## In the Supreme Court of the United States

CHAMBER OF COMMERCE OF THE UNITED STATES OF AMERICA, STATE OF ALASKA, AND AMERICAN FARM BUREAU FEDERATION,

**Petitioners** 

V.

ENVIRONMENTAL PROTECTION AGENCY, ET AL., Respondents

On Petition for Writ of Certiorari to the United States Court of Appeals for the District of Columbia Circuit

RESPONSE OF PEABODY ENERGY CORPORATION IN SUPPORT OF THE PETITION FOR WRIT OF CERTIORARI OF THE CHAMBER OF COMMERCE OF THE UNITED STATES OF AMERICA, STATE OF ALASKA, AND AMERICAN FARM BUREAU FEDERATION

JESSE K. MARTIN TROUTMAN SANDERS LLP 401 Ninth Street N.W., Suite 1000 Washington, D.C. 20004 (202) 274-2934 jesse.martin@ troutmansanders.com DOUGLAS A. HENDERSON Counsel of Record TROUTMAN SANDERS LLP 600 Peachtree Street, NE Suite 5200 Atlanta, GA 30308-2216 (404) 885-3479 douglas.henderson@ troutmansanders.com

May 9, 2013

Counsel for Respondent

### **RULE 29.6 DISCLOSURE STATEMENT**

Pursuant to Supreme Court Rule 29.6, the undersigned counsel for Peabody Energy Corporation certifies that it is a publicly-traded company on the New York Stock Exchange ("NYSE") under the symbol "BTU." As of December 31, 2012 filings, no holding companies own more than 10% of Peabody Energy Corporation's outstanding shares.

# TABLE OF CONTENTS

| RULI | E 29.6  | DISCLOSURE STATEMENT  | i   |
|------|---|---|-----|
| TABI | LE OF   | AUTHORITIES   | iii |
| INTR | ODUC  | CTION   | 1   |
| ARGU | UMEN  | T   | 2   |
| I.   | Becar<br>Emis   | Case Is Extraordinarily Significant use EPA Regulation of GHG sions Will Endanger the Public th and Welfare   | 2   |
|      | A.  | EPA Failed to Consider the<br>Positive Health and Welfare<br>Impacts that Result from the Use<br>of Fossil Fuels and the Negative<br>Health and Welfare Impacts that<br>Its Regulations Will Create | 3   |
|      | В.  | Using Fossil Fuels Creates<br>Significant Public Health and<br>Welfare Benefits   | 7   |
| II.  | Because Global Demand for Coal Will<br>Continue to Increase, the Significant<br>Health and Welfare Impacts that EPA<br>Will Impose on Society Will Not Affect<br>Purported Climate Change |   |     |
| CON  | CLUSI   | ION   | 20  |

# TABLE OF AUTHORITIES

| Page(s)   |
|---|
| Cholo   |
| Coalition for Responsible Regulation v. EPA, 684 F.3d 102 (D.C. Cir. 2012)  |
| Ethyl Corp. v. EPA, 541 F.2d 1 (D.C. Cir. 1976)4  |
| Massachusetts v. EPA,<br>549 U.S. 497 (2012)2   |
| Whitman v. American Trucking Ass'ns, 531<br>U.S. 457 (2001)   |
| FEDERAL REGISTER NOTICES  |
| Control of Emissions from New Highway<br>Vehicles and Engines, 68 Fed. Reg. 52,922<br>(Sept. 8, 2003)   |
| Endangerment and Cause or Contribute Findings for Greenhouse Gases Under Section 202(a) of the Clean Air Act, 74 Fed. Reg. 66,496 (Dec. 15, 2009)                   |
| Proposed Endangerment and Cause or<br>Contribute Findings for Greenhouse Gases<br>Under Section 202(a) of the Clean Air Act,<br>74 Fed. Reg. 18,886 (Apr. 24, 2009) |
| Standards of Performance for Greenhouse Gas Emissions for New Stationary Sources: Electric Utility Generating Units, 77 Fed. Reg. 22,392 (Apr. 13, 2012)            |

| STATUTES   |
|--|
| 42 U.S.C. § 7521(a)  |
| OTHER AUTHORITIES  |
| American Coalition for Clean Coal Electricity,  Energy Cost Impacts on American Families, 2001-2013, Jan. 2013, http://www.americaspower.org/sites/default/ files/Trisko%202013.pdf14, 15  |
| Bernhard Ostrolenk, Conference to Debate Many Power Problems, N.Y. TIMES, Sept. 6, 1936  |
| Central Intelligence Agency, THE WORLD FACTBOOK 2009 available at https://www.cia.gov/library/publications/do wnload/download-2009   |
| OECD, Climate Change Chapter of the OECD Environmental Outlook to 2050: The Consequences of Inaction, http://www.oecd.org/env/indicators-modelling- outlooks/climatechangechapteroftheoecdenv ironmentaloutlookto2050theconsequencesof inaction.htm (last visited May 7, 2013)20 |
| CRA International, Economic Analysis of the Lieberman-Warner Climate Security Act Of 2007(2008), http://www.nma.org/pdf/040808_crai_presentation.pdf   |

