.

Electric vehicles are extremely expensive and cost-prohibitive for most

Americans. Over 80% of Americans do not want them. *See* Brooks, *supra*. For these consumers, concerns about cost, range, and charging stations vastly outweigh any benefits they perceive. *Id.* Yet EPA ignored these concerns and the enormous consequences that forced electrification will have on consumers.

Electric vehicles come with a large price tag—one that is unaffordable for most Americans. *On average*, electric vehicles cost over $8,000 more than the overall industry average, even with recent price drops for electric vehicles. *See* Kelley Blue Book, *How much are electric cars?*, Kelley Blue Book (Aug. 20, 2024), prn.to/3T2c2aA. And the cheapest new EV, the Nissan Leaf ($29,280) is over $11,000 more than the cheapest new gas-powered vehicle the Nissan Versa ($17,820). Compare *Here Are the 11 Cheapest Electric Vehicles You Can Buy*, cars.com (Aug. 28, 2024), https://www.cars.com/articles/here-are-the-11-cheapest-electric-vehicles-you-can-buy-439849/, with Nelson Ireson *The Cheapest New Cars of 2024-2025*, Kelly Blue Book (Aug. 29, 2024), https://www.kbb.com/best-cars/cheapest-new-cars/. In this example, the EV costs 64% more than the comparable gas-powered car. For most Americans, these price differentials are very meaningful in making a car purchase.

EPA papers over all of this. It suggests that "[o]ver time, reductions in fuel consumption will offset the increase in upfront costs." 2023 and Later Model Year Rule, 86 Fed. Reg. at 74511. *Accord* Model Years 2027 and Later Rule, 89 Fed. Reg.

at 28136–137. Even if EPA's claim were true, it is little comfort for those Americans who can't afford those upfront costs. EPA previously claimed that lower-income individuals can just buy *used* electric vehicles and save on those upfront costs. 2023 and Later Model Year Rule, 86 Fed. Reg. at 74512–513. But cars cannot enter the market as used cars. Someone must buy a new electric vehicle for it to be resold as a used car.

Even then, used electric cars still come with a huge price tag. The replacement of batteries alone makes electric cars cost-prohibitive for many Americans. Unlike internal combustion engines, batteries degrade over time regardless of use. Jon Witt, *Costs of Electric Car Battery Replacement*, Recurrent (Aug. 25, 2022), bit.ly/3h9RZKf. "An electric car's range decreases with each drive." *Forced Electric Cars Harm Our Planet and Humanity*, The Denver Gazette (Sept. 4, 2022), bit.ly/3FRknuS. A replacement battery for an electric vehicle typically costs between $6,500 and $20,000, plus labor. Jon Witt, *Electric Car Battery Replacement Costs*, Recurrent (June 24, 2024), https://www.recurrentauto.com/research/costs-ev-battery-replacement. Simply put, that cost alone "will put used vehicles out of range for low-income buyers." *Forced Electric Cars Harm Our Planet and Humanity*, *supra*.

Beyond normal economic concerns, lithium extraction, and production (along with other vital resources) has its own sensitive geopolitical considerations. Most of

these raw materials for electric cars, including lithium, come from "insecure" locations. The White House, *Building Resilient Supply Chains, Revitalizing American Manufacturing, and Fostering Broad-Based Growth* 13, 21 (2021), https://www.whitehouse.gov/wp-content/uploads/2021/06/100-day-supply-chain-review-report.pdf. Specifically, "China currently dominates the global lithium-ion battery supply chain, producing 79% of all lithium-ion batteries[;] . . . 61% of global lithium refining for battery storage and electric vehicles and 100% of the processing of natural graphite used for battery anodes." Elizabeth P. Nevle, *Supply Chain Disruptions in the Energy Industry: Challenges with the Supply of Lithium-ion Batteries*, Foley (Sept. 1, 2022), https://www.foley.com/insights/publications/2022/09/supply-chain-disruptions-energy-lithium-ion/.

The battery life limitations negatively affect consumer interest in EVs. Battery degradation harms consumers who purchase new EVs by decreasing the vehicle's range and value. Ashlyn Brooks, *Gas vs. electric vehicles: Which is cheaper to own?*, Bankrate (Aug. 27, 2024), https://www.bankrate.com/insurance/car/electric-cars-vs-gas-cars/. The rapidly changing technology in EVs also causes them to depreciate faster than gas vehicles. *Id.* Battery degradation harms consumers who purchase used EVs as well because excessive degradation may require the consumer to replace the battery, which can

cost thousands of dollars. Witt, *Electric Car Battery Replacement Costs*, *supra*. But the government ignores these limitations and consequent legitimate consumer concerns.

The cost of installing a charger and having the space to charge offer their own obstacles for consumers. The price of a charger and the installation fee vary widely depending on the type of charger and where a consumer lives but can cost between $1,000 and $45,000. Alexandre Mouravskiy, *How Much Does a Home EV Charger Really Cost?*, CapitalOne (Oct. 31, 2023), https://www.capitalone.com/cars/learn/managing-your-money-wisely/how-much-does-a-home-ev-charger-really-cost/2737. Even more problematic is finding the space to charge the EV. Due to a lack of space, like a garage or driveway, one in three Americans do not have access to home charging, adding another obstacle for consumers. Lyon, *supra*.

As far as public charging stations go, the country lacks the infrastructure necessary to support the "widespread adoption of EVs." *Id.* And the U.S. will still need "almost 20 times more chargers than it has now." *See* Phillip Kampshoff et al., *Building the Electric-Vehicle Charging Infrastructure America Needs*, McKinsey & Co. (Apr. 18, 2022), mck.co/3TgY98Q. Even "[i]n a scenario in which half of all vehicles sold are zero-emission vehicles" by 2030 (the federal target), researchers estimate that the country "would require 1.2 million public EV chargers and 28

million private EV chargers by that year." *Id.* Plus, [a]ccording to research done in 2022 by the University of California, Berkeley, one-quarter of public chargers in the San Francisco Bay Area did not work due to unresponsive screens, payment system anomalies, network failures or just broken connectors." Lyon, *supra.*

Ford summarized these concerns for those "making the EV switch": "Things like how you drive, where you live, and what you do with a vehicle day to day … [] all factor into the decision." *Let's Go Electric, Together*, Ford, https://tinyurl.com/v95wt8nx (last visited Sept. 5, 2024). In the end, EPA ignored these concerns and the enormous consequences that forced electrification will have on American consumers.

CONCLUSION

For the foregoing reasons, this Court should enter judgment in favor of Petitioners.

Respectfully submitted,

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CERTIFICATE OF COMPLIANCE

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CERTIFICATE OF SERVICE

The undersigned hereby certifies that a copy of the foregoing amicus brief was served on all counsel of record via the Court's electronic filing system this 13th day of September 2024.

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