

TESTIMONY OF

Rena Steinzor
Professor, University of Maryland Carey School of Law
and
President, Center for Progressive Reform (www.progressivereform.org)

before the

**Committee on Energy and Commerce
Subcommittee on Energy and Power
U.S. House of Representatives**

**Legislative Hearing on
The Energy Consumers Relief Act of 2013**

April 12, 2013

Mr. Chairman, ranking member Rush, and members of the subcommittee, I appreciate the opportunity to testify today on the importance of the Environmental Protection Agency's (EPA) safeguards and how the legislation under consideration today would unduly inhibit the agency's ability to carry out its congressionally-mandated mission of protecting people and the environment against unreasonable risks.

I am a law professor at the University of Maryland Carey School of Law and the President of the Center for Progressive Reform (CPR) (<http://www.progressivereform.org/>). Founded in 2002, CPR is a network of sixty scholars across the nation dedicated to protecting health, safety, and the environment through analysis and commentary. We have a small professional staff funded by foundations. I joined academia mid-career, after working for the Federal Trade Commission for seven years and the House Energy and Commerce Committee for five years. For seven years, I served as the lawyer for small, publicly-owned electric systems. My work on environmental regulation includes four books, and over thirty articles (as author or co-author). My most recent book, published by the University of Chicago Press, is *The People's Agents and the Battle to Protect the American Public: Special Interests, Government, and Threats to Health, Safety, and the Environment*, co-authored with Professor Sidney Shapiro of Wake Forest University's School of Law, which comprehensively analyzes the state of the regulatory system that protects public health, worker and consumer safety, and natural resources, and concludes that these agencies are under-funded, lack adequate legal authority, and consistently are undermined by political pressure motivated by special interests in the private sector. I have served as consultant to the EPA and testified before Congress many times.

My testimony today makes four points:

The Energy Consumers Relief Act would only reinforce and amplify the problem of under-regulation, enabling some of the largest companies in the world to continue making record-making profits at the expense of public health and the environment.

Regulation is vital to the quality of life we take for granted in America, saving lives, preserving health, and safeguarding the natural environment for our children.

The real danger we face is one of under-regulation, particularly with respect to public health and environmental safeguards.

Congress should focus on ways to invigorate the EPA, rather than pursuing legislation that would to kneecap the agency.

The Energy Consumers Relief Act Puts Corporate Profits Ahead of Public Health and Environmental Protection

The Energy Consumers Relief Act (ECRA) would block certain EPA regulations that corporations in the energy industry find inconvenient. We could evaluate this bill in stuffy economic terms—that is, we could talk about how the bill prevents the EPA from advancing economic efficiency goals by forcing energy industry corporations to internalize the full costs of their polluting activities. While undoubtedly correct, this narrow economic view fails to capture the moral outrage that this bill richly deserves. The ECRA is nothing more—and certainly nothing less—than yet another attempt by certain members of Congress to shield some of the wealthiest and most heavily subsidized corporations in history from the relatively modest financial costs associated with carrying out their businesses in a manner that does not place people and the environment at unreasonable risk of harm.

Let's take a closer look at some of the energy industry companies that would reap a giant windfall from the ECRA. They include the Big 5 oil companies—BP, Chevron, ConocoPhillips, Exxon Mobil, and Shell—which raked in more than \$119 billion in profits in 2012.¹ Exxon Mobil finished at the top of the 2012 Fortune 500 list, bringing in profits of more \$41 billion; Chevron and ConocoPhillips finished third and fourth on the list, bringing in annual profits of nearly \$27 billion and over \$12 billion, respectively. Electric utilities would also benefit greatly from the Energy Consumers Relief Act. Exelon was number 145 on the Fortune 500 list, the highest ranking among electric utilities, bringing in profits of nearly \$2.5 billion. Other high-profitting utilities include AES Corporation (151 on the Fortune 500 list with profits of \$58 million in 2012) and Southern Company (152 on the Fortune 500 list with over \$2.2 billion in profits in 2012).