| Daniel E. Klein and Ralph L. Keeney,  Mortality Reductions from Use of Low-Cost- Fueled Power: An Analytical Framework, Dec. 2002, available at www.coalcandothat.com/images/content/Mo          |
|--|
| rtalityRed.pdf15   |
| Daniel Schwekendieka and Sunyoung Pak, Recent growth of children in the two Koreas: A meta-analysis, 7 ECONOMICS & HUMAN BIOLOGY (2009)  |
| EPA analysis of the Lieberman-Warner Climate Security Act of 2008, S. 2191 in 110th Congress (March 14, 2008), http://www.epa.gov/climatechange/Downloads/EPAactivities/s2191_EPA_Analysis.pdf12 |
| H.R. Rep. No. 95-294, reprinted in 1977<br>U.S.C.C.A.N. 10774  |
| International Energy Agency, WORLD ENERGY OUTLOOK 574 (2007), http://www.iea.org/publications/freepublications/publications/weo_2007.pdf   |
| International Energy Agency, World Energy Outlook 2012, Executive Summary, http://www.iea.org/publications/freepublicat ions/publication/English.pdf   |
| IPCC, Climate Change 2001: Mitigation ("IPCC 2001"), at 608, available at http://www.grida.no/publications/other/ipcc_tar/ (last visited May 7, 2013)  |

| Jeanne Brooks-Gunn and Greg J. Duncan, <i>The Effects of Poverty on Children</i> , THE FUTURE OF CHILDREN, Summer/Fall 1997, <i>available</i>   |
|---|
| at http://www.princeton.edu/futureofchildren/p ublications/journals/article/index.xml?journ alid=53&articleid=28717   |
| Jonathan Crawford, Sierra Club Eyes<br>Greenhouse Gas Regulations as Tool to<br>Phase out Coal Plants by 2030, Apr. 26,<br>2013,  |
| http://www.snl.com/InteractiveX/ArticleAbs<br>tract.aspx?id=1755337418  |
| Management Information Services, Inc.,  Executive Summary: Potential Impact of the  EPA Endangerment Finding on Low Income  Groups and Minorities, March 2010,  www.misi-net.com/publications/APA- 0310.pdf                         |
| National Mining Association, Coal: America's Power,   |
| http://www.nma.org/pdf/fact_sheets/cap.pdf<br>(last visited May 7, 2013)11, 12  |
| Neil A. Armstrong, <i>The Engineered Century</i> ,<br>THE BRIDGE, Spring 2000, <i>available at</i><br>http://www.nae.edu/Publications/TheBridge<br>/Archives/V30-<br>1TheVertiginousMarchofTechnology/TheEn<br>gineeredCentury.aspx |

| North Korea is Dark,                         |
|--|
| http://www.globalsecurity.org/military/worl  |
| d/dprk/dprk-dark.htm (last visited May 7,    |
| 2013)10                                      |
| ,  |
| Peabody Energy, Life Empowered: Peabody      |
| Energy 2012 Annual Report,                   |
| http://www.peabodyenergy.com/mm/files/In     |
| vestors/Annual-Reports/PE-AR2012.pdf19       |
| •  |
| Peter Galuszka, With China and India         |
| Ravenous for Energy, Coal's Future Seems     |
| Assured, N. Y. TIMES, Nov. 12, 201219        |
| D 1 10 0 6 1 D 1 6 1 C                       |
| Rule 12.6 of the Rules of the Supreme Court1 |
| Sam H. Schurr et al., ELECTRICITY IN THE     |
| AMERICAN ECONOMY, AGENT OF                   |
| TECHNOLOGICAL PROGRESS, Greenwood            |
| Press, 19909                                 |
| 11000, 1000                                  |
| The Clean Air Act and Public Health, Before  |
| the Senate Committee on Environment and      |
| Public Works, 112th Congress (2011)          |
| (statement of Dr. Harvey Brenner,            |
| Professor, Social and Behavioral Science,    |
| University of North Texas,                   |
| http://www.epw.senate.gov/public/index.cfm   |
| ?FuseAction=Files.View&FileStore_id=3718     |
| 8bea-2c5f-4100-a767-f264f1a1ced2The          |
| World Bank, Data: Electric power             |
| consumption (kWh per capita),                |
| http://data.worldbank.org/indicator/EG.US    |
| E.ELEC.KH.PC (2010 data)16                   |

