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EPA'S
REGULATORY TRAIN WRECK
STRATEGIES FOR STATE LEGISLATORS

AMERICAN LEGISLATIVE EXCHANGE COUNCIL

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EPA's Regulatory Train Wreck: Strategies for State Legislators

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EXECUTIVE SUMMARY



Introduction

The Environmental Protection Agency turned 40 years old in December 2010. To celebrate the occasion, the Agency undertook one of the most breathtaking and hostile regulatory assaults on energy affordability and electric reliability in our nation's history. While pending regulation of greenhouse gas emissions under the Clean Air Act (despite Congressional rejection of cap-and-trade) has received the lion's share of the attention, EPA has also begun promulgating and will continue promulgating over the next several years a slew of overreaching and inefficient air and water rules that will dramatically increase energy costs, cause enormous negative impacts to jobs and the economy, irreparably damage the competitiveness of American business, and trample on the rights of states in the process.

Despite the resounding expression of disapproval for the Administration's big government market interventions by voters last November, the Agency has pushed ahead in its regulatory onslaught without regard to economic realities or democratic accountability. This report highlights one small subsection of this emerging regime—EPA's assault on the use of fossil fuels,

and particularly coal, for electric generation and other commercial and manufacturing processes—to illustrate the broader issues resulting from EPA's regulatory train wreck.

Cap-and-Trade Through the Back Door

EPA's hostility to fossil fuels is a telling example of what the Agency has in mind for the American economy. Eighty-five percent of American energy is produced from fossil fuels; about 50 percent of American electricity comes from coal. America is the Saudi Arabia of coal; it is by far our most abundant domestic source of energy. The fact that the nation uses so much coal reflects its low cost, ready availability, and proven effectiveness as a stable and reliable fuel.

Yet despite the fact that emissions from the use of coal have sharply declined over the last several decades and will continue to decline with the introduction of new clean and green-coal technologies, EPA wants to remove coal completely from the equation. Instead, EPA wants to force the nation into a "green revolution" by implementing the rejected cap-and-trade agenda through regulation. In the words of President Obama in an interview with *Rolling Stone* last Fall following defeat of cap-and-trade in Congress: "One of my top priorities next year is to have an energy policy that begins to address all facets of our over-reliance on fossil fuels. We may end up having to do it in chunks, as opposed to some sort of comprehensive omnibus legislation."

Or as the President reiterated in his first press conference after the 2010 elections: "Cap-and-trade was just one way of skinning the cat; it was not the only way."

But the voters rejected the Administration's revolutionary approach to environmental policy in the November elections. The market will supply the energy innovations the country needs; government's role is to reduce the regulatory burden, encourage innovations, and otherwise get out of the way.

The Regulatory Train Wreck

Reflecting its government-knows-best attitude, EPA is developing and finalizing nearly 30 major regulations and more than 170 major policy rules. By late November of 2010, these changes had already surpassed the Agency's regulatory output in the entire first term of Bill Clinton, which the *Wall Street Journal* notes was a period in which "the EPA had just been handed broad new powers under the 1990 revamp of air pollution laws."

EPA's pipeline in the near term just for the use of coal for electric generation and for commercial and industrial purposes includes:

- Regulation of GHG emissions from industrial, manufacturing and electric generation facilities under the enormously inefficient New Source Review program;
- Regulation of essentially the same emissions from the same facilities under the inflexible, top-down, command-and-control New Source Performance Standards program;
- Regulation of cooling water intake structures at fossil fuel (and nuclear) electric generating stations under the Clean Water Act without adequate justification;
- Regulation of mercury, acid gases, and other hazardous air pollutants from power plants as well as from commercial and industrial boilers (despite the lack of evidence that emissions in these miniscule quantities cause health or welfare impacts) using the inflexible, stringent, command-and-control mechanisms set forth in the National Emissions Standards for Hazardous Air Pollutants section of the Clean Air Act;
- Regulation of sulfur dioxide and nitrogen oxides under the Clean Air Transport Rule, a rule that utilities must comply with starting on January 1, 2012, even though EPA is still formulating the rule and doesn't expect to finalize it until this summer at best;
- Regulation of coal combustion residuals under the Resource Conservation and Recovery Act, with the potential for designating this material for the first time ever as a hazardous waste, a designation which could seriously damage the use of coal for electric generation;

- Promulgation of stringent ozone and particulate matter standards under the National Ambient Air Quality Standards (NAAQS) program, with EPA revising standards recently adopted during the Bush Administration that environmental groups objected to;
- Restrictions on mining permits in Appalachia in an effort that will gut the coal industry and kill jobs in that region.

The images contained in Chapter 1 illustrate that there is nothing orderly or reasonable about this approach; this regulatory assault entails overlapping mandates, unattainable deadlines, and uncertainties that combine to threaten economic recovery, state sovereignty, and the very basis of our market-based affordable energy system. As anyone familiar with the implementation of the Clean Air Act over the last forty years will tell you, the low-hanging environmental fruit have been picked, and these additional pollution rules are likely to exponentially increase costs with minimal clean air and water benefits.

No Cost Too Much

What will all of this regulation cost? EPA doesn't know and evidently doesn't care to find out. Despite pleas from a broad cross-section of business, EPA has refused to undertake a study of the effect of its greenhouse gas regulatory initiatives on jobs, the economy and business competitiveness. It has similarly failed to conduct a study of the overall, cumulative cost of all of its regulations together. Others have been forced to weigh in on what that cost will be; as discussed in the report, that cost is enormous.

It is not, though, simply a matter of the scope of these regulations that constitutes a train wreck. As Kathleen Hartnett White and Mario Loyola of the Texas Public Policy Foundation (hailing from a state that has felt the brunt of EPA's revised approach to cooperative federalism) note: "The new heavy-handed EPA... operates far more like an activist for whom no standard is too high, no impact too onerous, no risk too low and no science too speculative."

“It makes sense for state and local air pollution agencies to take the lead in carrying out the Clean Air Act. They are able to develop solutions for pollution problems that require special understanding of local industries, geography, housing, and travel patterns, as well as other factors... The states must involve the public and industries through hearings and opportunities to comment on the development of each state plan.”

- United States EPA, “The Plain English Guide to the Clean Air Act,” 2007

Cramming Down Greenhouse Gas Regulation

Nowhere is EPA’s regulatory overreach more apparent than in its misguided effort to regulate greenhouse gases under the Clean Air Act, a statute that was never intended for that purpose. EPA was determined to have greenhouse gas regulation in place by the beginning of this year in order to create a fait accompli for the incoming Congress. As a result, the end of 2010 saw an unprecedented flurry of last-minute rulemaking. EPA promulgated no less than 11 greenhouse gas regulations in 2010, 7 of them in December, and 6 of them totaling more than 500 pages were issued on the eve of the Christmas holiday and did not get published in the Federal Register until the last two business days of 2010.

And what EPA did to states to get this program implemented by the beginning of 2011 is nothing short of unconscionable. Because states in most cases administer the “PSD” and “Title V” permit programs under which EPA chose to regulate greenhouse gases, the Agency ordered states to change their state laws and regulations under which these programs operate in order to conform to EPA’s new greenhouse gas requirements. But the Agency gave states only a few months to make the needed law changes. With time running out in 2010, EPA actually threatened states with

a construction ban for large industrial and manufacturing sources if the states did not make the necessary law and regulatory changes on EPA’s incredibly expedited schedule. And so the final months of 2010 witnessed a large majority of states galloping through rulemakings, some of them having to invoke emergency authority to meet EPA’s schedule, in order to avoid the construction ban. Some states did not make it; as of January 2, 2011, EPA imposed a federal implementation plan on 8 states that did not act quickly enough.

And then EPA had the nerve to announce in a press release that the Agency and the states had “worked closely” to implement the GHG program. That is simply not the case. Appended to the report is a paper entitled “What States are Really Saying about EPA GHG Regulation.” It contains excerpts from a dozen state environmental agencies expressing displeasure with the heavy-handed EPA approach.

EPA’s intrusion on states’ rights in implementing its greenhouse gas program is only one example of the Agency’s disregard for the interests of states. The report details a number of others.

More and More Regulation

While this report focuses on EPA rulemakings that primarily target the use of coal as a particular case study, it is worth noting that this regulatory onslaught is also underfoot in a variety of other fields. For example, having finalized greenhouse gas emission restrictions under the Clean Air Act for 2012 through 2016 model-year passenger vehicles and light trucks in April 2010, the Agency has already proposed the first-ever GHG standards for medium- and heavy-duty vehicles and is also in the process of developing additional light-duty vehicle standards for model-years 2017 to 2025. EPA also has under consideration greenhouse gas rules covering almost every sector of the economy, from cars and trucks to ships, boats and airplanes, to mining and agriculture, to all types of manufacturing and industrial facilities, to movable equipment of every kind (from fork lifts to lawnmowers), and to residential and commercial buildings.

Beyond greenhouse gases, EPA has considered or is in the process of taking up additional regulation of numerous products, emissions, and activities, including: hydraulic fracturing; the widely-used herbicide atrazine; formaldehyde emissions from pressed wood products; lead wheel weights; water nutrients in Florida; lead bullets and tackle; pesticide spray drift; dust; Portland cement; and Bisphenol A.

What Can State Legislators Do?

Given all of this EPA regulatory activity, now is an essential time for concerned state legislators to stand athwart a train wreck, and yell Stop. The first half and indeed the first few months of 2011 could prove decisive, as EPA moves to implement as much of its regulatory agenda as possible before it can be stopped. In the first part of 2011, Congress appears set to consider, both through more extensive EPA oversight and legislative vehicles like the Congressional Review Act, ways to limit EPA authority.

What then can state legislators do to stop the train wreck? The report outlines some of the comprehensive and issue-specific legislative tools at your disposal, including expressing strong opposition to EPA's regulatory train wreck via resolutions, enhanced regulatory review, bills to assert state sovereignty, and tips for getting your state on the right side of the ongoing legal and public relations struggles. As unemployment hovers around nine percent, it is the duty of states to weigh in against the effects of these job-crushing regulations.

In particular, as the highest-priority near-term action item, we urge you to give close consideration to the resolution highlighted in Chapter 5 calling on Congress to stop the train wreck. The resolution has been introduced in a number of states, and has, as of early February, passed out of state houses in Indiana and Wyoming. Our allies in Congress need to hear your support immediately; the Administration needs to understand your determination.

Finally, while the report offers a glimpse into this train wreck as it stands in early 2011, the regulatory environment is obviously dynamic. To provide ongoing updates to this material (including news on additional rulemakings, innovative tools, and links to new studies), an accompanying website is hosted at www.regulatorytrainwreck.com. This website also contains video from an ALEC workshop held at the 2010 States and Nation Policy Summit on "EPA's Regulatory Assault: Higher Prices, Fewer Jobs, and Less Energy," with indispensable analysis from Peter Glaser of Troutman Sanders LLP law firm, and Harry Alford of the National Black Chamber of Commerce. We will keep you up-to-speed on the progress of the Stop the Train Wreck resolution in legislatures across the country. We encourage you to check this site often. If you have any additional questions or requests for model legislation, please contact ALEC's Energy, Environment and Agriculture Task Force Director, Clint Woods, at cwoods@alec.org or 202.742.8542.

