

No. 10-174

IN THE
Supreme Court of the United States

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

v.

CONNECTICUT, *et al.*,
Respondents.

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

**BRIEF OF *AMICI CURIAE* AMERICAN
FARM BUREAU FEDERATION AND
NATIONAL MINING ASSOCIATION
IN SUPPORT OF PETITIONERS**

ELLEN STEEN
DANIELLE QUIST
AMERICAN FARM BUREAU
FEDERATION
600 Maryland Avenue, S.W.
Suite 1000
Washington, D.C. 22024

KATIE SWEENEY
General Counsel
NATIONAL MINING
ASSOCIATION
101 Constitution Avenue, N.W.
Suite 500 East
Washington, D.C. 20001

PETER S. GLASER
Counsel of Record
MARK E. NAGLE
TROUTMAN SANDERS LLP
401 9th Street, N.W.
Suite 1000
Washington, D.C. 20004
(202) 274-2998
peter.glaser@
troutmansanders.com
DOUGLAS A. HENDERSON
TROUTMAN SANDERS LLP
600 Peachtree Street, NE
Suite 5200
Atlanta, GA 30308-2216

*Counsel for the American
Farm Bureau Federation
and National Mining
Association*

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INTERESTS OF AMICI CURIAE

This *amicus* brief is filed in support of the Petitioners in this proceeding. *Amici* are representatives of farming and mining businesses.¹ Specifically, *Amici* are:

¹ All parties have consented to the filing of this brief. Their consents are on file with the Clerk of the Court. *Amici* state that no counsel for a party authored this brief in whole or in part and that no person or entity, other than *Amici* and its counsel, contributed monetarily to the preparation and submission of this brief.

- The American Farm Bureau Federation, the largest non-profit general farm organization in the United States, representing more than 6 million member families in all fifty states and Puerto Rico;
- The National Mining Association, a non-profit, incorporated national trade association representing all major producers of coal, metals, and minerals in the United States as well as numerous ancillary mining-related businesses.

The agricultural and mining sectors are particularly vulnerable to the type of greenhouse gas (“GHG”) emission limitations that Plaintiffs seek to impose in their tort lawsuit, and not just because both sectors, like almost every other sector of the American economy, produce GHG emissions. The economics of agriculture are highly sensitive to the cost of fuel (gasoline and diesel) and fertilizer, both of which are produced in processes that release GHG emissions. Imposition of GHG limitations will therefore make fuel and fertilizer more expensive, threatening the viability of many family-owned farms. Mining economics are similarly highly sensitive to electricity costs, and electricity in the United States is primarily produced through the combustion of fossil fuels which inherently produces GHG emissions. Moreover, because coal usage will be especially targeted by the wave of climate change lawsuits that the Panel decision at issue here will unleash—for instance, each of the electric generation stations as to which Plaintiffs in the instant suit seek an injunction are fueled with coal—coal mining may decline significantly if electric generation becomes subject to judicially imposed GHG emissions limits.

SUMMARY OF ARGUMENT

Contrary to the Second Circuit's holding, the Complaint raises fundamental issues of American energy, economic, environmental, and international policy. By every measure, climate change is a non-justiciable "political question" that should be resolved by the People's elected representatives, not the Judiciary. The policy issues are inescapable. Plaintiffs' lawsuit asks a United States District Court judge to order Defendants, who are all major providers of electricity to the public, to reduce their GHG emissions to a level that the Court determines to be "reasonable." Lowering Defendants' GHG emission levels will require them to increase their rates to electric consumers, and those rate increases will in turn have both economic and health and welfare effects on society, as consumers, particularly lower-income consumers, will have less money to spend on food, healthcare and the other necessities of life. Balancing the benefits to the public from reducing Defendants' GHGs with the detriments to the public of higher electricity costs is a quintessentially legislative function that the Judiciary is not empowered to resolve.

Although the Court below insisted its decision only concerns the appropriate emission levels of the five specific Defendants, the decision has a far wider reach. GHGs are the inevitable byproduct of combusting fossil fuel to produce energy. Under the Court's approach, virtually anyone in the United States, no matter where they are located, could bring an action in any federal district court in the Second Circuit against virtually any company in the United States that uses fossil fuel for energy, no matter where that company is located, and seek judicially-