| The World Bank, Data: GNI per capita, Atlas method (current US\$),                          |    |
|---|----|
| http://data.worldbank.org/indicator/NY.GN   |    |
| P.PCAP.CD (2011 data)   | 8  |
| The World Bank, Data: Life expectancy at  |    |
| birth, total (years),<br>http://data.worldbank.org/indicator/SP.DYN<br>.LE00.IN (2011 data) | 8  |
| .DE00.11v (2011 dava)   | 0  |
| The World Bank, Data: Malnutrition prevalence, height for age (% of children                |    |
| under 5),   |    |
| http://data.worldbank.org/indicator/SH.STA<br>.STNT.ZS?page=1 (2006 data)                   | 8  |
| .51N1.25: page-1 (2000 data)  | 0  |
| UNESCO, Access to Electricity and Water for Domestic Use,                                   |    |
| http://www.unesco.org/new/fileadmin/MUL<br>TIMEDIA/HQ/SC/pdf/wwap_wwdr3_10_An               |    |
| nexed_table_access_to_electricity_and_wate  |    |
| r.pdf (last visited May 7, 2013)  | 10 |
| U.S. Energy Information Administration,   |    |
| Annual Energy Outlook 2013 Early Release<br>Overview,                                       |    |
| http://www.eia.gov/forecasts/aeo/er/pdf/0383  |    |
| er(2013).pdf (last visited May 7, 2013)   | 20 |
| U.S. Energy Information Administration, EIA's   |    |
| Energy in Brief: What are the major sources   |    |
| and users of energy in the United States?   |    |
| http://www.eia.gov/energy_in_brief/article/   |    |
| major_energy_sources_and_users.cfm (last  |    |
| updated May 18, 2012)   | 6  |

| W.T. Gallo et al., The Impact of Late-career Job |
|--|
| Loss on Myocardial Infarction and Stroke: A      |
| 10-year Follow up Using the Health and           |
| Retirement Survey, 63 Occupational               |
| Environmental Medicine 685 (2006)1               |

#### INTRODUCTION

The Chamber of Commerce of the United States of America, the State of Alaska, and the American Farm Bureau Federation (hereinafter collectively referred to as "Chamber of Commerce") have petitioned this Court for a writ of certiorari in the captioned docket seeking review of the decision of the United States Court of Appeals for the District of Columbia in Coalition for Responsible Regulation v. EPA, 684 F.3d 102 (D.C. Cir. 2012) (per curiam) (App. 1a.), reh'g en banc denied at 2012 WL 6621785 (D.C. Cir. Dec. 20, 2012) (App. 99a). Pursuant to Rule 12.6 of the Rules of the Supreme Court, Peabody Energy Corporation ("Peabody") responds in support of the Chamber of Commerce's Petition. Peabody was a petitioner below in the petitions for review of the United States Environmental Protection Agency's ("EPA") "Tailpipe," "Tailoring," and "Timing" Rules, as well as "Endangerment Rule," and is therefore respondent here under Rule 12.6.

Peabody is the world's largest private-sector coal company and a global leader in sustainable mining and clean coal solutions. The company serves metallurgical and thermal coal customers in nearly thirty countries on six continents. The company shipped 246 million tons of coal in 2010, nearly 80 percent of which came from existing coal mines in the United States, and the company has approximately 9 billion tons of proven and probable coal reserves.

The decision of the court below raises extraordinarily important issues that justify this Court granting the Chamber of Commerce's Petition. The rules at issue constitute EPA's first foray into ("GHG") regulation following this Court's landmark

decision in Massachusetts v. EPA, 549 U.S. 497 (2012). As stated in the Chamber's Petition, these rules initiate "the costliest, farthest reaching, and most intrusive regulatory apparatus in the history of the American administrative state—regulations ... that could eventually touch practically every aspect of every industry across the entire economy." Chamber of Commerce Petition at 1. Peabody concurs and adds that the effect of EPA regulation of GHG emissions will not just be economic. Under the wellestablished formula that "wealth=health," the effect of GHG regulation, by increasing costs to society, will be to undermine the health and welfare goals that EPA seeks to achieve through its regulations. These health and welfare effects could be very significant as EPA extends its regulatory reach throughout the economy, but EPA failed to consider them at all in its Endangerment Rule.

#### **ARGUMENT**

I. This Case Is Extraordinarily Significant Because EPA Regulation of GHG Emissions Will Endanger the Public Health and Welfare.

Although ostensibly designed to protect the public health and welfare, the rules at issue will have the opposite effect. By raising energy costs and increasing unemployment, the rules will deprive American consumers, particularly low-income, elderly, and minority consumers, of purchasing power they need to acquire the necessities of life, such as shelter, heating and air conditioning, health care, and a nutritious diet. Yet EPA utterly failed to consider these health and welfare disbenefits in its endangerment analysis, resulting in one-sided and

biased conclusions as to the effect its GHG regulation will have. The significance of these unexamined and unaccounted for health and welfare disbenefits warrants granting the Chamber's Petition.

