

No. 10-174

IN THE
Supreme Court of the United States

AMERICAN ELECTRIC POWER CO., INC., *et al.*,
Petitioners,

v.

STATE OF CONNECTICUT, *et al.*,
Respondents.

On Writ of Certiorari to the United States
Court of Appeals for the Second Circuit

**BRIEF OF ALLEARTH RENEWABLES, INC.,
NAMASTÉ SOLAR, PETERSENDEAN, INC.,
REVISION ENERGY AND WESTINGHOUSE
SOLAR AS *AMICI CURIAE* IN
SUPPORT OF RESPONDENTS**

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INTERESTS OF THE *AMICI*¹

Amici curiae are renewable energy businesses that provide grid-connected solar and wind energy systems for commercial and residential customers throughout the country. The renewable energy *amici* compete directly with many of the electrical generators that are Defendants in this case.

As described more fully in the argument below, the renewable industry *amici* have a strong interest in supplying the Court with information regarding the market distortions and unfair competitive advantage created when carbon-intensive electrical energy providers are allowed to freely discharge large volumes of greenhouse gas (“GHG”) pollution and thereby externalize what should be a normal cost of doing business. *Amici* concur with Plaintiff-respondents that the federal common law of nuisance should apply to greenhouse gas emissions just as it does to other interstate pollutants, and that this case should be allowed to proceed to the merits stage. To create a categorical exception to nuisance doctrines for GHG emissions would perpetuate these market imbalances, incentivize further pollution and penalize clean energy providers such as *amici*.

AllEarth Renewables, Inc.,² is a Vermont company that specializes in the design, manufacture

¹ The parties have consented to the filing of this brief in letters of consent on file with the Clerk. No counsel for any party authored this brief in whole or in part or provided financial support. This brief was funded by the *amici curiae* and their counsel, with the assistance of grants from the Oak Foundation, USA, and the Swift Foundation.

² See www.allearthrenewables.com.

and installation of complete grid-connected wind and solar renewable energy systems that lessen dependence on nuclear and fossil fuels and reduce greenhouse gas emissions.

Namasté Solar Electric, Inc. (“Namasté Solar”),³ is a Colorado company that has expertise in residential and commercial solar photovoltaic project development, design, installation, operations, maintenance and related professional services. Namasté Solar enables the responsible use of customer-sited solar energy and pioneers conscientious business practices. Namasté Solar is a leading solar company in Colorado.

PetersenDean, Inc. (“PetersenDean”),⁴ is a full-service, national roofing and solar contractor, with 27 years of experience in complex residential, commercial, institutional and government projects. PetersenDean’s “Smarter Roof Systems” include design and installation of a variety of solar energy systems, including photovoltaic solar panels, integrated solar roofing tiles and shingles and integrated solar laminates for metal roofing. PetersenDean is headquartered in northern California and maintains fifteen regional offices in the states of California, Texas, Arizona, Florida and Nevada.

ReVision Energy⁵ is a full-service renewable energy contracting company that designs, installs and services solar electric energy systems for homes, businesses, municipal buildings and nonprofits

³ See www.namastesolar.com.

⁴ See www.petersendean.com.

⁵ See www.revisionenergy.com.

throughout northern New England. ReVision Energy helps people and businesses transition away from fossil fuels to sustainable solar energy.

Westinghouse Solar⁶ is a manufacturer, designer and distributor of solar-power systems. The company has over 25 pending or issued patents related to solar-panel technology. It sells its products through multiple channels that currently include a growing distribution network of Westinghouse Solar Authorized Dealers throughout the United States, as well as through retail at Lowe's Home Improvement stores. Westinghouse Solar is headquartered in Campbell, California.

SUMMARY OF ARGUMENT

At present, it is generally more expensive to produce electricity using renewable solar technologies than using carbon-intensive fossil fuels. That cost differential is due in large part to the fact that fossil fuel-based companies can discharge massive amounts of carbon dioxide (“CO₂”) into the atmosphere for free, imposing the costs of such emissions upon others without their consent. The practice of externalizing the cost of GHG pollution distorts the marketplace and exacerbates climate change by incentivizing further pollution while impeding urgently needed clean energy solutions.