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THE GLORIOUS MESS
OF EPA REGULATION

Why do so many now refer to the blizzard of regulatory activity that EPA has unleashed as a train wreck? If a picture is worth a thousand words, the following schematic showing some but not all of the regulations described in this report amply illustrates EPA's anti-coal plan. The timeline shows multiple EPA regulations all of which have a common purpose: to force the power sector into early retirements of its coal-fueled fleet of electric generation stations and to force the manufacturing and industrial sectors to cease using coal as an input fuel. EPA's vision for the power sector is to mandate industry to use more expensive, less reliable renewable resources. Renewable resources have an important role to play, but it is foolish to think that we can shut down the 50 percent of the power sector that uses coal and replace all that generation with wind and solar. Trying to force that outcome through the top-down EPA rulemaking that the schematic illustrates will be hugely debilitating to the economy, as this report will show.

The long-time former Chair of the House Energy and Commerce Committee and one of the principal authors of the current version of the Clean Air

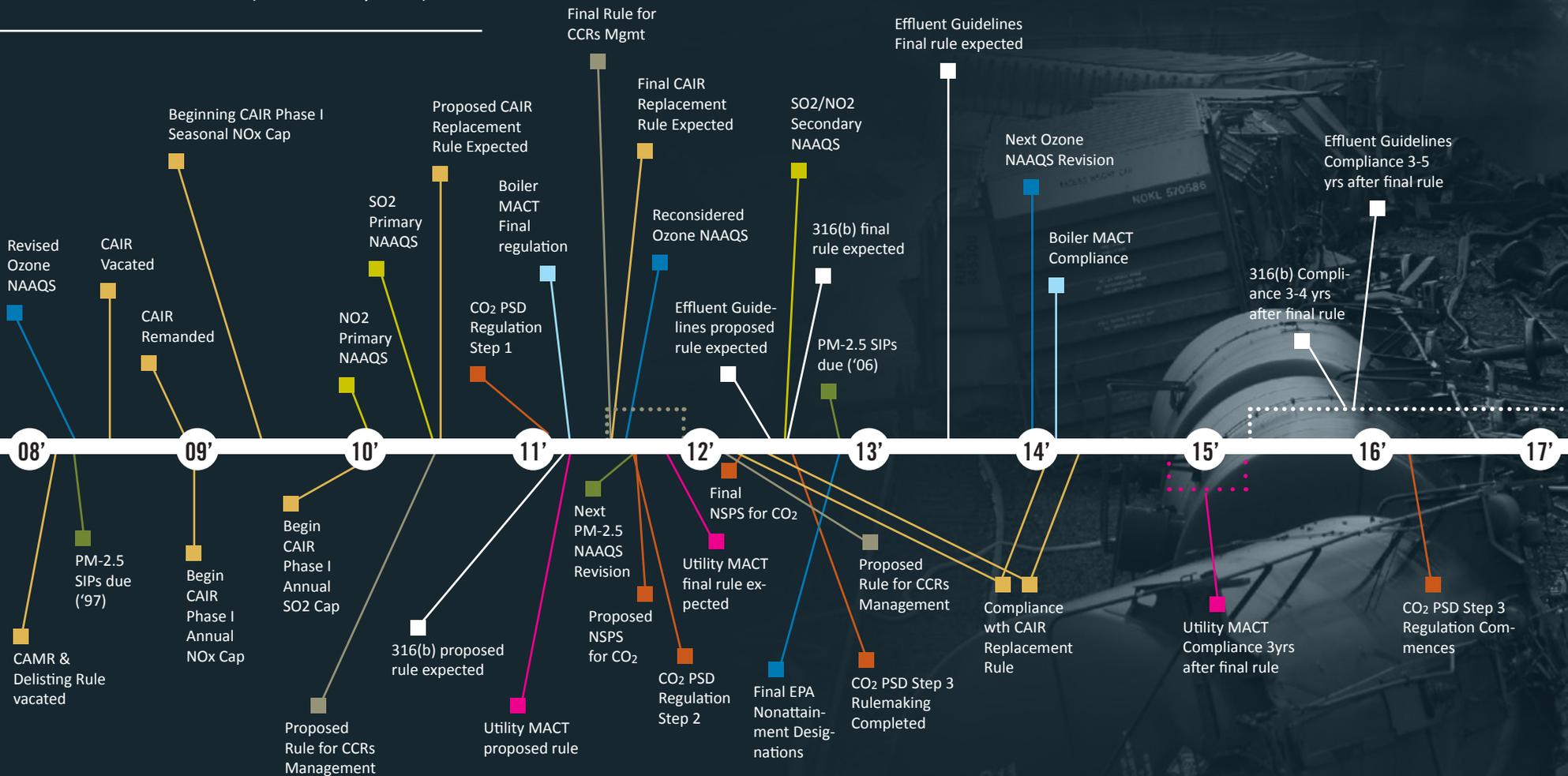
Act, Congressman John Dingell, a Democrat from Michigan, famously said that EPA regulation of greenhouse gases under the Clean Air Act will create a "glorious mess." Mr. Dingell underestimated what the current EPA has in mind. Not only is EPA intent on triggering a glorious mess of greenhouse gas regulation, it intends to layer on top of that mess all of the additional regulation shown in the schematic. And it is doing it at a time when the economy is least able to handle the staggering regulatory burden.

Incoming Chairman of the House Energy and Commerce Committee, Congressman Fred Upton, a Republican from Michigan, has it right: "[a]t a time of near double-digit unemployment, the EPA should stand down altogether from any action that will further hamstring our fragile economy."¹

¹"Upton Comments on EPA Delay of Devastating Ozone Regulations," December 8, 2010, <http://upton.house.gov/News/DocumentSingle.aspx?DocumentID=217157>.

EPA's Regulatory Train Wreck

Currently Estimated Regulatory Timeline for Coal-Fueled Power Plants and Commercial Industrial Boilers (as of January 2011)



2

LEAVING THE STATION:
ELEMENTS OF A TRAIN WRECK

While the image of the impending regulatory train wreck provides a dramatic illustration of the scope of EPA's agenda, hard data confirm that these rules, individually and collectively, will have a dramatic effect on the cost of electricity to the consumer, the economy as a whole, and jobs. Most of these regulations provide for duplicative, inefficient, command-and-control mechanisms for controlling the same emissions from the same electric generation stations; some apply to manufacturing and industrial facilities. While the country should continue on its long-established path of continually reducing emissions, EPA's tsunami of redundant regulations with unattainable compliance deadlines seems more in keeping with an agenda of just eliminating the use of coal—the nation's most abundant source of domestic energy—no matter the cost rather than maintaining steady progress in reducing emissions over time without damaging the economy.

This section provides a very basic introduction to the elements of this train wreck, including the background and timeline for rulemaking, the sources affected, and, where available, citation of the relative price tag for each regulation (to include compliance costs, jobs lost, or overall economic effects). GHG regulation under the Clean Air Act, as the greatest departure from established federal air and water regulation, is discussed with more legal and economic context at the end of this section. While the Admin-

istration has accused anyone who opposes this environmental onslaught of pushing "trumped-up doomsday predictions," EPA has no basis to make such a statement since it has not itself fully analyzed the costs and benefits of these individual proposals, let alone the combined effect of all elements of the train wreck. As Chapter 3 discusses, independent analysis indicates that even a small number of these rules are likely to result in radical changes to the U.S. energy mix and economy.

Regulation of Cooling Water Intake Structures Clean Water Act

Background

In an attempt to protect fish populations under certain situations, EPA is considering an overbroad regulation that could force a significant number of existing fossil fuel (and nuclear) power plants to replace their once-through cooling systems with cooling towers. Most plants heat water into a steam to turn a turbine and generate electricity, and many then use cooling water from a natural water body to condense the steam back to water and repeat the process. The Clean Water Act's Section 316(b) requires that these cooling water intake structures minimize environmental effects by using the "best technology available."

EPA has indicated, however, that it could require once-through cooling systems to shift to closed-cycle cooling towers, which would be an extremely costly and unnecessary retrofit.

Beyond economic costs associated with the rulemaking, there are several other reasons for pause on any broad cooling water intake structure regulation. From barrier nets to fish return systems, there are a variety of alternatives to cooling towers for reducing any adverse aquatic effects. Several studies have indicated that the overall impact for fish populations as a result of once-through cooling systems is minimal. Furthermore, cooling towers could decrease efficiency, increase emissions of particulate matter and GHG, and expand water use.¹

While Administrator Jackson stated in a recent letter to Chairman Upton that she does not favor a “one-size-fits-all federal mandate,” close attention must be paid to whether the regulations that EPA proceeds with provide business with necessary flexibility. Moreover, the necessity for federal intervention in this area, as opposed to action by the states, is questionable. As noted by the Nuclear Energy Institute (NEI), a recent Supreme Court decision granted EPA broad flexibility to “allow for the states to protect both the aquatic environment and the reliability of the electrical grid through appropriate site-specific and cost-benefit analyses.”² Section 316(b) is implemented through the National Pollutant Discharge Elimination System (NPDES) regulatory scheme. Despite an almost comprehensive set of federal NPDES regulations, EPA has never promulgated any meaningful rules implementing Section 316(b), although they have tried several times. Many states largely rely on BPJ (best professional judgment) when crafting NPDES permit conditions, if their NPDES regulatory schemes do not have specific prescriptions. Jackson has stated that the deadline for the proposed rule is March 14, 2011, and EPA is scheduled to take final action in July 2012.

Sources Affected

According to the North American Electric Reliability Corporation (NERC), this rule could impact existing plants with once-through cooling systems, including as many as 1,201 coal, oil steam, and gas steam generating units (totaling 252 gigawatts (GW)³) as well as roughly one-third of all installed nuclear capacity (approximately 60 GW).⁴

Estimated Price Tag

The Electric Power Research Institute (EPRI) has found that the total initial **capital costs would be around \$64 billion** nationally.⁵ According to a report by New Jersey utility PSEG, “[a] requirement to install cooling towers will force power plants into a retrofit-or-retire decision.”⁶ The NERC study found that, as a result of these decisions, this rule alone could **threaten up to 41 GW** and, in turn, electric reliability throughout the country. For each plant, costs could run **several hundred million dollars (and, for nuclear plants, as high as \$1 billion)**.⁷ The enormous capital expenditures, combined with reliability issues, could result in substantial rate increases for consumers.

Regulation of Coal Combustion Residues (CCRs) Resource Conservation and Recovery Act

Background

In 2008, a dam at a coal ash storage impoundment operated by the Tennessee Valley Authority failed, resulting in a significant spill. Although the problem was the integrity of the dam, and although only some coal ash is stored in impoundments (some of it is stored in landfills and coal mines and much is beneficially reused), EPA has seized on this incident to consider altering the regulatory classification of coal ash and designating it a hazardous waste. This will have highly significant consequences for the viability of coal-fired electric generation, which inevitably produces combustion residuals such as coal ash and must store it some place or sell it

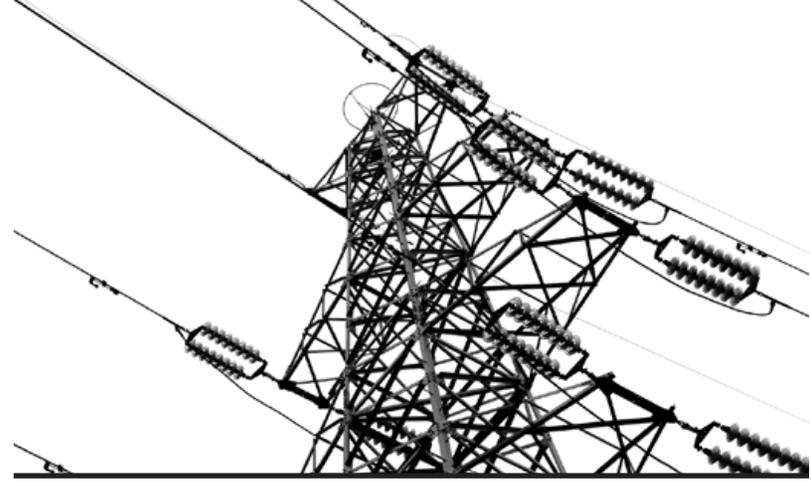
for beneficial use in products. EPA is considering this action despite having issued final regulatory determinations in 1993 and 2000 that concluded that coal combustion residuals (CCRs) do not represent hazardous waste.