A. EPA Failed to Consider the Positive Health and Welfare Impacts that Result from the Use of Fossil Fuels and the Negative Health and Welfare Impacts that Its GHG Regulations Will Create.

As demonstrated in the Chamber Petition, the chain of EPA rulemaking that ended with the Agency rewriting the numerical statutory thresholds under the "PSD" and "Title V" permit programs began with the Agency's Endangerment Rule. In this rule, EPA found that the emission of GHGs "cause, or contribute to, air pollution which may reasonably be anticipated to endanger public health or welfare." Endangerment and Cause or Contribute Findings, 74 Fed. Reg. at 66,505. This finding, however, was entirely one-sided in that EPA examined only what it saw as the negative health and welfare effects of emitting GHGs but not the positive health and welfare effects of the processes that create the emissions. Obviously, the emission of GHGs does not occur in a vacuum. GHGs are emitted across the

<sup>&</sup>lt;sup>1</sup> Endangerment and Cause or Contribute Findings for Greenhouse Gases Under Section 202(a) of the Clean Air Act, 74 Fed. Reg. 66,496 (Dec. 15, 2009).

economy for many reasons, the principal of which is that various residential, commercial and industrial processes utilize fossil fuels for energy and because carbon dioxide ("CO<sub>2</sub>"), the most ubiquitous GHG, is the inevitable byproduct of combusting such fuels. These processes produce fundamental health and welfare benefits without which modern life would be impossible.

EPA's one-sided analysis caused it to miss an obvious fact. Although the Agency finds that society's emissions of GHGs pose a health and welfare danger, over the last century, as anthropogenic greenhouse emissions have increased, every relevant indicator of public health and welfare has improved dramatically rather than deteriorated. This relationship between increasing GHG emissions and improved public health and welfare is not an accident. The direct cause of both the increased emissions and the improvements in health and welfare is society's use of energy, particularly electricity produced through the combustion of fossil fuels. The need to consider the positive as well as negative health and welfare benefits that comes with the use of fossil-fuel energy—and therefore the emission of GHGs—is consistent with the prophylactic purposes of the CAA. As the D.C. Circuit in *Ethyl Corp. v. EPA*, 541 F.2d 1, 13 (D.C. Cir. 1976) (*en banc*), stated, "[a] statute allowing for regulation in the face of danger is, necessarily, a precautionary statute." Similarly, the House Committee that proposed the endangerment finding language now set forth in 42 U.S.C. § 7521(a) also referred to the "preventive or precautionary nature of the [A]ct." H.R. Rep. No. 95-294 at 49, reprinted in 1977 U.S.C.C.A.N. 1077, 1127. But as Ethyl Corp. concluded, in exercising precaution in the

assessment of possible endangerment, the Administrator must "act, in part on 'factual issues,' but largely 'on choices of policy...." *Ethyl Corp.*, 541 F.3d at 29. Indeed, the preamble to the proposed Endangerment Rule itself emphasized that:

[t]hroughout this Notice the judgments on endangerment and cause or contribute are described as a finding or findings. This is for ease of reference and is not intended to imply that the Administrator's exercise of judgment in applying the scientific information to the statutory criteria is solely a factual finding; while grounded squarely in the science of climate change, these judgments also embody policy considerations.

Proposed Endangerment and Cause or Contribute Findings for Greenhouse Gases Under Section 202(a) of the Clean Air Act, 74 Fed. Reg. 18,886, 18,892, n.10 (proposed Apr. 24, 2009) (to be codified in 40 C.F.R. Ch. 1) (emphasis supplied).

The necessity for exercising policy judgment in acting in a precautionary fashion reflects the fact that determining the proper quantum of precaution in a particular case requires a balancing of risks and benefits in a broad sense. Obviously, over-caution creates its own health and welfare risks. As Justice Breyer stated in his concurring opinion in *Whitman v. American Trucking Ass'ns*, 531 U.S. 457, 494 (2001) (Breyer, concurring), "a world that is free of all risk – [would be] an impossible and undesirable objective." And as the preamble to the proposed Endangerment Rule stated, the purpose of such a finding is to review "the totality of the circumstances" to determine "whether the emissions *'justify* 

regulation' under the CAA." Proposed Endangerment and Cause or Contribute Findings, 74 Fed. Reg. at 18,892 (emphasis supplied). If, as EPA says, the basic purpose of the Endangerment Finding is to assess all risks and benefits of emissions in order to arrive at a policy judgment of the proper amount of precaution that justifies regulation in a particular case, that purpose cannot be fulfilled if EPA only looks at the atmospheric impacts of emissions, and ignores the health and welfare reasons why the emissions occur in the first place. Without a full view of the balance of health and welfare factors that relate to emissions, EPA could find that society would be better off without GHG emissions, balanced analysis might yield the opposite conclusion.