The best way to think about the ECRA is as a huge subsidy for the highly profitable companies that comprise the fossil fuel industry—adding to the already massive subsidies these companies already receive. The ECRA has the effect of a subsidy, because it systematically shields these companies from some of the costs of doing business—namely, doing their part to

¹ Jackie Weidman, *BP Rakes In \$11.6 Billion In Profits For 2012*, CLIMATEPROGRESS, Feb. 5, 2013, <http://thinkprogress.org/climate/2013/02/05/1542701/bp-rakes-in-116-billion-in-profits-for-2012/> (last visited Apr. 8, 2013).

ensure that their activities don't harm people and the environment. In 2012, the Big 5 oil companies received more than \$2.4 billion in various tax breaks from the federal government.² A January 2013 report by the International Monetary Fund estimates that every year the fossil fuel industry receive more than \$1.9 trillion in total global subsidies—an amount equal 2.5 percent of the global gross domestic product.³ Roughly, \$480 billion of those subsidies come in direct form—that is, in the form of tax breaks and other government handouts. The remaining \$1.4 trillion comes in indirect form—that is, through the absence of government policies that would force energy companies to internalize the costs of their harmful side effects. In other words, the “regulatory subsidy” that the ECRA seeks to provide the energy industry would fall into this second category.

Beyond this large fundamental objection to the ECRA, my more specific criticisms include the following:

The ECRA ignores regulatory benefits. The ECRA requires that certain EPA regulations be subjected to two new sets of analyses—one by the EPA and a second by the head of the Energy Department. By intentional designed, however, neither set of analyses accounts for regulatory benefits. As a result, these analyses are guaranteed to distort the true value of these regulations, just as the drafters of this legislation had intended. After all, even the best policies—including ones that generate enormous net benefits—will appear to be a huge drain on the economy if only their costs are considered. The cost-only focus of the ECRA's analyses reveals a telling shift in strategy by the anti-regulatory crowd. For years, they espoused cost-benefit analysis, confident that its inherently anti-regulatory methodology (*i.e.*, the systematic overestimation of regulatory costs combined with systematic underestimation of regulatory benefits) would be sufficient to quash effective regulations. They hadn't counted on regulations being such a good deal for society that they still managed to pass this dubious and biased test. So now, regulatory foes have moved the goalposts again in the regulatory debate by seeking to focus on the discussion entirely on the costs side of the ledger. This cost-only analysis of regulation can provide no useful information about regulations, and therefore serious policymakers should disregard the misleading results it produces.

The ECRA could capture a lot of the EPA's rules. Under the ECRA, any EPA rule meeting the \$1 billion statutory trigger is eligible to be blocked. The drafters of the ECRA have cleverly designed this trigger to be as expansive as possible. First, the definition is not limited to annual costs, much as other laws and policies impacting the regulatory process do. (For instance, Executive Order 12866 defines “economically significant” regulations as those having an annual economic impact of \$100 million or more.) Consequently, a rule that has recurring costs of \$100 million or more for 10 years can be subject to the ECRA. To put this in perspective, the U.S. Census estimated that there were nearly 115 million households in the United States in 2011.⁴ If a rule raised energy costs for each of these households by an average of just \$0.87 per year for ten

² *Id.*

³ INT'L MONETARY FUND, ENERGY SUBSIDY REFORMS: LESSONS AND IMPLICATIONS (2013), available at <http://www.imf.org/external/np/pp/eng/2013/012813.pdf>.

⁴ See U.S. Census Bureau, *State & County QuickFacts: USA*, <http://quickfacts.census.gov/qfd/states/00000.html> (last visited Apr. 9, 2013).

years (or \$8.70 total), then it would be sufficient to trigger the ECRA's requirements. In addition, the ECRA \$1 billion trigger includes the aggregate of both a rule's direct and "indirect" costs. The sheer expansiveness of the ECRA's statutory definition of indirect costs is mindboggling. It includes any costs that might be "incurred in related markets or experienced by consumers or government agencies not under the direct scope of the regulation." With a little creativity, there's almost no limit to how far this open-ended definition could be stretched. As a result, a generous application of the concept of indirect costs could sweep in a huge number of the EPA's rules, making them all eligible to be blocked under the ECRA.

The ECRA would subject EPA regulation to still more rounds of meaningless analysis. The additional EPA and Energy Department analyses mandated by the ECRA come on top of the slew of analytical and procedural requirements that already clog up the rulemaking process, preventing timely and effective regulatory action.⁵ These anew analyses will do nothing to improve the quality of EPA regulations; instead, they will simply waste scarce agency resources on quixotic attempts to determine some of the rules' highly attenuated—and fundamentally unknowable—future impacts. Here are the future impacts that these analyses must somehow divine:

- "Indirect costs";
- Impacts on future energy prices (including gasoline and electricity prices);
- Employment effects ("including potential job losses and shifts in employment");
- Impacts on energy prices for consumers ("including low-income households, small businesses, and manufacturers");
- "Impacts on fuel diversity of the Nation's electricity generation portfolio or on national, regional, or local electrical reliability"; and
- "Any other adverse effect on energy supply, distribution, or use (including a shortfall in supply and increased use of foreign supplies)."