Under one of the two regulatory proposals that EPA is considering, CCRs would be regulated under Subtitle C of the Resource Conservation and Recovery Act, which is reserved for hazardous waste. The Agency says that CCRs will only be designated as a hazardous waste under Subtitle C if the material is stored in landfills or impoundments, and therefore CCRs could still lawfully be used in products. But EPA's attempt to reassure the industry that it can still sell coal ash for beneficial reuse is hard to credit. For instance, what builder will use drywall containing a material that EPA has designated as a hazardous waste?

EPA is prohibited from declaring CCRs to be hazardous until it “conduct[s] a detailed and comprehensive study and submit[s] a report” to Congress on the “adverse effects on human health and the environment, if any, of the disposal and utilization” of CCRs.⁸ Groups including the U.S. Department of Energy, the Federal Highway Administration, the Department of Agriculture, the Electric Power Research Institute, and a variety of state agencies have studied CCRs over the last several decades, and all have found that the toxicity levels in CCRs are far below criteria that would require a hazardous designation.

Chairman Upton of the Energy and Commerce Committee has rightfully raised questions about whether the Agency has the authority to unilaterally reverse course on this issue, arguing that “to do so ... would render meaningless the statutorily prescribed procedures Congress specifically required EPA to follow in determining whether CCRs warrant regulation under RCRA Subtitle C.”⁹

EPA issued its proposed rule on June 21, 2010 and held a series of public hearings in the latter half of the year. More than 400,000 comments were



generated on the rule. A final decision is expected in 2011, with compliance beginning the following year.

Sources Affected

Any move by EPA to change the classification of CCRs from a non-hazardous waste would risk stigmatizing the numerous beneficial uses of CCRs. From Portland cement and wallboard products to kitchen cabinets and bowling balls, roughly 44 percent (more than 60 million tons per year) of CCRs are beneficially recycled, which contributes to more than \$2 billion in economic activity.¹⁰

Estimated Price Tag

In addition to threatening the \$2-billion-a-year CCR recycling trade, regulating any aspect of coal ash as hazardous waste could create enormous compliance costs and force power plant retirements. As an excellent 2010 report by the Congressional Western Caucus put it, the rule “would have the effect of treating coal ash like nuclear waste and make it nearly impossible to operate a power plant with coal due to the costly requirements that would go along with such a designation.”¹¹ Subtitle C compliance costs for electric utilities would be in the conservative range of **at least \$55 billion to \$77 billion**.¹² Other estimates have found that the **price tag could run up to \$20 billion annually**.¹³ Bryan Hannegan, Vice President of the environmental sector for the Electric Power Research Institute, sees a risk that “**250 to 350 coal units could be shut down**, in an extreme scenario, and drive up the cost of electricity.”¹⁴

Regulation of Mercury, Acid Gases, and Other Hazardous Air Pollutants (HAPs) from Power Plants Clean Air Act

Background

EPA is poised to regulate all hazardous air pollutants (HAPs), including mercury and acid gases, for coal and oil power plants. Under Title I of the Clean Air Act, EPA will require the adoption of “Maximum Available Control Technology” (MACT) for these HAPs. The rule will include an extremely strict requirement that all existing power plants must equal the average performance of the top 12 percent of power plants. New plants must meet an even more stringent standard. Under a consent decree that the Agency agreed to, EPA is set to act on an incredibly expedited timeline, with a rule proposal in March of 2011 and a final rule in November 2011.

While there are obvious environmental and health issues arising from exposure to mercury and other hazardous pollutants, there are also reasons to look skeptically upon EPA’s imposition of stringent command-and-control MACT standards to regulate emissions from domestic power plants. First, as the *Wall Street Journal* recently noted, EPA “started writing the rule while the data that will supposedly inform its analysis were still being collected.”¹⁵ Second, the impact of U.S. sources for mercury exposure is vastly overstated. At least 30 percent of the mercury that is in the U.S. comes from other countries,¹⁶ and more than 80 percent of seafood (the primary exposure method) eaten in this country is from foreign shores. The Electric Power Research Institute estimates that less than 5 percent of the 2,500 tons of mercury released each year comes from the U.S. As Jeff Holmstead, former EPA Assistant Administrator for Air and Radiation, explains: “[E]ven if you could eliminate all the mercury emissions in the U.S. completely, from every source of mercury pollution, you would have almost no impact on people’s exposure.”¹⁷

Sources Affected

This rule will apply on a plant-by-plant basis to nearly every coal- or oil-

fired utility in the country. An analysis by the North American Electric Reliability Corporation estimates that the rule could require retrofits for up to 753 units and that up to 15 gigawatts could be forced into retirement by the rule.¹⁸ Of particular concern is the Clean Air Act requirement that existing plants come into compliance with MACT standards within three years. Expensive pollution control equipment will need to be installed to meet these standards at a large number of plants, and these installations will be required at the same time as the industry is being forced to meet many of the other EPA requirements. Regardless of cost, which will be a significant concern, it simply may not be possible for many plants to install the necessary equipment to meet the standards within the limited compliance time frame, forcing them to close.

Estimated Price Tag

A 2005 analysis by the U.S. Energy Information Administration found that, depending on the availability of commercialized mercury removal technologies capable of reaching the 90 percent MACT requirement, **resource costs could be as high as \$261 to \$358 billion.**¹⁹ Even without addressing potential scrubber requirements, a Credit Suisse report predicts capital expenditures of \$70 to \$100 billion for utilities to comply with just the mercury MACT and Clean Air Transport Rule.²⁰

Clean Air Transport Rule for Sulfur Dioxide and Nitrogen Oxides Clean Air Act

Background

The Bush Administration’s Clean Air Interstate Rule (CAIR) was an ambitious program designed to reduce the contribution of electric generators to the interstate transport of pollutants that cause ozone and fine particle pollution in the eastern United States. Although the rule was largely supported by the utility industry, states and the environmental community, the rule was overturned in court because it provided for unlimited inter-

state trading of allowances under a cap-and-trade program, a mechanism that the Court said was not authorized under the applicable Clean Air Act provision.

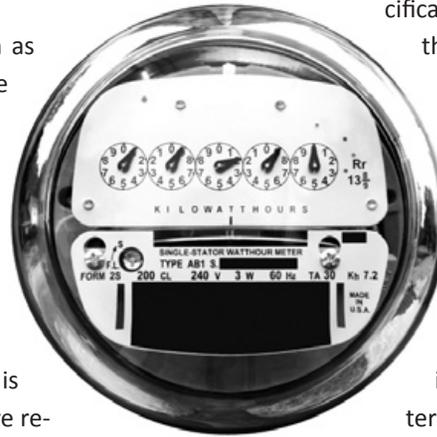
On remand, EPA has proposed a new program, known as the Clean Air Transport Rule (CATR), that requires more stringent emissions reductions than CAIR. The new Administration, however, eschewed the previous Administration's consensus approach on this issue. While the proposed rule is supported by environmental groups, it is opposed by utility groups that use coal.

Although the rule is still in the proposal stage, EPA wants the rule to be *effective* in 2012. This rulemaking rush is causing EPA to trample on the rights of states. States are responsible for having State Implementation Plans (SIPs) to meet EPA's requirements, and if EPA thinks that a state's plan fails to do so, it is required to give the state a reasonable amount of time, measured in years, to revise the plan. Here, since EPA wants utilities to become subject to the rule in 2012, there is no time to allow states a reasonable opportunity to revise their plans to comply with the rule in the way they think best. Instead, EPA is going to skip the SIP process entirely and directly impose federal requirements on utilities, which seems to be a clear violation of federal law. There is no reason why EPA has to make the rule effective in 2012 and thus foreclose states' rights; in fact, although CAIR was overturned in Court, it will remain in place until EPA adopts a new rule in due course.

EPA's rush to implement the rule is also causing considerable problems for the utility industry. Utilities are being required to plan for standards in 2012 that are at this point still in the proposal stage. Moreover, because of its rush, EPA issued its regulatory proposal before it was ready, with the result that EPA is now revising the proposed rule on the fly. Since the rule was proposed, the Agency has issued three successive "Notices of Data

Availability" in which EPA has asked for comments on fundamental changes in the rulemaking methodology, all of which could affect the rule's final requirements. As a result, the industry does not even know specifically what rule EPA is actually proposing, much less what the final requirements will be, even though the industry will have to comply by the beginning of next year. The industry does know, however, that significant investments in pollution control technology are likely.

Moreover, EPA has told industry that it is not finished with rules to address interstate pollution transport. They have promised three more such transport rules, making it virtually impossible for the industry to fashion coherent plans for making the long-term, capital-intensive investments necessary to ensure that power supplies remain reliable.



Sources Affected

The CATR will apply to virtually the entire fleet of fossil fuel power plants east of the Mississippi River and some on the western side of the river. NERC's report figures that even the most modest version of the rule could threaten 7 gigawatts (providing power to roughly 7 million American households) with retirement.²¹ A report by the Brattle Group found that the number could go as high as 55 GW if the most expensive pollution control equipment—"scrubbers" to remove sulfur dioxide and selective catalytic reduction equipment (SCRs) to remove nitrogen oxides—are required for power plants.²²

Estimated Price Tag

The Brattle Group found that the cost of investing in scrubbers and SCR units could run up to **\$120 billion by 2015**. Even EPA's extremely conservative cost estimate indicates that the CATR price could be \$2.8 billion annually, with \$2.2 billion borne by consumers each year.²³

Regulation of Ozone, Sulfur Dioxide, Nitrogen Oxides, and Particulate Matter under National Ambient Air Quality Standards Clean Air Act

The Clean Air Act requires EPA to set National Ambient Air Quality Standards for carbon monoxide, lead, nitrogen dioxide, ozone, sulfur dioxide, and particulate matter. “No Administration has ever updated more than two of these rules in a single term,” notes the *Wall Street Journal*, but at present “the EPA is stiffening the regulations for all six at the same time.”²⁴ Administrator Lisa Jackson has significant latitude in setting NAAQS, yet EPA is heading toward unprecedented regulation of these pollutants. Supreme Court Justice Stephen Breyer explained in *Whitman v. American Trucking Associations* that “[t]he statute, by its express terms, does not compel the elimination of all risk; and it grants the Administrator sufficient flexibility to avoid setting ambient air quality standards ruinous to industry.”²⁵ Whether EPA will heed this admonition remains to be seen.