imposed limits on that company's emissions of GHGs and therefore its use of fossil fuel. Such an outcome is not fanciful speculation. The lawsuit here has already been followed by three other lawsuits in different Circuits, including one (the *Comer* case) brought against virtually every major fossil fuel producing and using company in America. See *Comer v. Murphy Oil, USA*, No. 05-436, 2007 WL 6942285 (S.D. Miss. Aug. 30, 2007), *rev'd* 585 F.3d 855 (5th Cir. 2009), *reh'g granted*, 598 F.3d 208 (5th Cir. 2010), *appeal dismissed*, 607 F.3d 1049 (5th Cir. 2010); *California v. Gen. Motors Corp.*, No. C06-05755, 2007 WL 2726871 (N.D. Cal. Sept. 17, 2007), *appeal dismissed*, No. 07-16908 (9th Cir. June 24, 2009); *Native Vill. of Kivilina v. Exxon-Mobil Corp.*, 663 F. Supp. 2d 863 (N.D. Cal. 2009), appeal pending, No. 09-17490 (9th Cir. Nov. 5, 2009). Under the Second Circuit decision below, similar additional cases could find a home in district courts in the Second Circuit. Since eighty-five percent of American energy is produced from fossil fuels, the Second Circuit would become the arbiter of how America uses energy, weighing on a lawsuit-by-lawsuit basis the benefits and detriments to society of using fossil fuel and emitting GHGs as compared with more costly substitutes. The role of energy czar is not for the Judiciary.

The briefs of the Defendants and other *Amici* provide an exhaustive discussion of the political question doctrine. *Amici's* brief will not duplicate that discussion but will instead provide a more thorough discussion of the type of broad policy factors that a court would need to consider in determining, as Plaintiffs seek in their Complaint here, a "reasonable" level of GHG emissions, and therefore fossil fuel usage, in any particular GHG tort action.

ARGUMENT**I. THE COMPLAINT PRESENTS POLICY QUESTIONS THAT ARE NOT APPROPRIATE FOR JUDICIAL RESOLUTION****A. Overview**

The claim that human emissions of GHGs are changing the global climate has unquestionably become the most important issue at the intersection of American energy and environmental policy in decades and perhaps ever. No other issue engenders such extreme predictions of catastrophic global environmental damage as are made by those who advocate the necessity of limiting GHG emissions. At the same time, because significant cuts in GHG emissions would require substantial reductions in the use of fossil fuels such as oil, coal and natural gas even as the economy continues to grow, no other issue creates economic and social challenges of such magnitude. For instance, EPA has observed both that (1) climate change is “perhaps the biggest environmental threat to the planet,” *Hearings Before the Subcomm. On Clean Air and Nuclear Regulation of the Senate Comm. On Environment and Public Works*, 103d Cong., 2d Sess. (April 14, 1994) (testimony of Robert Sussman, EPA Deputy Administrator), and (2) “[i]t is hard to imagine any issue in the environmental area having greater ‘economic and political significance’ than regulation of activities that might lead to global climate change,” *Control of Emissions from New Highway Vehicles and Engines*, 68 Fed. Reg. 52,922, 52,928 (Sept. 8, 2003).

The possibility that human emissions of GHGs may change the climate for the worse has been an issue of public prominence since at least 1988, with widely

reported Congressional testimony by NASA scientist James Hansen in 1988 as to a potentially runaway greenhouse effect, *see Hearings Before the Senate Committee on Energy and Natural Resources*, 100th Cong., 2d Sess. 39 (1988), and the formation of the International Panel on Climate Change (“IPCC”) that year. Since then, various congressional committees have held hundreds of public hearings on the matter, climate change legislation has been introduced in every Congress, and climate change policy has become a staple of public debate, including in at least the last four presidential campaigns. Last year, for the first time, a GHG cap-and-trade bill passed the House of Representatives. 155 CONG. REC. H 7471 (June 26, 2009) (Waxman-Markey American Clean Energy and Security Act of 2009 (H.R. 2454)). Similar legislation was passed out of the Senate Environment and Public Works Committee on February 2, 2010, Senate Report 111-121, 111th Congress, 2d Sess. (Feb. 2, 2010) (reporting S. 1733, the Kerry-Boxer Clean Energy Jobs and American Power Act), but no cap-and-trade bill has been brought to the floor this year.

The failure to enact cap-and-trade legislation so far is a direct consequence of the enormity and complexity of the issues at stake, as is reflected in the 2008 Senate floor debate on the Lieberman-Warner cap-and-trade bill. On the one hand, “strong and swift action to reduce greenhouse gas emissions is needed to prevent catastrophic effects of climate change.” 154 Cong. Rec. S5197 (daily ed. June 5, 2008) (statement of Sen. Boxer). On the other hand, “[t]his is a massive tax increase on the American people” and “the killer for jobs in America.” 154 Cong. Rec. S5179 (daily ed. June 5, 2008) (statement of Sen. Inhofe).