Ultimately, the analyses required by the legislation would be so ridden with uncertainty that their numbers would be not just meaningless but deceptive.

The ECRA would authorize the head of the Energy Department to make monumental decisions based on technical matters outside his field of expertise. The bill gives the head of the Energy Department ultimate veto authority over certain EPA rules. Amazingly, the bill charges him to wield this authority based upon his decidedly non-expert determination of whether the regulation at issue "will cause significant adverse effects to the economy, taking into consideration impacts on economic indicators, including those related to gross domestic product, unemployment, wages, consumer prices, and business and manufacturing activity." These sorts of assessments would likely overwhelm even the best economists in the country, let alone the head of a department that lacks any institutional expertise in such matters. For decades, Congress

⁵ See PUBLIC CITIZEN, THE FEDERAL RULEMAKING PROCESS, available at <http://www.citizen.org/documents/Regulations-Flowchart.pdf>.

has trusted EPA's expert judgment on developing environmental and public health safeguards. That this bill would now seek to empower the head of the Energy Department to overrule this expert judgment based on considerations well outside the scope of his expertise defies any rational explanation.

The ECRA is a textbook example of poor legislative draftsmanship, which would lead to needless litigation and regulatory uncertainty. This bill is rife with poorly defined terms and vague concepts. Here are just a few examples:

- With respect to the bill's definition of "energy-related rule that is estimated to cost more than \$1 billion," it is unclear what is meant by a rule that "regulate any aspects of the . . . use of energy" (emphasis added). An EPA regulation to restrict uses of a particular toxic chemical could plausibly have an indirect effect on energy use (*e.g.*, the user of the chemical might have to use an alternative that involves greater energy use). Does that rule trigger this bill's applicability?
- When the head of the Energy Department makes his "determination on adverse effects to the economy," what exactly constitutes a "significant adverse effect[] to the economy"? In other words, how adverse an effect must it be before it crosses the line into "significant" territory? The bill doesn't specify. Does it have to be equal to at least a certain percentage of the GDP? Does it have to result in some minimal increase in the unemployment rate? What if the rule is projected to significantly reduce the employment rate (a beneficial economic effect) but significantly increase energy prices (possibly an adverse economic effect)?

In addition, how, if at all, will the provisions of this bill be enforced? Can the public challenge the quality of the EPA's or Energy Department's analysis of a rule? What if the public disagrees with a determination by the head of the Energy Department that a particular rule should be blocked because it will have an adverse economic impact?

Until these and other questions are resolved, this bill would lead to needless litigation wasting scarce agency and judicial resources. It could also perpetuate regulatory uncertainty, as the final status of pending rules remain indeterminate, pending the outcome of relevant litigation.

The Vital Importance of Effective Regulatory Safeguards

One does not need to look far to see how essential regulations are. Just ask anyone whose life was saved by a seat belt, whose children escaped brain damage because the EPA took lead out of gas, who turns on the faucet knowing the water will be clean, who takes drugs for a chronic illness confident the medicine will make them better, who avoided having their hand mangled in machinery on the job because an emergency switch was there to cut off the motor, who has taken their kids on a trip to a heritage national park to see a bald eagle that was saved from the brink of extinction—the list goes on and on.

The EPA's regulations—which the legislation under consideration today would attempt to block—are among the most beneficial safeguards the U.S. regulatory system has ever produced. For example, a 2011 report assessing the EPA's Clean Air Act regulations found that in 2010 these rules saved 164,300 adult lives and prevented 13 million days of work loss and 3.2

million days of school loss due to pollution-related illnesses such as asthma. By 2020, the annual benefits of these rules will include 237,000 adult lives saved as well as the prevention of 17 million work loss days and 5.4 million school loss days.⁶