Application of the federal common law of nuisance can provide a significant step in the process of internalizing these costs. Nuisance law has addressed a wide range of other interstate air and water pollution problems. There is no principled

⁶ See www.westinghousesolar.com.

distinction between those kinds of pollution and the carbon dioxide pollution at issue here. For this reason, *amici* urge the Court to affirm the decision below and allow the District Court to proceed to the merits of Plaintiffs' claims.

While no one would suggest that nuisance law, standing alone, can solve global warming, it has traditionally been a flexible, adaptable body of law that has helped address serious problems that share the same essential features of the problem of global warming. On the other hand, the exemption sought by Defendants, if granted, would amount to an extraordinary grant of tort immunity to the largest sources of greenhouse gases in the nation. That exemption would permanently distort energy markets in favor of polluting industries and against the clean companies that provide a similar product but without infringing upon the public good. Such a result is unwarranted and is patently contrary to our nation's legal tradition and economic principles.

For these reasons, the Court should affirm the decision of the Court of Appeals.

ARGUMENT

I. NUISANCE LAW IS AN APPROPRIATE MECHANISM TO CORRECT THE MARKET FAILURES CAUSED BY EXTERNALIZING CARBON DIOXIDE EMISSIONS

What the law calls a nuisance, economics terms an externality and market failure. Both definitions apply to the alleged harmful actions of Defendants in this case and support Plaintiffs' request to proceed with their nuisance claims on the merits.

A nuisance occurs under federal common law when “the defendant is carrying on an activity that is causing an injury or significant threat of injury to some cognizable interest of the complainant.” *Illinois v. City of Milwaukee*, 599 F.2d 151, 165 (7th Cir. 1979), *vacated on other grounds, Milwaukee v. Illinois*, 451 U.S. 304, 318 (1981); *see also* Restatement (Second) of Torts § 821B(1) (1979) (defining public nuisance as an “unreasonable interference with a right common to the general public”).⁷

The nuisance doctrine, in turn, reflects long-held economic principles disfavoring conduct that re-allocates part of the cost of doing business to other parties without their consent.

Our price system fails to take into account the environmental damage that the polluter inflicts on others. Economists call these damages “external social costs” (externalities). They reflect the ability of one entity, *e.g.*, a company, to use water or air as a free resource for waste disposal, while others pay the cost in contaminated air or water.

The Council on Environmental Quality, *The State of the Environment* (1970). *See also* James L. Huffman, *Environmental Protection and the Politics of Property Rights: The Public Interest in Private Property*

⁷ *See Nat’l Sea Clammers Ass’n v. City of New York*, 616 F.2d 1222, 1234 (3d Cir. 1980) (applying Restatement’s definition of public nuisance in federal common law of nuisance litigation), *vacated on other grounds, Middlesex Cnty. Sewerage Auth. v. Nat’l Sea Clammers Ass’n*, 453 U.S. 1 (1981).

Rights, 50 Okla. L. Rev. 377, 380 n.11, 383-84 (1997) (when “costs are ‘externalized’ to third parties, there is a market failure in the sense that one of the assumed conditions of an efficient market is missing”).

Allowing private parties to externalize the costs of their pollution damages the common good and produces economic distortions and inefficiencies.⁸

In the electrical sector, the social costs and market-distorting effect of externalizing pollution are well documented: low-priced power is not the same thing as low-cost power.⁹ To the extent that consumers do not pay for the cost of pollution, or do not compensate people for harm done to them, “they do not face the full cost of the services they purchase (*i.e.*, their energy use is being implicitly subsidised) and, thus, energy resources will not be allocated

⁸ See, *e.g.*, Zygmunt J.B. Plater, *et al.*, *Environmental Law and Policy: Nature, Law, and Society* (1992) (in absence of legal rule forbidding pollution or requiring payment for pollution harms, rational producer will not undertake pollution controls because it would increase costs and thereby reduce profit); Garrett Hardin, *The Tragedy of the Commons*, 162 *Sci.* 1243, 1245 (1968) (same).