The Court of Appeals decision below injects the Judicial Branch into this long-running climate change policy fray. Indeed, the Court's decision threatens to make the Judiciary the arbiter of how the country should use energy and at what cost. The Defendants here do not emit GHGs in a vacuum—they do so because they combust fossil fuel in order to produce electricity, as they are required by law to do in response to every consumer demand, and because that process—oxidizing carbon to produce energy—releases carbon dioxide. Plaintiffs' request for a permanent injunction requiring Defendants to lower their GHG emissions would therefore require the district court to order Defendants to use less fossil fuel in favor of more expensive substitutes or prohibitively expensive improvements in efficiency, assuming such improvements were technologically feasible. Such an order in turn would lead to higher rates to electric consumers, creating both detrimental economic and detrimental health and welfare consequences as consumers, particularly lower-income ones, would have less money to spend on the necessities of life. In resolving the issue of what level of GHG emissions is appropriate given the cost of reducing emissions, the Court would have no choice but to weigh and balance exactly the same type of economic and environmental policy considerations that have made determination of national GHG policy by the People's elected representatives so difficult.

For the Panel, the case merely involves a single nuisance action against specific defendants that does not require resolution of questions that are fundamentally political in nature, *Connecticut v. AEP*, 582 F. 3d 309, 325 (2d Cir. 2009). But that reasoning is artificially narrow. It is true that the specific relief sought in the Complaint is a limitation on the GHG

emissions of five electric utilities. But a court cannot determine whether the Defendants' energy choices here, and accordingly their GHG emissions, constitute a nuisance without determining whether those energy choices and GHG emissions levels are "reasonable."² And what is a reasonable level of fossil fuel usage—as compared to more expensive substitutes—is a fundamentally political question requiring the weighing of the public policy interest in addressing concerns about climate change with the public policy interest in protecting electric consumers against rate increases.

More fundamentally, the Panel's view that all that is at stake here is "a decision by a single federal court," *id.* at 325, entirely misses the broad precedential effect that its decision will have. The Panel's decision allows anyone claiming damage from possible climate change, no matter where that Plaintiff is located, to sue any GHG emitter, no matter where that emitter is located and to seek an injunction limiting emissions and even damages. Given the succeeding similar lawsuits already filed against an even larger group of defendants, the prospect of such lawsuits is hardly speculative.³ Indeed, it is hard to

² The Panel states that "Federal courts have applied well-settled tort rules to a variety of new and complex problems," 582 F.3d at 328, and notes that, "as a general matter, the Supreme Court and this Court have often turned to the Restatement (Second) of Torts for assistance in developing standards in a variety of tort cases," *id.* at 327. As the Panel noted, the Restatement specifically requires the court in a nuisance claim to address the "reasonableness" of the conduct in question. *Id.* at 369.

³ See *Comer v. Murphy Oil, USA*, No. 05-436, 2007 WL 6942285 (S.D. Miss. Aug. 30, 2007), *rev'd* 585 F.3d 855 (5th Cir. 2009), *reh'g granted*, 598 F.3d 208 (5th Cir. 2010), *appeal*

discern an intelligible principle in the Second Circuit decision as to which among the multitude of GHG-emitting companies in the United States could not be sued.

If the Panel decision stands, District Courts will become the locus of a multitude of climate change tort lawsuits. Each lawsuit will put at issue the proper amount of fossil fuel usage by the particular defendant or defendants, and whether they should use more expensive substitutes, and if they do what the impact will be on their businesses, their customers and society at large. The courts, not the elected branches of government, would decide how we use and generate energy in this country.

This is a daunting prospect. The U.S. economy runs on fossil fuels, and fossil fuel usage therefore cannot be significantly reduced without producing fundamental economic consequences. Judges, however, are neither empowered nor equipped to determine on a lawsuit-by-lawsuit basis the extent to which economic output should be reduced in order to accommodate reductions in fossil fuel usage. Indeed, the author of the Panel opinion conceded the political nature of the Panel's decision when he told a conference following the decision that Plaintiffs' "nuisance action by nuisance action" approach to forcing industry to reduce emissions reductions may "help in a political sense" by creating an "impetus" for legislative or regulatory action. *Key Judge Down-*

dismissed, 607 F.3d 1049 (5th Cir. 2010); *California v. Gen. Motors Corp.*, No. C06-05755, 2007 WL 2726871 (N.D. Cal. Sept. 17, 2007), *appeal dismissed*, No. 07-16908 (9th Cir. June 24, 2009); *Native Vill. of Kivilina v. Exxon-Mobil Corp.*, 663 F. Supp. 2d 863 (N.D. Cal. 2009), *appeal pending*, No. 09-17490 (9th Cir. Nov. 5, 2009).

plays Prospects for Successful Climate Damages Suits, Clean Air Report, Mar. 2, 2010, <http://carboncontrolnews.com/2010030219610/Carbon-Control-Daily-News/News/key-judge-downplays-prospects-for-successful-climate-damages-suits/menu-id-202.html>.