Under the standards EPA will promulgate, many areas of the country that are currently considered to have clean air will now be designated as “non-attainment” areas, or areas that fail to meet these new standards. There are severe consequences for these non-attainment areas. Pledging a full commitment to “conducting vigorous oversight on this matter, including ensuring that EPA conducts an open, transparent, and fair process,” Senator James Inhofe and Chairman Fred Upton pointed out in a December letter to Lisa Jackson that: “Non-attainment can mean loss of industry and economic development, including plant closures; loss of federal highway and transit funding; increased EPA regulation and control over permitting decisions; increased costs for industrial facilities to implement more stringent controls; and increased fuel and energy costs.”²⁶

Although all of these NAAQS will bear large costs, two specifically are examined below.

Ozone

EPA is about to promulgate its second new, progressively more stringent ozone standard since 2008 to address the nation’s diminishing smog problem. The latest revision represents a unilateral attempt by the new Administration to change the standard adopted by the previous Administration without doing any further studies or analysis and instead relying on the same information, much of which is now stale, that the previous Administration relied on. The public would be far better served if EPA allowed the current standard to be fully implemented and then reviewed additional science as a part of the regular NAAQS review cycle to determine whether a tightening of the standard is justified.

Under its new proposal, EPA has proposed to reduce the acceptable primary ozone level as low as 0.060 parts per million (ppm), down from the current level of 0.075 ppm. There is no scientific basis for this change and even the former Chairman of EPA’s Scientific Advisory Committee, Dr. Roger McClellan, in referring to the proposal of the Bush Administration to lower the previous ozone standard to a range of 0.0070 ppm to 0.075 ppm, called the revision “a policy judgment based on a flawed and inaccurate presentation of the science,” and recommended that a range up to 0.080 be considered.²⁷ Electric generation emits only 6 percent of U.S. ozone precursors.²⁸

The Congressional Research Service found that, as a result of this new ozone standard, the number of counties in non-attainment would jump from 85 to 650.²⁹ As a result of these non-attainment designations, the labor group Unions for Jobs and the Environment foresees “significant job losses across the country during a period of high unemployment.”³⁰ Analysis by Manufacturers Alliance/MAPI estimates that the annual cost of attaining a standard of 60 ppb would be **\$1.013 trillion** between 2020 and 2030 and total U.S. **job losses would be more than 7 million** by 2020.³¹

Particulate Matter

In 2011, EPA will also be proposing new standards for both fine particulate matter that results from the chemical transformation in the atmosphere

of gases emitted from a number of sources and coarse particulate matter that results from mining, agricultural, and other earth-disturbing activity, mostly in rural areas. EPA's (understated) estimate of the annualized cost (in 1999 dollars) of the current standard, which was only just promulgated in 2006, is more than \$6 billion.³² A further tightening of this standard will increase this cost even more. Both the mining and agricultural industries have expressed concern about their ability to meet the current coarse particle standard, and these concerns will heighten to the extent EPA chooses to make these standards more stringent.

Regulation of Hazardous Air Pollutants from Commercial and Industrial Boilers Clean Air Act

Background

On April 29, 2010, EPA released its proposed Maximum Achievable Control Technology (MACT) standard for commercial and industrial boilers (Boiler MACT rule). Under a consent decree, EPA obligated itself to issue a final rule by January 21, 2011. However, by agreeing to issue a final rule by that date, the Agency did not leave itself enough time to consider comments on its proposal from the public and to make changes to the rule in response to those comments. In fact, there was an overwhelming outpouring of protest at the proposed rule, and EPA decided based on "new data" that it needed to make extensive changes to the rule. Given the extent of the changes, EPA decided that it was legally obligated to repropose the rule and take further public comment. Accordingly, EPA asked the court to modify the consent decree with a new requirement for a final rule by April 13, 2012, a timetable that the Agency told the court was "achievable, but very aggressive."

Environmental parties, however, opposed EPA's request, and the Court sided with them. It issued an order delaying issuance of the final standard only for 30 days. EPA issued a press release after the court order was issued saying the rule as issued would be significantly different than its pro-

posal and that it would entertain petitions for reconsideration so that the agency can take public comment on the rule.

EPA's actions on these standards call into question the basic competency of the agency. The Agency has been in a tremendous rush to issue a multitude of regulations, and EPA was evidently so sure of its approach that it figured that it did not have to leave sufficient time to consider public comment. As a result, the Agency has ended up issuing a rule that it admits has not been adequately subject to public comment, a rule that the Agency evidently does not even agree with and therefore will reconsider. Perhaps if EPA had not been in such a rush to jam so many regulations through at once, and perhaps if it had not devoted so many resources to rushing through GHG regulation in 2010, it could have taken the time to do the Boiler MACT rule right the first time. Instead, we have the spectacle of a government agency soliciting the public to ask the agency to change its own rule.

While the Agency announced in December that it would delay issuing the final rule until April of 2012, there is little consolation for numerous industries relying upon the affected fossil fuel-fired and biomass-fired boilers. The rule would impose difficult-to-meet emissions standards and monitoring requirements for hazardous air pollutants (HAPs) and will have similar technological effects as the forthcoming mercury MACT requirements for power plants. Required reductions in hydrogen chloride, mercury, and other HAPs are nearly impossible to meet.³³

Sources Affected

These rules would apply to over 10,000 existing boilers and on any new boilers constructed after the rule becomes final.³⁴

Estimated Price Tag

41 U.S. Senators signed on to a bipartisan letter to Lisa Jackson in September of last year, expressing deep concern that this rule would create "onerous burdens on U.S. manufacturers."³⁵ The cost, according to the

United Steel Workers Union, “will be sufficient to imperil the operating status of many industrial plants.”³⁶ A study by IHS/Global Insight (and commissioned by the Council of Industrial Boiler Owners) concluded that this proposal would **risk nearly 800,000 jobs** and that “[e]very billion dollars spent on MACT upgrade and compliance costs will put 16,000 jobs at risk and reduce US GDP by as much as \$1.2 billion.”³⁷ It has been widely reported that a Department of Commerce report challenged EPA’s estimates of the cost of complying with these regulations, but the report has not been publicly released.

Restrictions on Mining Permits Clean Water Act

EPA is at war with coal mining in Appalachia, one of the principal industries in that region. It halted 150 permits, already approved by state and federal officials, in the region to conduct additional review. This does not include the close to a hundred already backlogged permits EPA is sitting on and not subjecting to review. EPA has claimed, based upon a single inside draft study from 2008 finding a tenuous connection between water near mines and reduced mayfly populations (yes, those mayflies), that the effects of mining are unacceptable under the Clean Water Act. In April 2010, the Agency created subjective anti-mining standards focused on Appalachia via new regulatory guidance.

As part of this hostility toward Appalachian coal mining, EPA announced in mid-January that, for the first time in history, it was retroactively revoking an existing water permit. The Agency does not have the statutory authority to do this under the Clean Water Act and has effectively jeopardized all similarly-issued permits. The shock waves from EPA’s veto of Arch Coal Inc.’s Spruce Mine No. 1 in West Virginia reverberated beyond the mining industry. The EPA action was widely seen as raising concerns about “whether permits previously issued for other businesses could also be revoked, po-



tentially stranding investments and costing jobs” and the **\$220 billion per year of economic activity generated by Clean Water Act permits.**³⁸ The National Mining Association had already filed suit against EPA and the Army Corps of Engineers in mid-2010 for unlawfully obstructing Clean Water Act permitting processes for coal mining.³⁹

West Virginia, with a Democratic Party governor, also recently sued EPA over its regulations of the coal-mining industry. One of the first press releases issued by the new West Virginia governor denounced EPA’s revocation of the permit for the Spruce Mine as “devastating” and “drastic.” Through stopping the issuance of mining permits, EPA and the Army Corps of Engineers have violated the Administrative Procedures Act, the Clean Water Act, the National Environmental Policy Act and the Surface Mining Control and Reclamation Act. They have disregarded requirements under these laws for public comment and formal rulemaking procedure as well as extending their jurisdictional reach over state and local authorities.

The Commonwealth of Kentucky, also with a Democratic Party governor, joined a lawsuit brought by the Kentucky Coal Association against the Agency’s use of the Clean Water Act to withhold mining permits. Governor Steve Beshear characterized EPA actions, including rejection of 11 permits approved by the Kentucky Division of Water and substantially similar to federally-approved permits granted in early 2010, as “arbitrary and unreasonable” and as risking up to 18,000 mining jobs.⁴⁰ EPA’s regional restrictions threaten thousands of additional jobs, as it is estimated that each coal mining job generates 3.5 jobs elsewhere in the economy.⁴¹

Regulation of Greenhouse Gas Emissions Clean Air Act

Background

EPA is moving full steam ahead on regulating GHG under the Clean Air Act.

The Agency finalized first-ever rules for reducing GHG emissions from automobiles and light-duty trucks in May 2010, and has begun implementing a program of regulating GHG from stationary sources on two different tracks in 2011:

First, EPA's GHG permitting program, which applies to new and substantially upgraded sources that emit GHG above certain thresholds, began on January 2, 2010. This covers pre-construction permits under the Prevention of Significant Deterioration (PSD) portion of New Source Review as well as operating permits under Title V.

Second, EPA is poised to roll out GHG New Source Performance Standards (NSPS) for power plants and refineries in 2011. In late December of last year, EPA announced that it had settled litigation with states and environmental groups, agreeing to propose GHG performance standards for fossil fuel power plants on July 26, 2011 and petroleum refineries on December 10, 2011. It committed to final rules for both types of facilities in 2012, almost all of which will be simultaneously subject to EPA's PSD and Title V permit regulations. Critically, unlike the PSD and Title V regulations, the power plant NSPS regulations will govern new and upgraded facilities as well as existing facilities, whether or not they upgrade. Thus, the NSPS regulations are a key tool for EPA to get at the existing fleet of coal-fired electric generating facilities.

On top of these programs, EPA is considering greenhouse gas regulation across almost the entire U.S. economy. Because the economy runs on fossil fuels and because carbon dioxide (the principal greenhouse gas) is the inevitable byproduct of combusting fossil fuels, EPA's claim of authority to regulate GHG emissions gives it an unprecedented ability to control virtually every facet of the economy. Indeed, EPA is considering regulation of everything from ships and boats, to planes, cars and trucks, agricultural facilities, mining, movable equipment of every stripe (from forklifts to lawnmowers), and more regulations on manufacturing and industrial facilities,

and commercial and industrial buildings. EPA believes it has a mandate to transform the American economy into what it sees as a cleaner, greener economy, and it is prepared to act on that mandate.

As noted, EPA's first step in its planned GHG program was regulation under the PSD and Title V permit programs. The initial target of this program is large industrial, electric generation and manufacturing facilities; over time, EPA plans further rulemakings to expand the universe of regulated facilities.

In its rush to commence regulating greenhouse gas emissions by the beginning of 2011 under these two permit programs, EPA triggered a regulatory stampede that trampled over states' rights and federal law requirements. EPA promulgated no less than 11 GHG regulations in 2011, 7 of them in December, and six of them totaling more than 500 pages on the eve of the Christmas holiday that did not get published in the Federal Register until the last two business days of 2010. This left states and regulated entities no time at all to prepare for regulatory requirements that became effective on the Sunday of the New Year's holiday weekend.