⁹ See, *e.g.*, Rudy Perkins, Note, *Electricity Deregulation, Environmental Externalities and the Limitations of Price*, 39 *B.C.L. Rev.* 993, 1015-23 (1998) (cataloguing history of externalities in the electrical sector and attempts by state public utility commissions to include an assumed price, or “adder”, for planning purposes to account for such costs). Examples of externalities range from localized impacts, such as water consumption, to regional impacts such as acid rain and haze caused by emissions of sulfur and nitrous oxides and particulates, to global and temporal impacts caused by global warming and the creation of long-term radioactive waste. *Id.*

efficiently.” Anthony Owen, *Renewable Energy: Externality Costs as Market Barriers*, 34 *Energy Policy* 632, 633-34 (2006). See also Mass. Dep’t Pub. Utilities, Order No. D.P.U. 86-38-G, at 79 (Jan. 1998) (failure to consider environmental externalities “increases the likelihood of selecting suboptimal energy projects”), quoted in Rudy Perkins, Note, *Electricity Deregulation, Environmental Externalities and the Limitations of Price*, 39 *B.C.L. Rev.* 993, 1015-23 (1998) [hereinafter *Electricity Deregulation*].

Use of the atmosphere as a free and unlimited waste repository for emissions of carbon dioxide is simply an old problem on a larger scale. Although the effects are global, such behavior still externalizes interstate pollution in a manner that harms others, including Plaintiffs and *amici*.

“The earth’s atmosphere is a global commons into which the world’s population emits the gaseous by-products of its activities” *If fuel costs included the full cost of the environmental consequences of the combustion of the fuel, there would be no marginal benefit to increased use of currently low cost fuels such as coal that emit large amounts of CO₂ into the global commons.* “Unfortunately, the tragedy the world now faces is that the economic benefits that each electricity generator derives from emitting more CO₂ are greater than the harm to it resulting from the increased emissions.”

Roberta Mann, *Waiting to Exhale?: Global Warming and Tax Policy*, 51 *Am. U. L. Rev.* 1135, 1144 n.38

(2002) (emphasis added) (quoting Richard L. Ottinger, *et al.*, *Environmental Costs of Electricity* 127 (Oceana Publications 1990)).¹⁰

“The harms associated with climate change are serious and well recognized.” *Massachusetts v. EPA*, 549 U.S. 497, 521 (2007). Atmospheric concentrations of carbon dioxide, the primary greenhouse gas, have risen from approximately 280 parts per million (“ppm”) before the Industrial Revolution to over 390 ppm and counting. Dr. Pieter Tans, National Oceanic & Atmospheric Administration Earth System Research Laboratory, *Trends in Atmospheric Carbon Dioxide* (March 2011)¹¹; Intergovernmental Panel On Climate Change (IPCC), *Climate Change 2007: Synthesis Report* 37 (2007) [hereinafter *IPCC Synthesis Report*]. Almost a third of the accumulated inventory of CO₂ in the atmosphere derived from activities in the United States. *See* Cass Sunstein, *Of Montreal and Kyoto: A Tale of Two Protocols*, 31 Harv. Envtl. L. Rev. 2, 50 (2007) [hereinafter *Two Protocols*] (U.S. is responsible for 30 percent of cumulative world CO₂ emissions between 1850 and 2002). Substantial portions of those U.S. emissions have come from the electrical sector, including the activities of the Defendant utilities.¹² *See Electricity Deregulation,*

¹⁰ *See also* Hans-Werner Sinn, *Public Policies Against Global Warming: A Supply Side Approach*, 15 Int. Tax Pub. Fin. 360, 372 (2008) (GHG emissions are “an externality *par excellence* as they distribute evenly around the globe, damaging air quality, the world’s most precious public good”).

¹¹ Available at <http://www.esrl.noaa.gov/gmd/ccgg/trends/>.

¹² Defendant utilities are alleged to be the five largest sources of GHG emissions in the U.S. and among the largest in the

supra, at 1050-51 (U.S. electricity production responsible for approximately seven percent of aggregate world CO₂ output).