And to illustrate this point in more detail, *Amici* discuss below the important public policy issues that courts would have to confront if the Court of Appeals decision below stands and the Judiciary must determine “reasonable” levels of GHG emissions and therefore fossil fuel usage.

B. Policy Considerations in Determining What Level of Greenhouse Gas Emissions Is Legal

1. Multiplicity of Emitters Worldwide

In adjudicating the reasonableness of a particular defendant’s GHG emissions in a climate change tort lawsuit, the court will be forced to examine those emissions in their global context. Because GHGs mix in the global atmosphere, a ton of GHGs emitted in, for instance, New York has the same effect on overall global atmospheric concentrations of GHGs—and therefore the climate effects of which Plaintiffs complain—as a ton emitted in China or India. Moreover, because fossil fuels are so fundamental to all societies, GHGs are emitted by an almost incomprehensively vast number of sources across the entire economic spectrum globally. As discussed in more detail below, the rest of the world emits far more GHGs than the United States, and that disparity is growing as developing nations continue to grow their economies. In this context, the court in any global warming tort lawsuit, in determining a “reasonable” level of GHG emissions, would have to consider that

any remedy it could impose on any defendant or group of defendants—and even on all major GHG-emitting facilities in the United States—would not meaningfully affect global atmospheric GHG concentrations and therefore would not meaningfully affect the global warming injury the plaintiff asserts.

As the IPCC, a source on which Plaintiffs rely in their Complaint, has noted, “[e]missions of GHGs are associated with an extraordinary array of human activities.” IPCC Third Assessment Report, CLIMATE CHANGE 2001: MITIGATION 608 (Cambridge University Press 2001) (“IPCC 2001”), *available at* http://www.ipcc.ch/publications_and_data/publications_and_data_reports.htm. The United States Energy Information Administration (“EIA”) reached the same conclusion: “there are a vast number of entities that emit carbon—homes, factories, vehicles, commercial facilities, and agricultural resources....” *Hearings Before the Senate Comm. on Energy and Natural Resources*, 106th Cong. (March 25, 1999) (testimony of Jay Hakes, EIA Administrator). According to EPA, “[v]irtually every sector of the U.S. economy is either directly or indirectly a source of GHG emissions.” Proposed Consent Decree, Clean Air Act Citizen Suit, 68 Fed. Reg. 52,922, 52,928 (Sept. 8, 2003).

Because the use of fossil fuels is so fundamental to the U.S. and global economies, the IPCC has concluded that “[t]he global nature of the problem . . . implies that the full breadth of human social structures is encompassed.” IPCC 2001 at 607. The IPCC noted:

A combination of several features lends the climate problem its uniqueness. They include public good issues arising from the concentration of GHGs in the atmosphere that requires collec-

tive global action, the multiplicity of decision makers ranging from global down to the micro level of firms and individuals, and the heterogeneity of emissions and their consequences around the world. Moreover, the long-term nature of climate change originates from the fact that it is the concentration of GHGs that matters rather than their annual emissions and this feature raises the thorny issues of intergenerational transfers of wealth and environmental goods and bads. Next, human activities associated with climate change are widespread, which makes narrowly defined technological solutions impossible, and the interactions of climate policy with other broad socioeconomic policies are strong. Finally large uncertainties or in some areas even ignorance characterize many aspects of the problem and require a risk management approach to be adopted in all [decisionmaking frameworks] that deal with climate change.

Id. at 66. Given the complexity of the issue, the latest IPCC report recommends that all of the many sectors that produce GHGs must be addressed as part of a coordinated approach. According to the IPCC, “[n]o one sector or technology can address the entire mitigation challenge. This suggests that a diversified portfolio is required based on a variety of criteria. All the main sectors contribute to the total.” IPCC Fourth Assessment Report: CLIMATE CHANGE 2007: WORKING GROUP III: MITIGATION OF CLIMATE CHANGE 621 (Cambridge University Press 2007). This includes energy supply, transport and its infrastructure, residential and commercial buildings, industry, agriculture, forestry and waste management. *Id.*, Chs. 4-10.