Worse, because states in most cases administer the PSD and Title V programs, EPA needed states to change their laws and regulations under which these programs operate to conform to the Agency's new GHG requirements. With time running out in 2010, EPA actually threatened states with a construction ban for large industrial and manufacturing sources if they did not make the necessary law and regulatory changes on EPA's incredibly expedited schedule. The final months of 2011 witnessed a large majority of states galloping through rulemakings, many of which invoked emergency authority to meet EPA's schedule, in order to avoid the construction ban. Some states did not make it; as of January 2, 2011, EPA imposed a federal implementation plan on 8 states that did not act quickly enough.

EPA also had the nerve to announce in a press release that the Agency and the states had "worked closely" to implement the GHG program.⁴² This is

simply not the case. Appendix B—“What States are Really Saying About EPA GHG Regulation”—on pg 51 contains excerpts from a dozen state environmental agencies expressing displeasure with the heavy-handed EPA approach.

Sources Affected

The Clean Air Act is uniquely unsuited for regulation of greenhouse gases. The Act is designed to regulate pollutants with a local or regional impact, not pollutants that circulate globally in the atmosphere, making domestic emission reductions unlikely to materially affect worldwide atmospheric concentrations.

In order to squeeze EPA's desired regulatory outcomes into the Clean Air Act framework, the Agency is straining the Clean Air Act's PSD and Title V permitting programs beyond the breaking point. The statute sets relatively low emissions thresholds to determine which projects must obtain permits under these programs. Those thresholds are appropriate for traditional types of pollutants because, in general, only large industrial facilities emit traditional pollutants above those levels. But GHG, and particularly CO₂, emissions are different. Any building that uses natural gas or oil for heating emits CO₂, and moderately sized buildings (something in the neighborhood of a 75,000 square foot building) emits CO₂ above the statutory thresholds. As EPA itself has said, more than six million buildings and facilities emit GHG above the statutory thresholds. And as Peter Glaser of Troutman Sanders LLP law firm explains:

A very large number and variety of buildings and facilities could therefore become subject to the program—including many office and apartment buildings; hotels; enclosed malls; large retail stores and warehouses; college buildings, hospitals and large assisted-living facilities; large houses of worship; product pipelines; food processing facilities; large heated agricultural facilities; indoor sports arenas and other large public

Does anyone think this is a good idea...?

“The Clean Air Act was not designed to regulate greenhouse gases, as the then-Chairman of the House Energy and Commerce Committee I know what was intended when we wrote the legislation. I have said from the beginning that such regulation will result in a glorious mess and regulation of greenhouse gas emissions should be left to Congress.”

-Congressman John Dingell (D-MI), former House Energy and Commerce Committee Chairman, December 7, 2009

“The Clean Air Act is a tool. It's not the optimal tool. But it can be used.”

-EPA Administrator Lisa Jackson, October 6, 2010

“I have no confidence that EPA can regulate greenhouse gases under the Clean Air Act without severe harm to all taxpayers.”

-Congressman Collin Peterson (D-MN), former House Committee on Agriculture Chairman, February 2, 2010

“These complexities reflect that the CAA was not specifically designed to address GHGs and illustrate the opportunity for new legislation to reduce regulatory complexity.”

-EPA, Advanced Notice of Proposed Rulemaking for Regulating Greenhouse Gas Emissions Under the Clean Air Act, July 30, 2008

assembly buildings; restaurants; soda manufacturers; bakers, breweries and wineries; and many others.⁴³

EPA is forced to concede that regulating this number of sources would be senseless. Apart from the fact that the CO₂ emissions from these buildings are de minimis as compared with total global emissions, requiring this number of sources to obtain permits would so overwhelm the system that no source would be able to obtain a permit. EPA therefore has had to unilaterally raise those thresholds to much higher levels for greenhouse gases (in its “Tailoring Rule”) to prevent what the Agency characterizes as the “absurd result” of a multiplicity of smaller buildings and facilities from becoming immediately subject to permitting requirements.

There are a variety of legal questions about EPA’s authority to change statutory language that Congress has enacted, and these issues are now being litigated in court. If EPA is wrong about its authority to change the statutory thresholds, then the Agency will have unwittingly adopted a regulatory regime that, in its own words, is absurd, will trigger permit requirements for numerous facilities, and will create incalculable damage across the economy.

Nation is Unprepared for EPA Greenhouse Gas Regulation

Although EPA continues to claim that the states and the regulated community are fully prepared for the GHG regulation that began on January 2, 2011, the damage of the Agency’s headlong rush into this regulatory train wreck has already been done. EPA’s view in 2010 seemed to be that if it could just finalize all of its regulations by the end of 2010, and if the states could do the same, then the nation would be prepared. EPA did not accomplish this goal, but beyond that the Agency seems to have no comprehension of the need for business to have lead time to understand and plan for the regulations that have now gone into effect. It can take a year or more to prepare a permit application, and before preparation of the application can

even begin, businesses need to understand the regulatory requirements in order to decide whether they wish to develop a project that will trigger the need to obtain a permit. Thus, as a large number of business trade associations have attested, the complete lack of lead time has retarded business investment and created significant uncertainty both in the business community and among the state agencies that are required to implement EPA’s program.

Moreover, there remains a complete lack of clarity of what types of greenhouse gas controls a facility will be required to install in order to obtain a permit. Although EPA indicated in the Spring of 2010 that it would issue guidance and other informational material on this question by that Summer, the guidance was not issued until November. As important, the guidance was vague, providing little information as to exactly what a facility would have to do to meet “Best Available Control Technology” requirements for greenhouse gases. And the questionable legal basis for EPA’s greenhouse gas requirements has resulted in legal challenges by an unprecedented number of businesses and business associations, creating yet more uncertainty.

Estimated Price Tag

EPA’s failure to conduct a study of the overall cost of its GHG program make it difficult to precisely assess the full economic costs of this regulatory revolution. However, estimates from a variety of perspectives suggest a substantial price tag.

Citing factors including “permitting delays, lack of specific knowledge of how EPA and individual state regulators will apply BACT, permitting challenges from advocacy groups and whether EPA’s tailoring rule will survive the myriad of legal challenges already in the courts,”⁴⁴ Dr. Margo Thorning of the American Council for Capital Formation believes that EPA’s new regulations will raise the so-called hurdle rate required for new U.S. invest-

ment. Her analysis predicts a **5 to 15 percent reduction in investment from 2011 to 2014**, resulting in **depressed investment by between \$97 and \$290 billion in 2011 and as much as \$301 billion in 2014**.⁴⁵ This is nearly as big of an impact in reduced investment as the U.S. economy sustained since late 2007.

Dr. Roger Bezdek of the economic research firm Management Information Services, Inc. compiled a variety of recent analyses on GHG regulation, concluding that the EPA approach would:

- Reduce Gross Domestic Product every year for the next two decades, with **GDP dropping \$500 billion by 2030**;
- Reduce U.S. employment, culminating in the **loss of 2.5 million jobs by 2030**;
- Reduce U.S. household incomes, with **average household income**

dropping by about \$1,200 annually by 2030.

- Increase U.S. energy costs, with increases of **50 percent for gasoline and residential electricity prices, 75 percent for industrial electricity prices and residential natural gas prices, and 600 percent for electric utility coal prices.**

Furthermore, this analysis found that, as a result of the regressive nature of energy costs and disproportionate impacts on minority populations, **“nearly 390,000 Black jobs would be lost and nearly 500,000 Hispanic jobs would be lost” by 2030**.⁴⁶

Based on conservative estimates and the broad outlines of EPA’s 2008 Advanced Notice of Proposed Rulemaking, the Heritage Center for Data Analysis found that regulation of GHG emissions from all sources under the Clean Air Act (in other words, if EPA is wrong and it does not have author-

Study	Legislation Analyzed	Year of Impact	Fewer Jobs
Energy Information Administration	H.R. 2454	2030	2.3 million
National Black Chamber of Commerce (study conducted by Charles River Associates)	H.R. 2454	2050	3.6 million
National Association of Manufacturers/ACCF (study conducted by SAIC)	H.R. 2454	2030	2.44 million
Heritage Foundation	H.R. 2454	2035	2.5 million
Institute for Energy Research (study by Chamberlain Economics)	Kerry/Lieberman American Power Act	2050	5.1 million
ACCF/Small Business and Entrepreneurship Council (study by SAIC)	Kerry/Lieberman American Power Act	2030	Up to 1.9 million

ity to unilaterally increase the statutory PSD and Title V thresholds) would result in: cumulative **GDP losses of \$7 trillion** by 2029; single-year GDP losses exceeding \$600 billion; and annual job losses of 800,000 or more for several years.⁴⁷

Another source to ballpark the total cost of regulating GHG comes from previous estimates of the job-killing potential of failed Congressional cap-and-trade proposals. Thorning explains that: “[t]he economic impact of EPA regulation of GHG emissions of stationary sources is likely to be more severe than if a market-based approach were employed. Therefore, analyses like the one performed on the Kerry/Lieberman bill can be used to benchmark the harm from EPA’s Clean Air Act GHG program.”⁴⁸

For example, one recent article found that “using non-market policies can raise cost by a factor of ten.”⁴⁹ The chart above offers an overview of the predicted employment effects of cap-and-trade proposals from six comprehensive analyses.⁵⁰

Apart from its initial round of greenhouse gas regulations that went into effect at the beginning of 2011, EPA is set to begin requiring greenhouse gas performance standards for refineries and power plants in 2012 (as of the December 23, 2010 announcement). While this chapter has gone into detail on the effects for power generation, it is important to note that this approach to existing refining capacity could create severe economic harm. According to former Secretary of Energy Spencer Abraham, there have been no new refineries built in our country since 1980 because “it is nearly impossible for an operating company to secure all of the required environmental and zoning permits from federal, state, and local agencies.”⁵¹ Senator Kay Bailey Hutchison of Texas argued in a late December letter that performance standards for existing refineries “will hurt every American driver, trucker, farmer and flier with higher gasoline, diesel and jet fuel prices. Higher prices passed on to consumer will feel like a new gas tax.”⁵²

⁴⁷Nuclear Energy Institute (NEI), “Issues in Focus: Water Use and Electricity Production,” November 2010, <http://www.nei.org/filefolder/WaterUseIssuesinFocus.pdf>.

⁴⁸NEI, “EPA Should Consider Flexible Approaches to Clean Water Regulation,” November 2010, <http://www.nei.org/resourcesandstats/documentlibrary/protectingtheenvironment/policybrief/epa-should-consider-flexible-approaches-to-clean-water-act-revision/>.

⁴⁹A brief note on units: A watt is a unit of measure for the rate of energy conversion, and is equal to one joule per second. A megawatt (MW) is equal to one million watts, and is usually the productive capacity for electric generation. An average coal-fired power plant in the U.S. is between 600 and 700 MW. A gigawatt (GW), equivalent to 1000 MW, provides an additional measure for large scale evaluation. For perspective, a megawatt powers roughly 1,000 U.S. homes (and, in turn, a gigawatt powers around 1 million U.S. homes).

⁵⁰North American Electric Reliability Corporation (NERC), “2010 Special Reliability Scenario Assessment: Resource Adequacy Impacts of Potential U.S. Environmental Regulations,” October 2010, http://www.nerc.com/files/EPA_Scenario_Final_v2.pdf.

⁵¹NEI, “Issues in Focus” at 1.