The ever-rising level of carbon dioxide pollution has already triggered climate changes, with concomitant impacts to property, health and natural resources. *See, e.g.*, National Academy of Sciences, *Understanding and Responding to Climate Change* 16-18 (2008).¹³ Even with no further emissions, warming will continue and may accelerate in coming years due to the long-lived nature of CO₂ pollution. James Hansen, *et al.*, *Target Atmospheric CO₂: Where Should Humanity Aim?*, 2 *The Open Atmospheric Sci. J.* 217, 221 (2008) [hereinafter *Target Atmospheric CO₂*].¹⁴ With continuing emissions, the rate of warming will accelerate. *Id.*

The bill for this pollution is now coming due, in the form of increased severe weather events, droughts, reduced snowpack levels, depletion of arctic ice and gradually rising seas. *IPCC Synthesis Report, supra*, at 30-33. Estimates of the potential financial impact from these and future impacts are in the trillions of dollars, ranging from, on the low side, one to five percent of the world's gross domestic product ("GDP") to six to 20 percent or more of GDP.

world. *Connecticut v. American Elec. Power Co., Inc.*, 582 F. 3d 309, 314-16 (2d Cir. 2009).

¹³ Available at http://dels-old.nas.edu/dels/rpt_briefs/climate_change_2008_final.pdf.

¹⁴ *See also Center for Biological Diversity v. Nat'l Highway Traffic Safety Admin.*, 538 F.3d 1172, 1190-91 (9th Cir. 2008) (summarizing science on climate change).

Two Protocols, *supra*, at 32.¹⁵ Anthropogenic emissions risk triggering catastrophic impacts. *Massachusetts v. EPA*, 549 U.S. at 526.¹⁶

Climate change is correctly viewed in economic terms as the “greatest and widest-ranging market failure ever seen.” Sir Nicholas Stern in Her Majesty’s Treasury, *The Stern Review on the Economics of Climate Change i* (2006) [hereinafter *Stern Review 2006*].¹⁷ Given the scale of the climate threat, the ability of very large polluters, such as the Defendants here, to emit greenhouse gases without limit is already a “market failure of epic proportions, since free market forces have failed to account for the enormous economic and social costs that would accompany global climate change.” Reuven S. Avi-

¹⁵ In *Two Protocols*, Sunstein quotes a range of climate change damage estimates from recent economic studies, including Frank Ackerman & Ian J. Finlayson, *The Economics of Inaction on Climate Change: A Sensitivity Analysis*, Tufts Univ. Global Dev. & Env. Inst. Working Paper No. 06-07 (2006); Sir Nicholas Stern in Her Majesty’s Treasury, *Stern Review on the Economics of Climate Change* (2006); Claudia Kemfert, *Global Climate Protection—Immediate Action Will Avert High Costs*, DIW Wkly. Rep. 135 (2005); Richard Posner, *Catastrophe* 161–63 (2004); James Houghton, *Global Warming: The Complete Briefing* 17 (3d ed. 2004); and William Nordhaus & Joseph Boyer, *Warming the World* 162–68 (2000). *Two Protocols* at 32.

¹⁶ See also *Target Atmospheric CO₂*, *supra*, at 228 (“If we stay our present course, using fossil fuels to feed a growing appetite for energy-intensive life styles, we will soon leave the climate of the Holocene, the world of prior human history.”).

¹⁷ Available at http://www.hm-treasury.gov.uk/sternreview_index.htm. See also the Stern Review’s subsequent update and response to criticisms: Sir Nicholas Stern, *The Economics of Climate Change*, 98:2 Am. Econ. Rev. 1 (2008).

Yonah & David M. Uhlmann, *Combating Global Climate Change: Why a Carbon Tax is a Better Response to Global Warming than Cap and Trade*, 28 *Stan. Envtl. L. J.* 3, 30 (2009).

Defendants ask this Court to categorically exempt global warming pollution from the tort doctrines that apply to other pollutants on grounds of the magnitude of the problem and number of contributors. They argue for dismissal even before the district court can hear the merits and consider the proof. But the scale of the problem does not negate Plaintiffs' nuisance claims; it underscores them. *Cf. Missouri v. Illinois*, 180 U.S. 208, 248-49 (1901) (nuisance claim may apply to alleged water-borne hazard of vast and new scale; issues such as causation and cure must be addressed on merits). There is no basis in legal or economic principles to find that interstate nuisances otherwise cognizable under federal law somehow lose cognizability because of their scale. Under long established law, Plaintiffs have the same right to seek abatement of Defendants' carbon dioxide emissions as the plaintiffs in *Georgia v. Tennessee Copper Co.* had to seek abatement of sulfur dioxide emissions more than a century ago. *Georgia v. Tennessee Copper Co.*, 206 U.S. 230 (1907). *See also Missouri v. Illinois*, 180 U.S. at 244-45 (equity is "a salutary jurisdiction, especially where a nuisance affects the health, morals or safety of the community") (quoting *Mugler v. Kansas*, 123 U.S. 623, 673 (1887)); Restatement (Second) of Torts § 821B(1) (1979).¹⁸ There is no