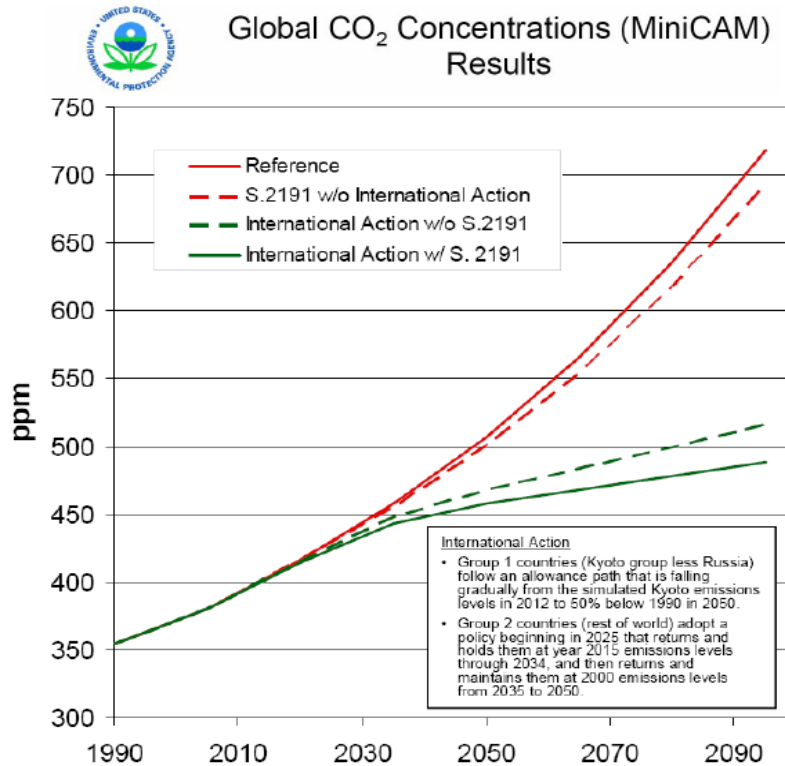
Not only are there many and diverse GHG emitters worldwide, emissions from foreign sources are increasing much more rapidly than domestic emissions, and that trend will accelerate in the future regardless of any action the United States may take. EIA, INTERNATIONAL ENERGY OUTLOOK 131 (2009), *available at* [http://www.eia.doe.gov/oiaf/ieo/pdf/0484\(2009\).pdf](http://www.eia.doe.gov/oiaf/ieo/pdf/0484(2009).pdf). Recent data shows that the emissions from China alone, which is building a coal-fired electric generating station every week, have surpassed those of the United States, and China's energy usage continues to rise at an ever increasing pace. *Id.* Indeed, although the International Energy Agency ("IEA") in 2004 forecast that China's emissions would still be less than U.S. emissions even in 2025, in fact, China's emissions exceeded those of the U.S. by 2006. *See* EIA, INTERNATIONAL ENERGY OUTLOOK 172 (2004), *available at* [http://tonto.eia.doe.gov/ftproot/forecasting/0484\(2004\).pdf](http://tonto.eia.doe.gov/ftproot/forecasting/0484(2004).pdf) and EIA, INTERNATIONAL ENERGY OUTLOOK 131 (2009), *available at* [http://www.eia.doe.gov/oiaf/ieo/pdf/0484\(2009\).pdf](http://www.eia.doe.gov/oiaf/ieo/pdf/0484(2009).pdf). China's carbon dioxide emissions are forecast by the EIA to be about 12 billion metric tons by 2030 as compared with U.S. emissions of 6.8 billion metric tons. EIA, INTERNATIONAL ENERGY OUTLOOK 196 (2009), *available at* [http://www.eia.doe.gov/oiaf/ieo/pdf/0484\(2009\).pdf](http://www.eia.doe.gov/oiaf/ieo/pdf/0484(2009).pdf).

The trend toward greater international GHG emissions is likely to continue. Given global development, energy decisions made in the United States are increasingly less important to the world's GHG emissions profile. As the current century proceeds, generation of electricity is poised for staggering growth. The EIA predicts a 75% increase in the next two decades alone. EIA, INTERNATIONAL ENERGY OUTLOOK 507 (2008), *available at* <http://www.eia>.

doe.gov/oiaf/archive/ieo08/pdf/0484(2008).pdf. The locus of that incremental growth reflects a major shift in the global situation. From 1980-2000, almost one-fourth of the global increase in electric generation came from the United States. EIA International Energy Statistics, *available at* <http://tonto.eia.doe.gov/cfapps/ipdbproject/IEDIndex3.cfm?tid=2&pid=2&aid=12>. Over the next 20 years, the U.S. will be a relatively minor player in an ever larger drama. According to the EIA, between 2006 and 2030, electricity generation in the U.S. will increase by 1,090 billion kWh, whereas electricity generation will increase by 12,710 billion kWh in the rest of the world. EIA, INTERNATIONAL ENERGY OUTLOOK 196 (2009), *available at* [http://www.eia.doe.gov/oiaf/ieo/pdf/0484\(2009\).pdf](http://www.eia.doe.gov/oiaf/ieo/pdf/0484(2009).pdf).