⁵²PSEG, “Navigating the Environmental Regulatory Landscape: Overview of Forthcoming National Environmental Requirements, Impacts to the Electric Power Industry, and PSEG Power’s Position,” June 29-30, 2010, <http://phx.corporate-ir.net/External.File?item=UGFyZW50SUQ9Mzg3NzQyYfENoaWxkSUQ9MzkwMzQ5fFR5cGU9MQ==&t=1>.

⁵³Rep. Fred Upton, “Declaring war on the regulatory state,” *The Washington Times*, October 18, 2010, <http://www.washingtontimes.com/news/2010/oct/18/declaring-war-on-the-regulatory-state/>.

⁵⁴42 U.S.C. § 6982.

⁵⁵“Upton Fights EPA’s Misguided Coal Ash Rule that Could Cost Billions and Eliminate Thousands of Jobs,” November 22, 2010, <http://www.upton.house.gov/News/DocumentSingle.aspx?DocumentID=215616>.

⁵⁶Ibid.

⁵⁷“The War on Western Jobs: A Report by the Senate and Congressional Western Caucuses,” September 2010, at 17, <http://robbishop.house.gov/UploadedFiles/WaronWesternJobsReportFinal.pdf>.

⁵⁸EPRI, Comments to EPA on Disposal of Coal Combustion Residuals From Electric Utilities, November 18, 2010, at 2, <http://www.uswag.org/pdf/2010/CCR%20Comments/EPRI%20Part111192010.pdf>.

⁵⁹Thomas R. Kuhn and David K. Owens, “Electricity 2010: Opportunity Dressed as Hard-Work,” February 10, 2010, at 7, http://www.eei.org/ourissues/finance/Documents/Wall_Street_Briefing_2010.pdf.

¹⁴Neil King, Jr., and Rebecca Smith, "White House, EPA at Odds Over Coal-Waste Rules," *Wall Street Journal*, January 9, 2010, <http://online.wsj.com/article/SB126300256672322625.html>.

¹⁵"The EPA Permitorium," *Wall Street Journal*, November 22, 2010, <http://online.wsj.com/article/SB10001424052748704658204575610924168519824.html>.

¹⁶Robert Bryce, *Power Hungry: The Myths of "Green" Energy and the Real Fuels of the Future* (New York: Public Affairs, 2010), 168.

¹⁷Gabriel Nelson, "How EPA's Regulatory Surge Missed a Primary Target," *Greenwire* (Reprinted in *The New York Times*), December 8, 2010, <http://www.nytimes.com/gwire/2010/12/08/08greenwire-how-epas-regulatory-surge-missed-a-primary-target-47437.html>.

¹⁸NERC, "2010 Special Reliability Scenario Assessment."

¹⁹Energy Information Administration, "Analysis of Alternative Mercury Control Strategies," Report No. SR-OIAF/2005-01, January 2005, <http://www.eia.doe.gov/oiaf/service/mercury/analysis.html>.

²⁰Credit Suisse, "Growth from Subtraction: Impact of EPA Rules on Power Markets," September 23, 2010, [http://op.bna.com/env.nsf/id/jstn-8actja/\\$File/suisse.pdf](http://op.bna.com/env.nsf/id/jstn-8actja/$File/suisse.pdf).

²¹NERC, "2010 Special Reliability Scenario Assessment."

²²Metin Celebi, Frank Graves, Gunjan Bathla, and Lucas Bressan, "Potential Coal Plant Retirements Under Emerging Environmental Regulations," December 8, 2010, http://www.brattle.com/_documents/UploadLibrary/Upload898.pdf.

²³ <http://www.epa.gov/airtransport/pdfs/FactsheetTR7-6-10.pdf>.

²⁴"The EPA Permitorium," *Wall Street Journal*.

²⁵Breyer, J., concurring in part and concurring in judgment, *Whitman et al. v. American Trucking Associations, Inc.*, et al., 531 U.S. 457, 473, 475-76 (2001), <http://caselaw.lp.findlaw.com/scripts/getcase.pl?navby=CASE&court=US&vol=531&page=457>.

²⁶"Inhofe, Upton Join in EPA Oversight Efforts," December 9, 2010, <http://upton.house.gov/News/DocumentSingle.aspx?DocumentID=217247>.

²⁷Roger McClellan, Statement Before the Senate Subcommittee on Clean Air and Nuclear Safety, Senate Environment and Public Works Committee, Hearing on EPA's Proposed Revision to the National Ambient Air Quality Standards for Ozone, July 11, 2007, at 3, http://epw.senate.gov/public/index.cfm?FuseAction=Files.View&FileStore_id=57ca4cda-7a2a-4da7-afba-80a4d2fbbb6d.

²⁸John Kinsman, "Environmental Issues Update," November 16, 2010, http://www.eei.org/meetings/Meeting%20Documents/2010_11_14_AccountingStandards_John_Kinsman_Environmental_Issues.pdf.

²⁹James McCarthy, "Ozone Air Quality Standards: EPA's Proposed January 2010 Revisions," Congressional Research Service Report, February 1, 2010, at 4, <http://www.fas.org/sgp/crs/misc/R41062.pdf>.

³⁰Unions for Jobs and the Environment, Comments on Proposed National Ambient Air Quality Standards for Ozone, March 22, 2010, (Docket ID No. EPA-HQ-OAR-2005-0172; FRL-9102-1).

³¹Donald Norman, "Economic Implications of EPA's Proposed Ozone Standard," MAPI/Manufacturers Alliance, September 2010, <http://www.mapi.net/Filepost/ER-707.pdf>.

³²U.S. EPA, *Regulatory Impact Analysis (RIA) of the 2006 National Ambient Air Quality Standards for Fine Particle Pollution (PM2.5)*, <http://www.epa.gov/particles/actions.html>.

³³U.S. Senate Committee on Environment and Public Works Minority Staff, "EPA's Anti-Industrial Policy: 'Threatening Jobs and America's Manufacturing Base,'" September 28, 2010, at 4-5, http://epw.senate.gov/public/index.cfm?FuseAction=Files.View&FileStore_id=3ede3e93-813f-4449-97e6-0d6eb54fbc9e.

³⁴Carroll "Mack" W. McGuffey III, "EPA Issues Proposed MACT Standards for Industrial Boilers," May 4, 2010, <http://www.troutmansanders.com/epa-issues-proposed-mact-standards-for-industrial-boilers-05-04-2010/>.

³⁵Full letter available at http://epw.senate.gov/public/index.cfm?FuseAction=Minority.Speeches&ContentRecord_id=5d9e1da9-802a-23ad-4b41-98994e366d4c&Region_id=&Issue_id=.

³⁶United Steel Workers Union, "Comment: Proposed rule, National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters," Document ID: EPA-HQ-OAR-2002-0058-2964.1, <http://www.regulations.gov/#!documentDetail;D=EPA-HQ-OAR-2002-0058-2964.1>.

³⁷IHS/Global Insight (for the Council of Industrial Boiler Owners), "The Economic Impact of Proposed EPA Boiler/Process Heater MACT Rule on Industrial, Commercial, and Institutional Boiler and Process Heater Operators," August 2010, at 5, http://www.cibo.org/pubs/boilermact_jobsstudy.pdf.

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⁴²"EPA Completes Framework for Greenhouse Gas Permitting Programs," December 23, 2010, <http://yosemite.epa.gov/opa/admpress.nsf/e77fdd4f5afd88a3852576b3005a604f/cad212db554919ec8525780200570c1c!OpenDocument>.

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⁴⁵Margo Thorning, "The Economic Impact of Regulating U.S. Greenhouse Gas Emissions Under the Clean Air Act," Declaration to United States Court Of Appeals For The District Of Columbia Circuit, September 14, 2010, at 8, http://www.acf.org/media/dynamic/4/media_483.pdf.

⁴⁶Roger Bezdek, "Potential Harm of EPA Greenhouse Gas Control Regulations to Minorities, Low-Income Persons, the Elderly, and Those Living on Fixed Incomes," Declaration to United States Court Of Appeals For The District Of Columbia Circuit, September 2010, http://www.uschamber.com/sites/default/files/issues/environment/files/Ex%2013_Declaration%20of%20Roger%20Bezdek.pdf.

⁴⁷David Kreutzer and Karen Campbell, "CO₂-Emission Cuts: The Economic Costs of the EPA's ANPR Regulations," A Report of the Heritage Center for Data Analysis, October 29, 2008, <http://www.heritage.org/research/reports/2008/10/co2-emission-cuts-the-economic-costs-of-the-epas-anpr-regulations>.

⁴⁸Thorning, "Questions & Answers," at 3.

⁴⁹William Pizer, Dallas Burtraw, Winston Harrington, Richard Newell, and James Sanchirico, "Modeling Economy-wide vs. Sectoral Climate Policies Using Combined Aggregate-Sectoral Models," *The Energy Journal* (2006) 27(3): 135-68.

⁵⁰Initial data from: Senate Republican Policy Committee, "Cap-and-Trade Destroys Jobs," October 7, 2009, http://rpc.senate.gov/public/?a=Files.Serve&File_id=34f71018-cfba-4956-90fc-257e375d77cd. Supplemental data from: Institute for Energy Research, June 30, 2010, <http://www.instituteforenergyresearch.org/2010/06/30/new-study-kerry-lieberman-to-destroy-up-to-5-1-million-jobs-cost-families-1042-per-year-wealthiest-americans-to-benefit/>; and "ACCF/SBE Council Study on Kerry-Lieberman Bill," July 21, 2010, <http://www.accf.org/publications/137/acf-sbe-council-study-on-kerry-lieberman-bill>.

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⁵²Senator Kay Bailey Hutchison, Letter to EPA Administrator Jackson, December 29, 2010, <http://www.hutchison.senate.gov/resources/EPA%20letter%2012-29-10.pdf>.