¹⁸ Interference with a public right under § 821B(1) is unreasonable and therefore tortious when the "conduct involves a significant interference with the public health, the public

basis to depart from these long-standing precedents here.¹⁹

One does not gain the unfettered right to continue to pollute the global atmospheric commons for free simply because the magnitude of the harm is great and because others contribute to the harm.²⁰ Under both nuisance doctrine and economic principles,

safety, the public peace, the public comfort or the public convenience,” Restatement (Second) of Torts § 821B(2)(a) (1979), or when “the conduct is of a continuing nature or has produced a permanent or long-lasting effect, and, as the actor knows or has reason to know, has a significant effect upon the public right.” *Id.* § 821B(2)(c). These factors could not more perfectly describe global warming.

¹⁹ Defendants also suggest that the complaint must be dismissed on political question grounds, because the judiciary cannot make an initial policy decision about who should bear the cost of global warming. But this is not a case in which judges abstain from politics by refusing to engage. If the Court were to categorically remove GHG emissions from the traditional realm of nuisance law, it would in effect be making the political decision to assign the burden of nuisance costs to the public and to competing firms that do not export their business cost onto the public.

²⁰ To be sure, Congress – as part of a comprehensive climate change legislation or otherwise – might choose to displace some or all kinds of nuisance claims directed at GHG emissions. *Cf. Int’l Paper Co. v. Ouellette*, 479 U.S. 481, 494-98 (1987) (concluding that Clean Water Act preempted some state nuisance claims but not others). However, in the absence of Congressional action, there is no basis for exempting such emissions from the operation of the common law. *See Illinois v. City of Milwaukee*, 406 U.S. 91, 107 (1972) (until Congress intervenes, federal courts are empowered to appraise the equities of suits alleging creation of a public nuisance by pollution).

emitters of GHGs should face the same common law standards that have constrained other polluters. Plaintiffs should be entitled to make their case on the merits, based on the same principles that apply to other cases of alleged interstate pollution. *Amici* and similar clean energy firms should not be forced to compete against energy companies bearing an artificial shield against nuisance law and a judicially-approved license to pollute for free.

II. LEVELING THE FIELD WOULD DISCOURAGE FURTHER POLLUTION AND ENCOURAGE DEPLOYMENT OF CLEAN ENERGY

The Court should also decline Defendants' requests to create exceptions to the law of nuisance because such a decision would (1) institutionalize market inefficiencies that are impeding adoption of urgently needed low carbon energy alternatives, and (2) negate market signals that would otherwise drive innovation and development of new and improved technologies to reduce GHG emissions from the electrical sector.

As noted above, "utilities endorse centralized fossil and nuclear power plants because they are able to pass most of the costs from these polluting power systems directly onto consumers and society at large. Renewable power sources, in contrast, provide public benefits that are not yet priced into the electricity market." Benjamin K. Sovacool, *Renewable Energy: Economically Sound, Politically Difficult*, 21:5 Elec. J. 18, 19 (2008) [hereinafter *Renewable Energy*].

Drawing upon a survey of 38 environmental externality studies and 132 emissions estimates from

individual electrical generators, Dr. Sovacool found that the seven electric generating technologies with the lowest true costs – energy efficiency, offshore wind, onshore wind, geothermal, hydroelectric, biomass and solar thermal – are all zero or low-carbon energy fuel sources. *Id.* at 25 (citing and updating Thomas Sundqvist & Patrik Soderholm, *Valuing the Environmental Impacts of Electricity Generation: A Critical Survey*, 8:2 *J. Energy Lit.* 3 (2002)).