It is no surprise that unilateral action by the United States, as in the tort lawsuit that the Plaintiffs have brought here, and that others will bring if the Panel decision stands, will not meaningfully affect atmospheric GHG concentrations. For instance, the United States Environmental Protection Agency produced an analysis last year of the effect on global GHG concentrations over a 100-year period if S. 2191, the Lieberman-Warner climate change legislation that was reported by the Senate Committee on Environment and Public Works in 2008, were enacted into law. The Lieberman-Warner bill did what Plaintiffs want the courts to do here—it set an amount of GHG emissions that fossil fuel industries could legally produce (in the bill this was called a “cap”). The analysis is reproduced below and shows that, without legally binding international action, U.S. efforts at reducing GHG emissions will

have almost no impact on overall GHG concentrations and the injury which Plaintiffs assert.⁴



⁴ See EPA ANALYSIS OF THE LIEBERMAN-WARNER CLIMATE SECURITY ACT OF 2008, S. 2191 IN 110TH CONGRESS (March 14, 2008) at 192, available at http://www.epa.gov/climatechange/downloads/s2191_EPA_Analysis.pdf. The solid top line in the graph assumes the legislation is not enacted; the dotted top line assumes that the legislation is enacted. Both top lines assume the rest of the world does not take action to significantly reduce its GHG emissions as compared with efforts they are already undertaking. As can be seen, at the end of the 100-year period 1990-2010, the bill would result in only a six-year delay of the GHG levels predicted without the bill. The bottom two show that the rest of the world must reduce GHG emissions if overall atmospheric concentrations are to be meaningfully reduced.

In sum, given that GHGs are emitted by a very large and diverse number of sources globally, arriving at a “reasonable” amount of GHG emissions for the American fossil fuel industry involves highly difficult policy decisions. Given the difficult policy choices that such a decision entails, it is not surprising that the Lieberman-Warner bill consumed 252 pages of legislative text. But these policy choices belong with Congress, not a court.

2. The Benefits of Using Fossil Fuels

Another factor a court would need to consider in any particular climate change tort lawsuit is the benefits society derives from fossil fuels, benefits that will be jeopardized if the defendants do not engage in their allegedly unreasonable conduct of using fossil fuels to produce energy. Indeed, because the use of fossil fuels and the attendant GHG emissions are so closely tied with all facets of modern life, a finding that using fossil fuels and emitting GHGs constitute a nuisance is akin to saying that modern life constitutes a nuisance. That may be true in some sense, but the necessary rejoinder is: compared to what? Certainly not as compared with pre-industrial society with pre-industrial levels of atmospheric GHG concentrations. As Justice Breyer stated in his concurring opinion in *Whitman v. Am. Trucking Ass'ns*, 531 U.S. 457, 496 (2001) in the context of air pollution regulations designed to protect the public health, “[p]reindustrial society was not a very healthy society; hence a standard demanding the return of the Stone Age would not prove ‘requisite to protect the public health.’”

Although energy production results in GHG emissions, it also yields significant benefits for the health and welfare of all Americans. The benefits to

the United States in fossil fuels usage can be seen by comparing energy usage in the developed world with energy usage in the developing world. The disparity and its consequences are striking. The average consumer in the United States, for example, uses 13,652 kWh of power each year. The average Indian uses just 542 kWh. In the United States, virtually no household lacks access to electricity. World Bank Indicators, *available at* <http://data.worldbank.org/country/united-states> (2007 data). In India, more than 400 million people have no electricity, 600 million cook with wood or dung and more than 900 million have no refrigeration. IEA, WORLD ENERGY OUTLOOK 482 (2007), *available at* http://www.iea.org/textbase/nppdf/free/2007/weo_2007.pdf.

The human and economic consequences of these differences in access to electricity are stark indeed. In the United States, the per capita Gross National Income is \$46,400. In India, it is \$950. In the United States, a new baby can expect to live 78 years, in India only 63. In the United States, there is virtually no serious child malnourishment. In India, about half the children are malnourished and tens of millions are classified as “stunted.” World Bank Data, *available at* <http://web.worldbank.org/WBSITE/EXTERNAL/COUNTRIES/SOUTHASIAEXT/INDIAEXTN/0,,menuPK:295589~pagePK:141159~piPK:141110~theSitePK:295584,00.html>.