Even when measured against the rubric of cost-benefit analysis—the inherently anti-regulatory yardstick espoused by corporate interests and small government ideologues—the EPA’s regulations are revealed to be huge winners for society. The 2011 report on EPA’s Clean Air Act regulations concluded that these safeguards would produce benefits worth \$2 trillion annually by 2020, dwarfing the \$65 billion in compliance costs.⁷ Similarly, a recent report by the Economic Policy Institutes (EPI) evaluated the total impact of major EPA rules developed during the Obama Administration. The report derived its results by simply aggregating the cost-benefit analyses that the EPA has prepared for these rules. It found that the major EPA rules issued during the first two years of the Obama Administration produced total annualized benefits of between \$44 billion and \$148 billion, as compared to total annualized costs of between just \$6.7 billion and \$12.5 billion. The EPI report also found that four of the EPA’s then-pending proposed major rules generated total annualized benefits of between \$173 billion and \$457 billion, as compared to total annualized costs of between just \$14 billion and \$15 billion.⁸

The damage that the ECRA would do to the public health and environment is immediately apparent when one looks at some of the recent or pending EPA regulations this bill seeks to block. For example, EPA’s boiler MACT rule, which sets strong limits on toxic air pollution from industrial and commercial boilers, will annually prevent up to 8,100 premature deaths, 5,100 non-fatal heart attacks, and 52,000 asthma attacks. In addition, EPA’s greenhouse gas standards for cars and light trucks together are projected to save Americans more than \$1.7 trillion in fuel costs. For a comprehensive summary of the benefits of EPA’s recent and pending rules, please see the chart produced by the Natural Resources Defense Council, which I have attached to this testimony as Appendix A.

Importantly, these EPA rules have brought great benefit to the United States without any significant economic dislocation. A recent CPR report reviewed all 30 of the available retrospective rule reviews that the EPA has conducted pursuant to section 610 of the Regulatory Flexibility Act, and each of these reviews concluded that the regulations were still necessary and that they did not produce significant job losses or have adverse economic impact on the regulated industries, including on small businesses. Specifically, all of these reviews reached the following findings:

- There is a “continued need” for the regulation, meaning that a significant risk to public health or the environment exists, and that the controls called for in the regulation continue to be successful in reducing that risk.
- The regulations did not require any major modification to increase their effectiveness or reduce their costs.

⁶ See ENVTL. PROTECTION AGENCY, THE BENEFITS AND COSTS OF THE CLEAN AIR ACT FROM 1990 TO 2020 (Mar. 2011), available at <http://www.epa.gov/oar/sect812/feb11/fullreport.pdf>.

⁷ *Id.*

⁸ Isaac Shapiro, *Tallying Up the Impact of New EPA Rules: Combined Costs of Obama EPA Rules Represent a Sliver of the Economy and are Far Outweighed by Cumulative Benefits* (Econ. Pol’y Inst., Briefing Paper No. 311, 2011), available at <http://w3.epi-data.org/temp2011/BriefingPaper311.pdf>.

- The regulations have not been unduly costly on industry nor did it have a significant adverse impact on the industry.
- Existing regulations were often supported by regulated entities, and when this was not the situation, regulated entities supported reform of the regulation, not its elimination. In several cases, the EPA received no comments from regulated entities when it reviewed a regulation.

Despite the vast evidence supporting the value of regulation, self-righteous crusaders against regulation have become accustomed to telling only half the story to the American people: they pretend that exaggerated regulatory costs are the only result of the system, and ignore the considerable benefits described above. Conversely, they suggest that if we dismantled the regulatory system, we would suffer no negative consequences and instead reap a windfall in saved money.

The ECRA is clearly intended to advance this strategy of willful deception. The analyses it mandates are clearly calculated to present the EPA's regulations in the worst light possible—as senseless drains on the economy that invariably impose large costs on businesses, kill jobs, and raise energy prices. Meanwhile, the bill makes no effort to account for the overwhelmingly larger benefits these rules produce. Worse still, it pretends that there are no costs to blocking or delaying the EPA's rules. There are, of course. Preventable deaths, heart attacks, aggravated asthma symptoms, and chronic lung disease, to say nothing of quashing our last best efforts at averting the worst consequences of climate change, will be the inevitable result if the ECRA should become law.

In short, the ECRA does not eliminate regulatory costs for polluting industries. Rather, it ensures that American public continues to shoulder these burdens, in the unconscionable form of a degraded environment, debilitated health, and, in too many cases, lives cut tragically short.