OFF THE RAILS: NINE REASONS TO OPPOSE EPA'S OVERREACH

Energy Affordability

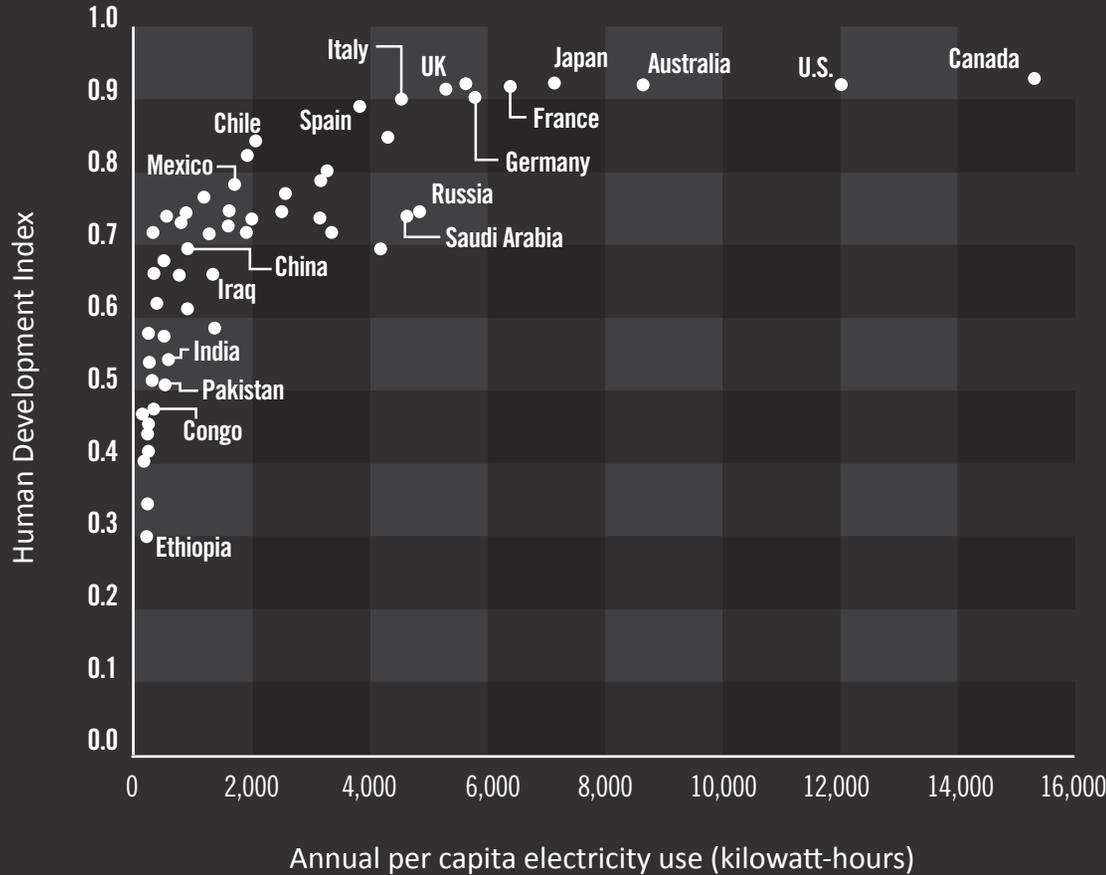
Energy is, in the words of inestimable economist Julian Simon,¹ the “Master Resource” that serves as the linchpin to all aspects of our modern world as well as the lifeblood of our economy. In addition to the obvious need for affordable energy in promoting wealth and economic growth, inexpensive power is also paramount for basic development goals, economic justice, and human rights. As Paul Driessen of the Committee For A Constructive Tomorrow put it in a recent ALEC *State Factor*, energy “transforms constitutionally protected civil rights into rights we actually enjoy: jobs, homes, transportation, healthcare, living standards, opportunities, and other earmarks of life, liberty and the pursuit of happiness.”²

More specifically, there is ample evidence from the U.S. and other nations that electricity consumption is an essential driver of basic human development as well as the creation of advanced economies capable of competing in the 21st century. This is clearly the case in the industrialized world; the list of the top twenty countries in terms of electricity generation is nearly identical to the list of the top twenty countries in terms of GDP.³ There is also significant evidence that electricity consumption is also the critical determinant for the hopes and dreams of the rest of the world as well. The figure on the following page, compiled by Alan Pasternak of the Lawrence Livermore National Laboratory, demonstrates the near-perfect correlation

between electricity use and economic progress (as measured by annual per capita electricity consumption and rankings from the United Nations Development Index⁴):



Electricity Consumption and the Human Development Index: A Near-Perfect Correlation



Source: Alan D. Pasteruk, "Global Energy Futures and Human Development: A Framework for Analysis," Lawrence Livermore National Laboratory, October 2000.

Pasternak concludes that "[n]either the Human Development Index nor the Gross Domestic Product of developing countries will increase without an increase in electricity."⁵ It should come as no surprise that what allows widespread electricity use and the attendant prosperity it brings is the existence of affordable and reliable supplies. Yet the overall impact of EPA's train wreck regulations is to tax citizens and industry by dramatically raising electricity prices.

The combination of rules represents a full scale assault on the roughly 50 percent of the nation's total electric supply that is generated from coal-fired power plants. As surely as there is a law of supply and demand, as EPA shrinks electric supply options available to the power sector, electricity prices will rise. A series of composite impact models from investment companies, consulting firms, and industry groups suggest an enormous reduction in coal-fueled electricity. The chart to the right summarizes five of these studies, noting the rulemakings incorporated in each model.

It is important to note that nearly all of the generation discussed as "at risk" for retrofitting or retirement in the studies above are coal-fired plants. As a result of differing assumptions about retrofitting older coal

Study	Timeline of Impacts	Impact on Generation (retirement or retrofit)	Capital Expenses / Cost	Estimated Households Affected ⁶	Notes
NERC 2010 Special Reliability Scenario Assessment (October 2010) ⁷	By 2015	Up to 78 GW	n/a	Up to 78 million	Analysis includes cooling water intake structure rule, HAPs, Clean Air Transport Rule, and coal combustion residuals rule.
FBR Capital Markets Report (December 2010) ⁸	Regs through 2015	Up to 70 GW	More than \$80 billion	Up to 70 million	
Credit Suisse (September 2010) ⁹	2013-2017	Up to 69 GW	\$70 billion to \$100 billion	Up to 69 million	This analysis only incorporates Clean Air Transport Rule and mercury MACT. It only looked at plants with a capacity of 300 MW.
The Brattle Group (December 2010) ¹⁰	To 2020	50 to 67 GW	\$100 billion to \$180 billion	50 million to 67 million	Analysis includes SO ₂ , NO _x , particulate matter, cooling water and mercury MACT rules.
ICF International (May 2010) ¹¹		Up to 50 GW	n/a	50 million	Analysis only includes SO ₂ & NO _x NAAQS and HAPs.

plants, the capital expense projections vary greatly. The studies differ as to how many and how quickly new natural gas units could be built to replace lost coal generation. However, a 2010 study conducted by the Aspen Environmental Group for the American Public Power Association makes the point that there are a number of significant roadblocks to any government mandates forcing coal plants to shift to natural gas (or other fuels). The study discovered no previous instances of coal plant retrofits to natural gas, and estimates that it would cost approximately \$1 million per megawatt to shift fuels. The analysis further points out that many utilities have outstanding debt service on existing coal plants, which could also add significantly to the cost of replacement.¹² In addition to the generally lower costs of coal-fired electricity,¹³ the capital expenses required by government-mandated fuel switching will also be passed down to consumers.

Sadly, the increased electricity costs resulting from EPA's war on coal will disproportionately harm minorities and low income groups and it may destroy large segments of American small business and manufacturing.

Minorities and Low Income Groups

Higher energy costs associated with environmental regulation disproportionately affects low income groups and minorities as "a result of lower average incomes and a disproportionate percentage spent on energy" according to Harry Alford of the National Black Chamber of Commerce.¹⁴ For example, the analysis by Dr. Bezdek of EPA regulation of GHG found that by 2030, this process could increase the energy burden (defined as gross annual household income that is used to pay residential energy bills) of African Americans by more than 30 percent and Hispanics by more than 35 percent.¹⁵ More information on the effect of the train wreck regulations on minorities and low-income populations can be found in the power point presentation of Harry Alford of the National Black Chamber of Commerce on the ALEC website www.regulatorytrainwreck.com.

Small Business

While the President is fond of referring to small business as the engine of job growth in the U.S., his Administration has ignored the disproportionate burden that higher electricity prices will have on small and emerging businesses. A recent analysis by the Small Business Administration's Office of Advocacy found that "[c]ompliance with environmental regulations costs 364 percent more in small firms than in large firms."¹⁶ Energy costs already rank as one of the biggest issues facing small businesses.¹⁷

Manufacturers

The United States has already lost 5.4 million direct manufacturing jobs and 16.2 million related jobs since 2000, and the rising prices that will result from EPA's regulatory train wreck could significantly impact the competitiveness of a number of energy-intensive American industries.¹⁸ To take a look at the potential economic fallout in just one industry, the American Forest & Paper Association has estimated that the combination of Clean Air Act rules "potentially could impose on the order of \$17 billion in new capital costs on papermakers and wood products manufacturers in the next five to eight years alone."¹⁹ Many types of manufacturing are energy-intensive and will be encouraged to relocate their operations overseas by energy price increases. The following chart shows at-risk, energy-intensive manufacturing (more information on the effect of the train wreck regulations on manufacturing can be found in the power point of Paul Cicio of the Industrial Energy Consumers of America on the ALEC website www.regulatorytrainwreck.com).

EPA's Inadequate Attention to Costs and Fuzzy Numbers on Benefits

Despite the significant resources devoted to promulgating these train wreck regulations, EPA has failed to consider what the overall regulatory costs of its program will be. While EPA has developed some estimates of costs and benefits (benefits include, among other inputs, a monetary value for lives saved or diseases prevented) for individual rules, there has not

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been an attempt at comprehensive accounting of the total and cumulative effect of the entire program on jobs, GDP, or the potential for business relocation overseas. In a time of economic recovery, this is unacceptable. Beyond the failure to even consider a comprehensive analysis of economic impacts, there are other troubling signs regarding EPA's fuzzy numbers. Chairman Fred Upton and Tim Phillips of Americans for Prosperity noted in a *Wall Street Journal* op-ed that, despite the fact that Section 321 of the Clean Air Act requires it, the Agency has failed to conduct a study of how many jobs might be lost by regulation of GHG.²⁰ The Administration has steadfastly refused to release a study by the Department of Commerce on the negative economic impacts of its commercial and industrial boiler MACT rule. Perhaps most alarming is news that the Agency, in response to questions over the costs of its rules, is seeking to effectively cook the books in early 2011 by changing the process for estimating regulatory benefits.²¹

The White House and EPA repeatedly and unreflectively cite the millions of "green jobs of the future" their regulations will create, but there are serious issues with this view. According to Dr. Jonathan Lesser of Continental

Economics, American studies in favor of so-called green jobs entirely ignore the effects of higher electricity prices.²² Based upon recent studies, the three countries often cited as models for "green jobs" don't quite add up either:

- In Spain, each green job has resulted in 2 jobs being lost.²³
- The price per green job in Germany is roughly \$240,000.²⁴
- In the wind energy mecca of Denmark, electricity prices are higher than anywhere else in the European Union.²⁵

Harm to Public Health and Welfare

Because EPA's regulations will be so costly, any public health and welfare benefit created by the regulations will be far outweighed by the health and welfare damage they will cause. EPA ignores the well known dictum that wealth = health. As one study found, "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."²⁶

A study by Johns Hopkins University Professor M. Harvey Brenner noted that "predicted mortality trends associated with air quality regulations that increase energy costs show trends an order of magnitude greater than the estimated benefits."²⁷ EPA entirely misses this point. As the U.S. Chamber of Commerce points out, "governmental programs intended to protect public health should take into account potential income and employment effects of required compliance measures. By increasing the costs of goods and services such as energy, and decreasing disposable incomes, regulation can inadvertently harm the socioeconomic status of individuals and, thereby, contribute to poor health and premature death."²⁸

Similarly, the Annapolis Center for Science Based Public Policy found that affordable energy has led to a high standard of living and longevity. Inex-

pensive energy also has a more direct effect at the level of the individual, allowing people to devote resources to health promoting activities (e.g., diet, health care, and exercise) rather than domestic heating and cooling, transportation costs, etc.²⁹

Electric Reliability

The train wreck regulations not only increase the cost of electricity, they threaten the basic reliability of the electric grid. In finding that the combined effect of EPA regulations on cooling water intake, coal ash disposal, clean air transport, and MACT for HAPs threatens more than 70 GW of electric capacity (or roughly 7 percent of total U.S. capacity), the North American Electric Reliability Corporation (the organization responsible for ensuring the reliability of the bulk power system) sees serious danger for electric reliability across the country. The combination of rules could force some areas to dip below a 15 percent “reserve margin,” which is necessary to protect against vulnerabilities from extreme weather, unexpected blackouts, and other events. Vulnerabilities in our electrical grid risks severe economic upheaval, diminished productivity, and reduced quality of life for our electricity-reliant society.