Energy usage, and in particular electricity usage, is the *sine qua non* of modern society. The National Academy of Engineering has identified societal electrification as the “most significant engineering achievement” of the twentieth century—a century that saw population growth of more than four billion people, the rise of the metropolis, dramatic improve-

ments in diet and health, and the emergence of a vast system of electronic communication. See Neil A. Armstrong, *The Engineered Century*, BRIDGE, Spring 2000, at 18, available at <http://www.nae.edu/Publications/TheBridge/Archives/V30-1TheVertiginousMarchofTechnology/TheEngineeredCentury.aspx>. In 1930, *The New York Times* stated, "Nothing in modern life so raises the standard of living of high and low income groups as the use of electricity." N.Y. TIMES, Sept. 6, 1936, p. E7.

Energy is a key factor in economic development, transforming agrarian societies to modern industrial ones. This societal transformation driven by the accumulation of income and wealth eliminates many contagious diseases, reduces child mortality, and lengthens adult life expectancy. This virtuous cycle has been demonstrated over the past two centuries in dozens of countries around the world. The emergence from poverty begins as countries develop transportation networks using petroleum and electricity networks, often based upon coal. These systems are capable of achieving massive economies of scale that provide large amounts of energy at low cost. These abundant and reliable supplies of energy spur technological change, productivity growth and living standards. Sam H. Schurr, *Electricity in the American Economy, Agent of Technological Progress*, Greenwood Press, 1990.

It is no coincidence then that the world energy complex is built upon fossil fuels. Consumers prefer low-cost, reliable power, and producers who provide these services prosper. The fact that the U.S. economy currently derives 85 percent of its total energy from coal, oil and natural gas is a testament to the competitive advantage of fossil fuels. These

fuels have empowered modern industrial societies to raise living standards for billions of people.

The benefits of energy usage can be demonstrated graphically in the following satellite picture of the Korean peninsula at night. One part of the peninsula is a modern country and the other part is one of the most backward countries in the world: the difference is access to electricity and the energy from which the electricity is produced.⁵

Electricity Makes the Difference: Korea



South Korean preschool children average 3 inches taller and 7 pounds heavier than North Korean Children

The Infant Mortality Rate in North Korea is 12 times higher than South Korea

South Korea ranks 49th in GDP/capita. North Korea Ranks 188th

Only 20% of North Koreans have access to electric power. South Korea access approaches 100%

⁵ See <http://www.globalsecurity.org/military/world/dprk/dprk-dark.htm>. The statistics in the above graphic are taken from Daniel Schwekendieka and Sunyoung Pak, *Recent growth of children in the two Koreas: A meta-analysis*, 7 *ECON. & HUMAN BIOLOGY* 109 (2009); Central Intelligence Agency, *THE WORLD FACTBOOK 2009* (2009), available at <https://www.cia.gov/library/publications/the-world-factbook/index.html> and *ACCESS TO ELECTRICITY AND WATER FOR DOMESTIC USE* (UNESCO 2009), available at <http://www.unesco.org/water/wwap/wwdr/indicators/>.

In sum, the benefits of using fossil fuels have been demonstrated by remarkable socioeconomic progress first in the United States and the developed world and currently in China, India and the rest of the developing world. Plaintiffs' view that fossil fuel usage is nevertheless "unreasonable" thus would require the court to weigh whether the benefits of fossil fuel usage are outweighed by the asserted detriments. That determination, however, is a quintessentially legislative task.

3. Who Suffers if Fossil Fuel Usage Is Penalized?

The necessary implication of Plaintiffs' assertion that Defendants unreasonably use fossil fuels and produce GHG emissions is that Defendants should use less fossil fuels in order to reduce their GHG emissions. That is why Plaintiffs seek an injunction ordering Defendants to reduce their GHG emissions and therefore use less fossil fuel. But because significantly controlling GHG emissions would entail fundamental changes to our economy and the way we live, a variety of authorities have concluded that the cost of reducing GHG emissions would be massive. Thus, in any particular climate change tort lawsuit, the trier of fact would have to engage in a kind of cost-benefit analysis in order to determine whether the defendant's level of emissions was reasonable or whether the defendant should have emitted some other level of GHGs.