Most surveys in the study, however, omitted the externality costs of carbon dioxide emissions. *Id.* at 26. Inclusion of such costs would further reinforce these results. In the aggregate, renewable power sources – wind, solar, biomass, hydropower and geothermal – emit an average of between 5.1 and 59.6 grams of CO₂ per kilowatt hour (“kWh”) over their full generation lifecycles.²¹ Benjamin K. Sovacool & Charmaine Watts, *Going Completely Renewable: Is It Possible (Let Alone Desirable)?*, 22:4 *Elec. J.* 95, 100 (2009) [hereinafter *Going Renewable*]. The next closest, nuclear power, emits twice that, 124 gCO₂/kWh. *Id.* Clean coal with carbon capture and storage systems (theoretically) emits 439 gCO₂/kWh. *Id.* Natural gas emits a lifecycle average of 443 gCO₂/kWh and conventional coal 1,005 gCO₂/kWh. *Id.*

The range of estimated carbon dioxide externality costs from conventional electric generating plants is wide – 1.4 to 700 cents/kWh. *Renewable Energy*,

²¹ The full lifecycle for energy production includes the emissions associated with the manufacture, transportation and construction of the equipment needed to produce the power, such as solar panels, wind turbines or coal-fired boilers.

supra, at 26. However, no matter how it is measured, the price of conventional electricity is considered cheap only because these costs are left out. *See, e.g.*, Owen, *supra*, at 642 (“damage costs resulting from combustion of fossil fuels, if internalised into the price of the resulting output of electricity, could clearly lead to a number of renewable technologies . . . being financially competitive with generation from coal plants”); *Renewable Energy, supra*, at 26 (“If priced to include the risks from greenhouse gas emissions and climate change, the costs of coal would rise 35 to 70 percent more; oil 9 to 18 percent more; natural gas 6 to 12 percent more.”). *See also* Mann, *supra*, at 1144, n.8 (“If fuel costs included the full cost of the environmental consequences of the combustion of the fuel, there would be no marginal benefit to increased use of currently low cost fuels such as coal that emit large amounts of CO₂ into the global commons.”); David A. Grossman, *Warming Up to a Not-So-Radical Idea: Tort-Based Climate Change Litigation*, 28 Colum. J. Envtl. L. 1, 5 (2003) (internalizing the costs of climate change through tort litigation would “make alternative energy sources and more efficient consumption of fossil fuels more desirable, thereby reducing the level of greenhouse gas emissions”).

Failure to include the public cost of carbon emissions in the price of electricity also distorts energy markets in ways that prevent cost-effective solutions to, climate change. First, the inherent environmental subsidy gained from externalizing these costs encourages utilities to increase rather than reduce their GHG emissions. “The cost savings from avoiding GHG reductions are enormous, a huge short term incentive to pollute.” Robert H. Cutting

& Lawrence B. Cahoon, *The Gift That Keeps on Giving: Global Warming Meets the Common Law*, 10 Vt. J. Envtl. L. 109, 113-114 (2008). Nuisance law would eliminate at least some portion of this incentive to pollute. Early emissions reductions are intrinsically more cost effective, because GHG pollution is aggregative and long-lived; reductions in emissions now decrease both the degree of future adverse impacts and the need for drastic and rapid later reductions. Claudia Kemfert, *Global Climate Protection—Immediate Action Will Avert High Costs*, 1:12 DIW Wkly. Rep. 135 (Apr. 12, 2005).

Second, “changes in technology are triggered principally by price signals.” Owen, *supra*, at 632. Incentivizing carbon-intensive energy sources through environmental subsidies – including potential judicial exemptions from nuisance law – blocks those signals. See Xinyu Hua and Kathryn E. Spier, *Information and Externalities in Sequential Litigation*, 161 J. Institutional & Theoretical Econ. 215 (2005) (nuisance actions tend to increase economic efficiency by spreading information about costs, allowing future defendants to determine which precautions to take to mitigate risks and avoid future injuries). Choices made today between deploying a new conventional fossil-fueled power plant or a sustainable renewable option are “hard infrastructure” choices and once installed will affect emissions for many decades to come. Additionally,

. . . once the transmission infrastructure is established to carry power out of a large fossil-fueled-plant to load centers, this creates a transmission and distribution corridor, system hardware,

and distribution patterns . . . [that also becomes] “hard” embedded infrastructure “Hard” infrastructure choices of any kind, once embedded in the physical and distributional fabric of a country, are not easily removed or altered.