The prospect of GHG regulation provides a particularly compelling illustration of the need for a approach balanced in assessing possible As the preamble to the proposed endangerment. Endangerment Rule stated, in somewhat of an understatement, "[t]he Administrator recognizes that the context for this action is unique." Id. at 18,890. And, as the Intergovernmental Panel on Climate Change, a source on which EPA relies extensively, has noted, "[e]missions of GHGs are associated with an extraordinary array of human activities." More than eighty percent of energy in the United States is derived from the combustion of fossil fuel.<sup>3</sup>

<sup>&</sup>lt;sup>2</sup> IPCC, Climate Change 2001: Mitigation ("IPCC 2001"), at 608, available at http://www.grida.no/publications/other/ipcc\_tar/ (last visited May 7, 2013).

<sup>&</sup>lt;sup>3</sup> U.S. Energy Information Administration, EIA's Energy in Brief: What are the major sources and users of energy in the United

States?

result, according to EPA, "[v]irtually every sector of the U.S. economy is either directly or indirectly a source of GHG emissions." Control of Emissions from New Highway Vehicles and Engines, 68 Fed. Reg. 52,922, 52,928 (Sept. 8, 2003). Because GHG emissions, particularly CO<sub>2</sub> emissions, are so closely tied with all facets of modern life, a finding that GHG emissions endanger public health and welfare is akin to saying that modern life endangers public health or welfare. That may be true in some sense, but the necessary rejoinder is: compared to what? Certainly not as compared with pre-industrial society with preindustrial levels of atmospheric GHG concentrations. To again quote Justice Breyer's concurring opinion in Am. Trucking Ass'ns, "[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." 531 U.S. at 496. Thus, although EPA would presumably conclude that preindustrial society would not pose a health and welfare danger in terms of GHG emissions, the lack of industrial activity that causes GHG emissions would pose other, almost certainly more serious health and welfare consequences. Yet these impacts remained unexamined by EPA.

## B. Using Fossil Fuels Creates Significant Public Health and Welfare Benefits.

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

http://www.eia.gov/energy\_in\_brief/article/major\_energy\_sources\_and\_users.cfm (last updated May 18, 2012).

comparing energy usage in the developed world with energy usage in the developing world. The disparity and its consequences are alarming. The average consumer in the United States, for example, uses 13,394 kWh of power each year. The average Indian uses just 616 kWh.<sup>4</sup> 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.<sup>5</sup>

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 \$48,620. In India, it is \$1,420. In the United States, a new baby can expect to live 79 years, in India only 65. 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 "stunt[ed]."6

<sup>&</sup>lt;sup>4</sup> The World Bank, Data: Electric power consumption (kWh per capita),

http://data.worldbank.org/indicator/EG.USE.ELEC.KH.PC (2010 data).

<sup>&</sup>lt;sup>5</sup> International Energy Agency, WORLD ENERGY OUTLOOK 574 (2007),

http://www.iea.org/publications/free $publications/publications/weo \_2007.pdf.$ 

<sup>&</sup>lt;sup>6</sup> The World Bank, Data: GNI per capita, Atlas method (current http://data.worldbank.org/indicator/NY.GNP.PCAP.CD (2011 data); The World Bank, Data: Life expectancy at birth, total (years), http://data.worldbank.org/indicator/SP.DYN.LE00.IN (2011)data); The World Bank, Data: Malnutrition prevalence, height (% ofchildren under for age http://data.worldbank.org/indicator/SH.STA.STNT.ZS?page=1 (2006 data).

Indeed, 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 improvements in diet and health, and the emergence of a vast system of electronic communication.<sup>7</sup> In 1936, 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."8 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 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

<sup>&</sup>lt;sup>7</sup> See Neil A. Armstrong, The Engineered Century, THE BRIDGE, Spring 2000, at 18, available at http://www.nae.edu/Publications/TheBridge/Archives/V30-1TheVertiginousMarchofTechnology/TheEngineeredCentury.asp

<sup>&</sup>lt;sup>8</sup> Bernhard Ostrolenk, *Conference to Debate Many Power Problems*, N.Y. TIMES, Sept. 6, 1936.

supplies of energy spur technological change, productivity growth, and rising living standards.<sup>9</sup>

It is no coincidence then that the world energy complex is built upon fossil fuels. Consumers prefer reliable power at a reasonable cost. And producers who provide these services prosper. The fact that the U.S. economy currently derives about 80 percent of its total energy from coal, oil, and natural gas is a to the competitive and reliability testament advantages 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 underdeveloped countries in the world: the difference is access to electricity and the energy from which the electricity is produced.<sup>10</sup>

<sup>&</sup>lt;sup>9</sup> Sam H. Schurr et al., ELECTRICITY IN THE AMERICAN ECONOMY, AGENT OF TECHNOLOGICAL PROGRESS, Greenwood Press, 1990.