To give context to this issue, it is instructive to understand how substantial the cost burden is of reducing GHG emissions. For instance, in EPA's March 2008 analysis of the Lieberman-Warner cap-and-trade bill, annual GDP is modeled to be between

0.9 percent (\$238 billion) and 3.8 percent (\$983 billion) lower in 2030 and between 2.4 percent (\$1,012 billion) and 6.9 percent (\$2,856 billion) lower in 2050 than in the Reference Scenario. Consumption is modeled to be between 0.9 percent (\$180 billion) and 1.4 percent (\$233 billion) lower in 2030 and between 2.1 percent (\$670 billion) and 3.3 percent (\$843 billion) lower in 2050 than in the Reference Scenario. The average annual growth rate of consumption is ~0.08 percentage points lower than the reference case. In 2030 per household average annual consumption is ~\$1,375 lower and gasoline prices increase ~\$0.53 per gallon. In 2050 per household average annual consumption is ~\$4,377 lower and gasoline prices increase ~\$1.40 per gallon. See EPA ANALYSIS OF THE LIEBERMAN-WARNER CLIMATE SECURITY ACT OF 2008, S. 2191 IN 110TH CONGRESS (March 14, 2008), *available at* http://www.epa.gov/climatechange/downloads/s2191_EPA_Analysis.pdf. Other studies have showed even higher costs, some much higher.⁶

Plaintiffs, of course, are not proposing judicial imposition of the Lieberman-Warner bill on society. But by suing major fossil fuel-using companies on a theory that they acted unreasonably in not lowering their GHG emissions profile, they are asserting that

⁶ See, e.g., CRA International, ECONOMIC ANALYSIS OF THE LIEBERMAN-WARNER CLIMATE SECURITY ACT OF 2007 USING CRA'S NRA-NEEM MODEL (April 2008), *available at* http://www.nma.org/pdf/040808_crai_presentation.pdf. (4 million jobs will be lost in 2015 alone, and growing on a year-by-year basis to more than 7 million jobs lost in 2050; overall cost of the bill to the average household of 2.6 persons will exceed \$2,300 annually in 2015, which approximates the amount households now spend annually on healthcare; large year-over-year losses in GDP accumulating to \$5.3 trillion (present value 2007\$).

these companies should have used more expensive substitutes. The cost of those substitutes would have been passed on to consumers, and these costs would have been substantial because it is demonstrably not possible to achieve significant GHG emission reductions without incurring significant costs.

Without question, these costs would fall disproportionately on the poor. According to a recent study, GHG regulation:

...will impact low income groups, the elderly, and minorities disproportionately, both because they have lower incomes to begin with, but also because they have to spend proportionately more of their incomes on energy, and rising energy costs inflict great harm on minority families. Lower-income families are forced to allocate larger shares of the family budget for energy expenditures, and minority families are significantly more likely to be found among the lower-income brackets.

This disparity between racial groups means that rising energy costs have a disproportionately negative effect on the ability of minority families to acquire other necessities such as food, housing, childcare, or healthcare.

Management Information Services, Inc., POTENTIAL IMPACT OF THE EPA ENDANGERMENT FINDING ON LOW INCOME GROUPS AND MINORITIES (March 2010) at iv-v, *available at* <http://www.affordablepoweralliance.org/Home.aspx>.

Agriculture is also particularly vulnerable to attempts to restrict GHG emissions. Animal agriculture is a significant source of methane emissions. Nitrous oxide, another GHG, is also produced in

animal agriculture operations. Most farms typically have both stationary and mobile engines that are a source of CO₂, and the economics of farming are highly sensitive to the cost of fuel and fertilizer, both of which would be affected by higher energy prices. As a result, restricting GHG emissions will cause an increase in food prices to the consumer and may drive many smaller farms out of business.

In sum, the reasonableness of the Defendants' conduct here can only be determined in the context of what the costs of alternative action would have been. But, again, weighing the costs of action or inaction on GHG emissions is a legislative function, not a judicial one.

CONCLUSION

Determining “reasonable” levels of GHG emissions is a fundamentally legislative task not appropriate for the Judicial Branch. Neither a judge nor a jury should determine energy policy in the United States.

Respectfully submitted,

ELLEN STEEN
DANIELLE QUIST
AMERICAN FARM BUREAU
FEDERATION
600 Maryland Avenue, S.W.
Suite 1000
Washington, D.C. 22024

KATIE SWEENEY
General Counsel
NATIONAL MINING
ASSOCIATION
101 Constitution Avenue, N.W.
Suite 500 East
Washington, D.C. 20001

PETER S. GLASER
Counsel of Record
MARK E. NAGLE
TROUTMAN SANDERS LLP
401 9th Street, N.W.
Suite 1000
Washington, D.C. 20004
(202) 274-2998
peter.glaser@
troutmansanders.com

DOUGLAS A. HENDERSON
TROUTMAN SANDERS LLP
600 Peachtree Street, NE
Suite 5200
Atlanta, GA 30308-2216
*Counsel for the American
Farm Bureau Federation
and National Mining
Association*