The Problem of Under-Regulation

The regulatory system created by Congress and implemented by agencies is designed to protect the American people against unacceptable risks to important values such as a safe and healthy environment, but the destructive convergence of inadequate resources, political interference, and outmoded legal authority often prevents regulatory agencies from fulfilling this task in a timely and effective manner. Unsupervised industry “self-regulation,” which has often filled the resulting vacuum, is not an adequate substitute, as the predictably catastrophic results of inadequate regulation regularly demonstrate.

The consequences of inadequate regulation and enforcement are obvious—from the BP oil spill in the Gulf of Mexico to the Upper Big Branch Mine disaster that claimed the lives of 29 men; from the decaying natural gas pipeline networks running beneath our homes to the growing risk of imported food tainted with salmonella, botulism, or other contaminants showing up on grocery store shelves. And, of course, inadequate regulation of the financial services industry helped trigger the current economic recession and left millions unemployed, financially ruined, or both.

The EPA provides a clear illustration of the problem of under-regulation, as the agency has been prevented from adequately addressing several pressing environmental and public health threats:

- **Climate change.** The EPA has made some important strides toward addressing the threat of climate change through strengthened controls on mobile sources and by encouraging energy efficiency. The agency's efforts to limit greenhouse gas emissions from the largest sources—including fossil-fueled power plants and oil refineries—will likely remain delayed for several years.
- **Toxic chemicals.** Of the 40,000 unique chemicals in existence, the EPA has managed to test only a few hundred, and has imposed adequate restrictions to protect public health and the environment on far less. The agency has barely even scratched the surface of addressing the threats human health consequences that can result when people are exposed to combinations of these chemicals.
- **Fracking.** The EPA has thus far taken only a few small steps toward addressing the various environmental and public health risks associated with fracking, which include conventional and toxic air pollution, water pollution, and drinking water contamination.
- **Ozone.** Excessive ground-level ozone can trigger asthma attacks and cause permanent lung damage. The EPA has not updated its national ozone standard in more than 15 years, even though the agency's science advisors have known since at least 2006 that the existing standards were inadequate to protect public health and the environment. Under the Clean Air Act, the EPA is supposed to update this standard at least once every five years.

Even the EPA's most recent regulatory successes—including first-time limits on toxic air pollution from power plants and a further tightening of its nationwide fine particulate matter standards—were the subject of several years of inexcusable delays.

If enacted, the ECRA would only reinforce and amplify the problem of under-regulation at the EPA, preventing the agency from addressing many of the environmental and public health risks noted above. This result would no doubt elate corporate interests by helping them protect their already healthy bottom lines. But, the toll it would take on the general public would be unconscionable.

The EPA Must Be Invigorated, Not Blocked

The proponents of this bill are partially right one thing: The EPA is not carrying out its statutory mission of protecting people and the environment as well as it could be. Their diagnosis of the problem, however, is completely off the mark. To fix the problem, the EPA must be reinvigorated, not burdened with new analyses and threatened with unilateral vetoes of their pending rules by non-expert officials in other executive branch agencies.

To reinvigorate the EPA, I suggest the following reforms:

Empower the EPA Administrator to run EPA. It sounds somewhat absurd, but the reality of the situation is that the EPA Administrator does not in fact run the EPA.

Instead, the head of the White House Office of Information and Regulatory Affairs (OIRA) has *de facto* authority over the final substance of EPA rules and whether the rules even see the light of day, as detailed in a recent law review article by former EPA official Lisa Heinzerling.⁹ The ECRA would in fact worsen the situation by deputizing yet another non-expert in the executive branch to squash the EPA's pending rules. The EPA alone has the unique expertise to design regulations that best comport with applicable law and the best available science. The EPA Administrator must be permitted to ensure that this expertise provides the sole basis for regulatory decision-making.

Provide agencies with the resources they need. One of the reasons that the EPA cannot fulfill its statutory mission is that its financial resources and available personnel have been reduced or maintained at constant levels in recent years. This has been occurring as the EPA's mission has become more complex, forcing the agency to effectively do more with less. And the situation is getting worse, not better. For example, the recent sequestration cuts slashed EPA's already inadequate \$8.4 billion budget by another \$700 million. Among other things, these new cuts would force the agency to scrap several air pollution monitoring sites and scale back its program for assessing the human health impacts of several potentially harmful chemicals. To reverse this situation, the President and Congress must work together to identify and actually provide the minimal resources that the EPA needs to fulfill its mission in as effective and timely manner as possible.