<sup>&</sup>lt;sup>10</sup> See North Korea is Dark,

http://www.globalsecurity.org/military/world/dprk/dprk-dark.htm (last visited May 7, 2013). 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 ECONOMICS & HUMAN BIOLOGY 109 (2009); Central Intelligence Agency, THE WORLD FACTBOOK 2009 (2009), available at

https://www.cia.gov/library/publications/download/download-2009 and UNESCO, Access to Electricity and Water for Domestic Use

http://www.unesco.org/new/fileadmin/MULTIMEDIA/HQ/SC/pdf/wwap\_wwdr3\_10\_Annexed\_table\_access\_to\_electricity\_and\_water.pdf (last visited May 7, 2013).

### 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 Korean access approaches 100%

With the benefits of modern life so intertwined with abundant and low-cost fossil fuels, it is no surprise that a variety of authorities have concluded that the economic and non-economic costs of reducing GHG emissions would be massive. Regulatory policies that result in the phasing out of the dominant fuel for electric generation cannot help but have serious consequences. Coal has been America's fuel of choice for electric generation for a reason: it has proved over time to be the lowest cost and most reliable fuel, one on which the United States does not need to depend on foreign nations to obtain. Coal is by far America's most abundant energy resource—"making up 92 percent of U.S. fossil energy reserves

on a BTU basis."<sup>11</sup> "At current consumption rates, the U.S. has more than 230 years of remaining coal reserves."<sup>12</sup> By the simple law of supply and demand, curtailing the country's use of the dominant fuel for electric generation will cause the price of electricity to rise, and because electricity usage affects virtually everything, the American economy will suffer as a result.

To give this issue some context, 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 capand-trade bill, "annual GDP is modeled to be between 0.9% (\$238 billion) and 3.8% (\$983 billion) lower in 2030 and between 2.4% (\$1,012 billion) and 6.9% (\$2,856 billion) lower in 2050 than in the Reference Scenario. Consumption is modeled to be between 0.9% (\$180 billion) and 1.4% (\$233 billion) lower in 2030 and between 2.1% (\$670 billion) and 3.3% (\$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 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."13 Other

<sup>&</sup>lt;sup>11</sup> National Mining Association, Coal: America's Power, http://www.nma.org/pdf/fact\_sheets/cap.pdf (last visited May 7, 2013).

<sup>&</sup>lt;sup>12</sup> *Id*.

<sup>&</sup>lt;sup>13</sup> See EPA analysis of the Lieberman-Warner Climate Security Act of 2008, S. 2191 in 110th Congress (March 14, 2008), http://www.epa.gov/climatechange/Downloads/EPAactivities/s21 91\_EPA\_Analysis.pdf.

studies have showed even higher costs, some much higher.<sup>14</sup>

EPA, of course, is not proposing administrative imposition of the Lieberman-Warner bill. But by initiating GHG regulations, it is putting the Nation on a path towards the use of different and more expensive sources of energy. The cost of those substitutes will be passed on to consumers, and these costs will be substantial because it is demonstrably not possible to achieve significant GHG emission reductions without incurring significant costs. EPA itself estimates that capturing CO<sub>2</sub> from a coal-fueled electric generating plant would increase the cost of the plant's electricity by 80 percent.<sup>15</sup>

Moreover, these costs will fall disproportionately on the poor. As one study has concluded, 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

<sup>&</sup>lt;sup>14</sup> See, e.g., CRA International, Economic Analysis of the Lieberman-Warner Climate Security Act Of 2007 Using CRA's NRA-NEEM model, Summary of Findings 19-21 (2008), 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 (in 2007 \$).

<sup>&</sup>lt;sup>15</sup> Standards of Performance for Greenhouse Gas Emissions for New Stationary Sources: Electric Utility Generating Units, 77 Fed. Reg. 22,392, 22,415 (Apr. 13, 2012).

energy costs inflict great harm on minority families. Lower-incomes 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. 16

Indeed, family incomes are not keeping pace with the rising costs of energy.<sup>17</sup> Approximately one-half of American households have average pre-tax annual incomes below \$50,000 and real median household income has declined by eight percent since 2007. *Id.* In 2001, households with gross annual incomes below \$50,000 spent an average of 12% of their after-tax income on residential or transportation energy costs. This year, these households are expected to spend an average of 20% of their after-tax income on energy. *Id.* In 2011, nearly one-third of American households had gross annual incomes of less than \$30,000 and energy costs accounted for an average of 27 percent of their family budgets, before taking into account any energy assistance. Id. at 3. Nearly all of the

<sup>&</sup>lt;sup>16</sup> Management Information Services, Inc., *Executive Summary:* Potential Impact of the EPA Endangerment Finding on Low Income Groups and Minorities, March 2010 at 2-3, www.misinet.com/publications/APA-0310.pdf.