Steven Ferrey, *Why Electricity Matters, Developing Nations Matter, and Asia Matters Most of All*, 15 N.Y.U. Envtl. L. J. 113, 157-58 (2007). To get future energy choices right, the cost of GHG emissions must be incorporated into investment decisions. “[I]f significant externalities are not priced into the marketplace then associated environmental degradation will also be ‘locked-in’ and, as a consequence, more environmentally benign technologies could be ‘locked-out.’” Owen, *supra*, at 634.

Third, the market distortions that would result from a blanket rule against the application of nuisance law for high-carbon electricity sources would detract from the effectiveness of programs aimed at reducing carbon dioxide emissions. For example, state and regional efforts to limit carbon dioxide emissions through a carbon allowance system (such as the northeast’s Regional Greenhouse Gas Initiative or the Western Climate Initiative) can be undermined by the availability of low-priced, carbon-intensive power in adjacent states,²² such as power generated by Defendants. Plaintiffs’ nuisance claims, if successful, would reduce the potential for

²² See, e.g., William Funk, *Constitutional Implications of Regional CO₂ Cap-and-Trade Programs: The Northeast Regional Greenhouse Gas Initiative as a Case in Point*, 27 UCLA J. Envt. L. & Pol’y 353, 363-64 (2009).

the importation of dirtier power from unregulated, out-of-program sources, because it would require the five dirtiest power sources in the U.S. to clean up.

Similarly, reducing the inherent environmental subsidy Defendants gain from externalizing the costs of their GHG emissions would boost the effectiveness of federal and state renewable energy incentives and other carbon dioxide reduction programs, by helping to level the economic playing field.

Applying [] incentives for [greenhouse gas] reduction without repealing existing subsidies for fossil fuel use just puts window dressing on the greenhouse effect. It is hard to see what could be less economically efficient than paying for both incentives to use and incentives to stop using fossil fuels.

Mann, *supra*, at 1219-20.

Finally, claims by Defendants and their *amici curiae* that the intermittency of some renewable resources and the lack of baseload production in the renewable energy sector would necessarily force a “dash to gas” are premature and wholly without merit.²³ A Rule 12 motion is far too soon to debate the terms, reasonableness or cost of any potential injunction. Further, it is incorrect to assume that gas is the only economically viable solution. It is becoming increasingly clear that – when full costs are accounted for – renewable energy resources can efficiently address many issues besides the power sector’s GHG emissions problem. For instance, there

²³ See, e.g., Brief for the Edison Electric Institute, *et al.*, as *Amici Curiae* in Support of Petitioners, 18-20.

is a close match between hourly photovoltaic (“PV”) solar power generation and peak demand, making it possible for PV power to cost-effectively reduce the need to build and operate some expensive fossil-fueled “peaking” plants. *See, e.g., Going Renewable, supra*, at 97-98.

Renewable power plants have a number of [other] advantages over their conventional alternatives: they are more modular and can be distributed through a utility’s service area, helping to minimize grid congestion and displacing the need to construct expensive transmission and distribution infrastructure. They have quicker lead times, reducing the risk of cost overruns and inflation and improving debt to equity ratios. They use widely available and non-depletable forms of fuel, which are not subject to the speculation and price volatility exhibited by coal, oil, natural gas, and uranium.

Id. Moreover, wind and solar energy generate more jobs and more high-skilled jobs per megawatt of installed capacity than fossil-fueled plants, reduce energy imports, improve national security and energy independence, lower trade imbalances, keep more money in local economies, eliminate toxic waste generation and preserve water supplies. *Id.* at 101.

In sum, Petitioners’ speculation about the impact of this case to the nation’s economy is not relevant to the claims at issue here (nor will it be relevant to the district court on remand), is based on fundamental distortions of the market and ignores the substantial collateral benefits of renewable power. While no one

expects a single lawsuit to fully correct all of the market failures noted above, requiring these five companies – the five largest emitters in the U.S. – to reduce emissions would constitute a significant step in the vital process of internalizing some costs. This is an appropriate role for tort law.

Accordingly, the Court should not create an exception in the common law of nuisance for the most serious interstate pollution challenge of our time.

CONCLUSION

The Court of Appeals' decision should be affirmed.

Respectfully submitted,

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