Reform the rulemaking process to reduce corporate dominance and level the playing field for the general public. Over the past few decades, the rulemaking process has become encumbered by a growing number of analytical and procedural requirements. These analytical obstacles draw upon the EPA's already stretched resources and distract the agency from focusing on its regulatory missions without meaningfully improving the quality of agency decision-making. More problematically, corporate interests have leveraged their superior financial resources to dominate key steps in the rulemaking process, enabling them to delay rulemakings and unduly influence the rule's final substance. In short, the regulatory process works for corporate interests rather than the public interest. This must change. The President and Congress should carefully evaluate the various analytical and procedural requirements with an eye toward eliminating or consolidating them as much as possible. For the remaining analytical and procedural requirements, the President and Congress should consider reforms that would ensure meaningful participation by the general public, including providing the public with tools such as petition rights to dislodge rules that have become stuck at any chokepoints in the rulemaking process.

Thank you. I'd be pleased to answer any questions you may have.

⁹ Lisa Heinzerling, *Who Will Run the EPA?*, 30 YALE J. ON REG. 39 (2013), available at <http://jreg.commons.yale.edu/who-will-run-the-epa/>.

Appendix A

Chart Summarizing the Benefits of Recent and Pending Environmental Protection Rules That Could Potentially Be Blocked by the Energy Consumers Relief Act

Prepared by the Natural Resources Defense Council

EPA Rule	Projected Costs and Benefits	Benefit to Cost Ratio	Health Benefits
Tier III standards for motor vehicles, proposed March 2013 <i>(not yet final)</i>	\$3.4 billion in costs ¹ \$8 to 23 billion in benefits ²	2.2 to 6.8:1 ³	Once implemented in 2030, each year will avoid ⁴ : <ul style="list-style-type: none"> • Between 820 and 2,400 premature deaths • 3,200 hospital admissions and asthma-related emergency room visits • 22,000 asthma exacerbations • 23,000 upper and lower respiratory symptoms in children • 1.8 million lost school days, work days and minor-restricted activities
Final Toxic Air Pollution Standards for Industrial Boilers (“Boiler MACT”), finalized Dec. 20, 2012	Benefits: \$27 to 67 billion ⁵ Costs: annual costs of approximately 2 billion ⁶	Up to 29:1 ⁷	Once implemented in 2015, each year will avoid ⁸ : <ul style="list-style-type: none"> • up to 8,100 premature deaths, • 5,100 heart attacks, and • 52,000 asthma attacks.
Final Standards for PM2.5	Estimated annual costs of implementing the	Up to 171:1	Once implemented in 2020, each year will prevent:

¹ U.S. EPA, Draft Regulatory Impact Analysis: Tier 3 Motor Vehicle Emission and Fuel Standards, March 2013, at Table 8-3 available at <http://www.epa.gov/otaq/documents/tier3/420d13002.pdf>.

² *Id.*, at 8-31.

³ *Id.*

⁴ U.S. EPA, Fact Sheet: EPA Proposes Tier 3 Motor Vehicle Emission and Fuel Standards, available at <http://www.epa.gov/otaq/documents/tier3/420f13016a.pdf>.

⁵ U.S. EPA, Fact Sheet: Final Adjustments to the Air Toxics Standards for Industrial, Commercial, and Institutional Boilers and Process Heaters at Major Source Facilities, available at http://www.epa.gov/airquality/combustion/docs/20121221_boiler_major_recon_fs.pdf.

⁶ U.S. EPA, Fact Sheet: Emission Reductions Remain Significant for Comparable Cost, available at http://www.epa.gov/airquality/combustion/docs/20121220_emissions_reductions_cost.pdf.

⁷ U.S. EPA, Fact Sheet: Adjustments for Major and Area Source Boilers and Certain Incinerators Summary Overview, available at

http://www.epa.gov/airquality/combustion/docs/20121221_sum_overview_boiler_ciswi_fs.pdf.