<sup>&</sup>lt;sup>17</sup> American Coalition for Clean Coal Electricity, *Energy Cost Impacts on American Families*, 2001-2013, Jan. 2013 at 2, http://www.americaspower.org/sites/default/files/Trisko%202013.pdf.

residential electricity price increases over the past two decades have occurred since 2000. *Id.* at 3.

The impact of higher energy costs is not just economic, however. As both common sense and a wealth of literature shows, a rise in energy prices, by depriving consumers of purchasing power needed for the necessities of life, will result in a decline in health and welfare. As researchers, Daniel E. Klein and Ralph L. Keeney, explain:

When regulations are enacted with the intent of reducing certain life threatening risks, we expect to see benefits in the form of safer, healthier, and longer lives. But at the same time, the economic costs of these regulations – particularly the impacts on income and employment – tend to *worsen* individual health or safety and can shorten lifetimes.<sup>18</sup>

Summarizing, a large body of scientific literature, Dr. Harvey Brenner of Johns Hopkins University recently wrote:

At the individual level of analysis—i.e., in epidemiological studies—individual income is a standard and fundamental inverse predictor of early mortaility (Anderson, Gamborg, Olser, Prescott, Diderichsen 2005; Ecob, Davey Smith, 1999; Ettner, 1996; Kahn, Wise,

<sup>&</sup>lt;sup>18</sup> Daniel E. Klein and Ralph L. Keeney, *Mortality Reductions* from Use of Low-Cost-Fueled Power: An Analytical Framework, Dec. 2002 at ES-1, available at www.coalcandothat.com/images/content/MortalityRed.pdf.

Kennedy. Kawachi, 2000; Kivimaki, Shipley, Ferrie et al., 2008; Lynch, Smith, Kaplan, House, 2000). industrialized countries, the higher the level of income of individuals, the lower the illness and mortality rates attributed to the great majority of infections, chronic diseases and mental disturbances....Moving from the individual to the national level, however, real GDP per capita indicates the availability of basic goods and services: nutrition, potable water, sanitary engineering, housing and other means of climate control, transportation primary health care. At the national level, real GDP per capita—especially for industrialized societies [-]conveys the capacity of society to invest in the development of science and technology. improved working conditions at higher technological levels of safety and health, financing of education at all levels, stabilization of the income of individuals and small businesses, and the many types of social protection: unemployment insurance; active labor market policies; health insurance; social welfare payments to impoverished. frail populations and children; social security and retirement benefits.<sup>19</sup>

The Clean Air Act and Public Health, Before the Senate Committee on Environment and Public Works, 112th Congress (2011) (statement of Dr. Harvey Brenner, Professor, Social and Behavioral Science, University of North Texas,

A wide variety of literature shows that lower-income children are less healthy than other children. And a June 23, 2006 report by Yale researcher Dr. William T. Gallo reported that, "Results suggest that the true costs of late career unemployment exceed financial deprivation, and include substantial health consequences. Physicians who treat individuals who lose jobs as they near retirement should consider the loss of employment a potential risk factor for adverse vascular health changes." <sup>21</sup>

And the positive effects of fossil fuel usage is not just limited to public health but to the environment as well. The use of coal to generate electricity improves the environment by creating an environment where people can work and live and generate sufficient resources to improve the quality of life.

http://www.epw.senate.gov/public/index.cfm?FuseAction=Files.View&FileStore\_id=37188bea-2c5f-4100-a767-f264f1a1ced2.

<sup>&</sup>lt;sup>20</sup> See, e.g., Jeanne Brooks-Gunn and Greg J. Duncan, The Effects of Poverty on Children, THE FUTURE OF CHILDREN, Summer/Fall 1997, available at http://www.princeton.edu/futureofchildren/publications/journals/article/index.xml?journalid=53&articleid=287.

<sup>&</sup>lt;sup>21</sup> W.T. Gallo et al., The Impact of Late-career Job Loss on Myocardial Infarction and Stroke: A 10-year Follow up Using the Health and Retirement Survey, 63 Occupational Environmental Medicine 685 (2006).

II. Because Global Demand for Coal Will Continue to Increase, the Significant Health and Welfare Impacts that EPA Will Impose on Society Will Not Affect Purported Climate Change.