⁸ *Id.*

<p>("PM2.5 NAAQS") Finalized Dec. 14, 2012</p>	<p>standard: \$53 million to \$350 million⁹</p> <p>Benefits of \$4 billion to \$9.1 billion per year in 2020¹⁰</p>	<p>(minimum of 12:1).¹¹</p>	<ul style="list-style-type: none"> • Up to 1000 premature deaths • 480 non-fatal heart attacks • 40,000 asthma exacerbations • 27,000 asthma exacerbations • 420,000 restricted activity days
<p>National Greenhouse Gas standards and CAFE standards to reduce GHG emissions from motor vehicles (Model Years 2017 and later finalized Aug. 2012; Model Years 2012-2016 finalized April 2010)</p>	<p>Combined standards: projected to save Americans \$1.7 trillion in fuel costs</p> <p><u>Model Year 2017-2025 standards:</u></p> <p>Benefits: \$326 billion to \$451 billion</p> <p>\$150 billion</p> <p><u>Model Year 2012-2016 standards:</u></p> <p>Benefits up to \$240 billion</p> <p>Costs: less than \$52 billion</p>		<p><u>Model Year 2017-2025 Standards:</u></p> <ul style="list-style-type: none"> • 110 to 280 lives saved per year by 2030 <p><u>Model Year 2012-2016 Standards:</u></p> <ul style="list-style-type: none"> • 60 to 150 lives saved per year by 2030
<p>Mercury and Air Toxics Standards, finalized Dec. 14, 2011</p>	<p>\$9.6 billion to implement¹²</p> <p>\$37 to 90 billion in health benefits¹³</p>	<p>up to 9:1 (minimum of 3:1)¹⁴</p>	<p>Once Implemented, per year will prevent¹⁵:</p> <ul style="list-style-type: none"> • Premature Deaths: Up to 11,000 • Chronic Bronchitis: 2,800 • Heart Attacks: 4,700 • Asthma Attacks: 130,000

⁹ U.S. EPA, Fact Sheet: Overview of EPA's Revisions to the Air Quality Standards for Particle Pollution (Particulate Matter), available at <http://www.epa.gov/pm/2012/decfsoverview.pdf>.

¹⁰ *Id.*

¹¹ *Id.*

¹² U.S. EPA, Fact Sheet: Mercury and Air Toxics Standards, available at <http://www.epa.gov/mats/pdfs/20111221MATSummaryfs.pdf>.

¹³ U.S. EPA, Fact Sheet: Benefits and Costs of Cleaning Up Toxic Air Pollution from Power Plants, available at <http://www.epa.gov/mats/pdfs/20111221MATSimactsfs.pdf>.

¹⁴ *Id.*

¹⁵ *Id.*

			<ul style="list-style-type: none"> • Hospital & Emergency Room Visits: 5,700 • Restricted Activity Days: 3,200,000
Cross- State Air Pollution Rule, finalized July 6, 2011	<p>\$120 to \$280 in health benefits¹⁶.</p> <p>\$800 million in annual costs; \$1.6 billion underway as a result of implementation of Clean Air Interstate Rule.¹⁷</p>		<p>Once implemented, per year will prevent¹⁸:</p> <ul style="list-style-type: none"> • Up to 34,000 premature deaths • 19,000 cases of acute bronchitis • 15,000 nonfatal heart attacks • 19,000 hospital and emergency room visits • 1.8 million days when people miss work or school • 400,000 cases of aggravated asthma, and • 420,000 cases of upper and lower respiratory symptoms.
Proposed Cooling Water Intake Rule (not yet finalized)	<p>(Costs and benefits figures based on EPA's "preferred option" in the proposed rule)</p> <p>Costs: \$384 – 489 million annually</p> <p>Benefits: \$3.4 billion to 5.5 billion</p>	Up to 14:1 (minimum of 7.6 :1)	
Final NAAQS for Sulfur Dioxide, Finalized June 3, 2010	<p>Benefits: \$13 to \$33 billion annually once implemented¹⁹</p> <p>Cost in 2020 to fully implement the standard: \$1.5 billion²⁰</p>		<p>Once implemented , will annually avoid²¹:</p> <ul style="list-style-type: none"> • 2,300 to 5,900 premature deaths • 54,000 asthma attacks

¹⁶ U.S. EPA, Fact Sheet: The Cross-State Air Pollution Rule: Reducing the Interstate Transport of Fine Particulate Matter and Ozone available at <http://www.epa.gov/airtransport/CSAPR/pdfs/CSAPRFactsheet.pdf>.

¹⁷ *Id.*

¹⁸ *Id.*

¹⁹ U.S. EPA Press Release: EPA Sets Stronger National Air Quality Standard for Sulfur Dioxide First new SO₂ standard in 40 years will improve air quality for millions, available at <http://yosemite.epa.gov/opa/admpress.nsf/0/F137260029B9B4F385257737004E521B>.

²⁰ *Id.*

²¹ *Id.*