EPA's GHG regulation seems particularly targeted at coal, the most carbon-intensive of all the fossil fuels, and the fuels that has powered about fifty percent of the Nation's electric supply for decades. Not surprisingly, the Sierra Club at least sees EPA's GHG emissions regulations as a tool to phase out entirely the nation's coal-fired power plants. senior director of the Sierra Club's Beyond Coal campaign, Bruce Niles, remarked: "The rules, if perfectly written, would phase out coal over the next one to two decades."22

But phasing out coal domestically will have little impact on worldwide usage of coal and therefore on worldwide GHG emissions. The developing world can be expected to continue to seek to rapidly reduce its energy poverty as compared to the developed world and to dramatically increase its production and use of electricity to provide basic necessities such as heat, air conditioning, refrigeration of perishable foods, cooking, as well as heated water. Coal usage will inevitably rise because coal is the lowest-cost, most reliable fuel for electric generation.

This is not speculation. According to William L. Burns, energy analyst with Johnson Rice in New

<sup>&</sup>lt;sup>22</sup> Jonathan Crawford, Sierra Club Eyes Greenhouse Gas Regulations as Tool to Phase out Coal Plants by 2030, Apr. 26, 2013,

http://www.snl.com/InteractiveX/ArticleAbstract.aspx?id=17553374.

Orleans, "[c]oal is the cheapest fuel source [and] [i]f you poke your head outside of the U.S., coal-fired plants are being built left and right."<sup>23</sup> Peabody's own projections are that, within the next five years. the global demand for coal will grow by about 1.4 billion tonnes, which is more than total current U.S. production.<sup>24</sup> Milton Catelin, the chief executive of the World Coal Association in London explained that in 2011, "coal represented 30 percent of world energy, and that's the highest share it has had since 1969."<sup>25</sup> Catelin predicts that "[w]ithin a year or two, coal will surpass oil as the planet's primary fuel."<sup>26</sup>

According to the International Energy Agency ("IEA"), "Coal has met nearly half of the rise in global energy demand over the last decade, growing faster even than total renewables . . . . The policy decisions carrying the most weight for the global coal balance will be taken in Beijing and New Delhi – China and India account for almost three-quarters of projected non-[Organisation for Economic Co-Operation] coal demand growth (OECD coal use declines)." The IEA goes on to say that, "The growth in China's electricity demand over the period to 2035 is greater than the total current electricity demand in the United States and Japan. China's coal-fired output increases almost as much as its generation from nuclear, wind

<sup>&</sup>lt;sup>23</sup> Peter Galuszka, With China and India Ravenous for Energy, Coal's Future Seems Assured, N. Y. TIMES, Nov. 12, 2012 at B6.

<sup>&</sup>lt;sup>24</sup> Peabody Energy, *Life Empowered: Peabody Energy 2012 Annual Report* at 3,

http://www.peabodyenergy.com/mm/files/Investors/Annual-Reports/PE-AR2012.pdf.

<sup>&</sup>lt;sup>25</sup> Galuszka, *supra* note 23.

 $<sup>^{26}</sup>$  *Id*.

and hydropower combined."27

International GHG emissions will continue to trend upwards as the developing world uses more coal and other fossil resources. In fact, global GHG emissions are projected to increase by 50 percent by 2050, "primarily due to a 70% growth in energy-related  $CO_2$  emissions."<sup>28</sup> On the other hand, domestic energy-related  $CO_2$  emissions are projected to remain below 2005 levels through 2040.<sup>29</sup>

#### CONCLUSION

Given the dramatic effects EPA's regulation could have on the public health and welfare, the Court should grant the Chamber of Commerce's Petition for a Writ of Certiorari.

<sup>&</sup>lt;sup>27</sup> International Energy Agency, *World Energy Outlook 2012*, *Executive Summary* at 5, 6 (emphasis added), http://www.iea.org/publications/freepublications/publication/Eng lish.pdf.

<sup>&</sup>lt;sup>28</sup> OECD, Climate Change Chapter of the OECD Environmental Outlook to 2050: The Consequences of Inaction, http://www.oecd.org/env/indicators-modelling-outlooks/climatechangechapteroftheoecdenvironmentaloutlookto 2050theconsequencesofinaction.htm (last visited May 7, 2013).

<sup>&</sup>lt;sup>29</sup> U.S. Energy Information Administration, *Annual Energy Outlook 2013 Early Release Overview* at 3, http://www.eia.gov/forecasts/aeo/er/pdf/0383er(2013).pdf (last visited May 7, 2013).

Respectfully submitted,

Douglas A. Henderson Troutman Sanders LLP 600 Peachtree Street, NE Suite 5200 Atlanta, GA 30308-2216 (404) 885-3479 douglas.henderson@ troutmansanders.com

JESSE K. MARTIN
TROUTMAN SANDERS LLP
401 Ninth Street N.W.,
Suite 1000
Washington, D.C. 20004
(202) 274-2934
jesse.martin@
troutmansanders.com

May 9, 2013

Counsel for Respondent