State Sovereignty and Resources

It is no overstatement to say that the current EPA is running roughshod over states rights. Although EPA disdain for the interests of states is most notable in the context of GHG standards discussed above, the disregard manifests itself across the whole of the train wreck regulatory program. To cite a few examples:

- EPA’s unprecedented onslaught of regulation, most of which have to be implemented by states, has put an enormous burden on state resources. Unlike the federal government, most states have to balance their budgets, and therefore have been forced to undertake a series of painful budget cuts. As reported by the Environmental Council of the

States (ECOS), the association of state environmental agencies, while state funding shortfalls for environmental programs have partially been mitigated by federal stimulus money, the stimulus is about to run out.³⁰ States simply do not have the resources to continue to implement more and more EPA regulations. And now comes word that federal budget constraints will likely force EPA to cut back on grants to states to implement environmental programs.³¹

- A December 2010 ECOS report argues that several new administrative processes adopted by the Obama Administration infringe on state authority and may violate federal requirements as well. According to the ECOS report, these new processes were adopted to expedite regulation at the expense of state discretion.³²
- As discussed above, EPA’s Clean Air Transport Rule will wholly circumvent state authority to implement the program in the manner that states deem best pursuant to a State Implementation Plan.
- As noted above, EPA’s view that it knows better than the states in which mountaintop mining occurs about the effects of that mining has led to lawsuits against the Agency by Kentucky and West Virginia, both of which have Democratic governors.
- EPA is engaged in a multi-front war against Texas, which rightfully believes it is better able to administer environmental programs in the state than federal bureaucrats. The Agency’s power grab threatens the Lone Star State’s highly-successful flexible permitting program.³³ Former EPA general counsel Roger Martella argued in a recent television interview that the state’s interpretation of the Clean Air Act is well-grounded in the history: “Texas’s primary concern is, they would rather EPA take the time to get this right. They feel like they’re shoving a regulatory system down Texas’s throat, and the basic principle of the Clean

Air Act going back to 1970 is the notion of cooperative federalism...Here EPA is taking an exception from that and saying, 'We're going to implement our federal policies at the state level.'"³⁴

- A letter signed by 20 governors in March of last year stated that "regulation will place heavy administrative burdens on state environmental quality agencies, will be costly to consumers and could be devastating to the economy and jobs."³⁵

The Environmentalist War on Coal

Both inside and outside the Administration, environmentalists have embraced EPA's regulatory train wreck as the most effective tool they have for their declared war against coal-fired electricity. The brunt of EPA's assault on energy targets coal; the estimates discussed above include scenarios that could force the early retirement of up to one-third of all coal-fired electricity in the next few years. The Sierra Club has deployed significant resources—to the tune of \$18 million and 100 employees—for a global campaign against coal, and they are seeking out legal avenues, like expansion of New Source Review for even routine plant maintenance, to crusade against existing coal-fired generation.³⁶ "We have essentially ended the rush to build new coal plants...Not a single coal plant has broken ground in the past 25 months," bragged one Sierra Club attorney to *Inside EPA* in late 2010, "[w]e are turning our attention to retiring the existing fleet of dirty coal plants...[the group's goal] is to retire or replace all of these coal plants over the next two decades."³⁷

Since coal is the nation's most abundant and affordable fuel for generation, there is a close correlation between states whose power supply is made up of at least 60 percent or more of electricity generated from coal and low electricity prices (with the previously-discussed corollary of economic growth and development). More importantly, there is no possibility of the renewable fuels favored by environmentalists filling in for more than a frac-

tion of this power. For example, in the U.S. from 1995 to 2008, a banner period for renewable electricity sources, "the absolute increase in total electricity produced by coal was about 5.8 times as great as the increase in output from wind and 823 times as great as the increase from solar."³⁸

Forcing retirement of American coal plants would be a costly enterprise and is unlikely to change global energy developments. 3.6 billion people around the globe have no or only partial access to electricity, but many regions are seeking to expand access to inexpensive energy with attendant improvements in quality of life. Over the last decade, coal has been the fastest-growing fuel in the world. Driven primarily by expanding Asian demand, the current pace of expansion will add 1 billion tons of coal demand every three years.³⁹ A recent issue of *The Atlantic* included a cover story by national correspondent James Fallows that, in assessing the electricity demands in the U.S. and China (where more than 70 percent of electricity is fueled by coal), rightfully cites the inevitability and indispensability of coal consumption for the foreseeable future. Fallows identifies two essential realities about clean coal: "One is that coal *can* be used in less damaging, more sustainable ways than it is now. The other is that it *must* be used in those ways, because there is no plausible other way to meet what will be, absent an economic or social cataclysm, the world's unavoidable energy demands."⁴⁰

What the Other Half Reads

"The EPA and Lisa Jackson versus the polluters who want dirtier air and water for your family"

Climate Progress, December 1, 2010

"Good riddance: The outlook dimmed for coal in 2010"

Grist Magazine, December 23, 2010

"Is the EPA Confrontational Enough?"

The New Republic, December 7, 2010

"A Coming Assault on the E.P.A."

The New York Times, December 24, 2010

Minimal Environmental Benefits

While EPA is seeking more creative accounting techniques to emphasize the potential benefits of this slew of environmental regulations, there is much evidence that unilateral action on these rules is unlikely to have a significant overall effect. To take the example of GHG regulation under the Clean Air Act, there are four reasons that suggest that, even if things go according to EPA plans, the impact on greenhouse gas concentrations will be minimal:

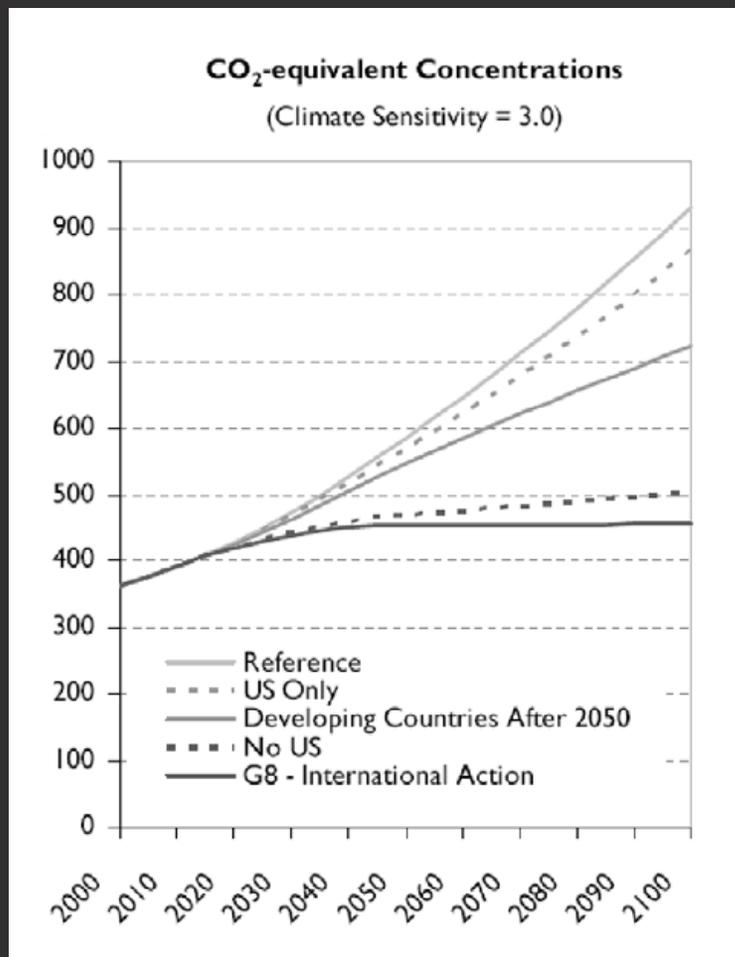
First, even EPA officials admit that their Clean Air Act requirements will only achieve at best a 5 percent reduction in U.S. greenhouse gas emissions, a drop in the global climate bucket.⁴¹ EPA's Federal Register entry accom-

panying the rule regulating GHG emissions from new cars and light-duty trucks found that: "[G]lobal mean temperature is estimated to be reduced by 0.006 to 0.015 [degrees] C by 2100... and sea-level rise is projected to be reduced by approximately 0.06 – 0.14 cm by 2100." As the minority staff of the Senate Environment and Public Works Committee notes, "[t]his amount is so miniscule it can't even be measured by a ground-based thermometer."⁴²

Second, despite the hopes of environmentalists in the wake of climate meetings in Copenhagen and Cancun, GHG regulation will not bring the U.S. into compliance with any international climate regime. The Organization for Economic Co-operation and Development (OECD) points out that EPA regulation "is unlikely to deliver emission reductions compatible with likely U.S. commitments in any global agreement."⁴³

Third, growing, unmitigated emissions by developing countries will overwhelm even the most severe unilateral greenhouse gas regulations by the U.S. Many commentators have noted that China's GHG emissions have already surpassed America's emissions, and that the Chinese are putting a coal-fired power plant into operation every week. Perhaps even more important is the fact that U.S. emissions are likely to remain relatively flat, while developing country emissions will grow exponentially over the next century (further compounded by the fact that China's faster growth of electricity demand comes from more than 70 percent coal-fired generation).⁴⁴ The graph below is EPA's depiction of the effect of cap-and-trade on global atmospheric GHG concentrations. The chart shows that, even based on EPA's own analysis, unilateral American reduction in greenhouse gas emissions have a negligible impact on atmospheric concentrations:⁴⁵

Fourth, there is a significant risk that so-called carbon leakage (in which energy-intensive industries shift production overseas to avoid costly regulation) will wipe out even the modest effect estimated by EPA.⁴⁶



Source: EPA, http://www.epa.gov/climatechange/economics/pdfs/EPA_APA_Analysis_6-14-10.pdf

Energy Dependence and American Supply

The cumulative impact of EPA's regulatory train wreck, including reduced domestic energy supplies and less competitive electricity prices, could force the U.S. to end up importing more in either fuel or finished products from industries moving production. As noted earlier, countries like China are moving rapidly to expand coal-based generation, while the combination of EPA rules could disrupt the existing domestic electric industry and raise the price of doing business in the U.S. The chart below also demonstrates that, considering the enormous coal reserves held by the U.S. (nearly 30 percent of global reserves and enough to support current levels of demand for more than 200 years), EPA rules are hostile to the Administration's lofty goals of energy independence:

Top Five Countries with Largest Coal Reserves

Country	Reserves (million tons)	Percentage of world total	Reserves-to-production ratio*
US	238,308	28.9%	224
Russia	157,010	19.0%	481
China	114,500	13.9%	41
Australia	76,200	9.2%	190
India	58,600	7.1%	114

*Indicates the number of years of reserves remaining given current levels of production.

Source: BP Statistical Review of World Energy 2009

Seizing upon low shipping costs and expanding global demand for coal-fired electricity, domestic companies are already seeking export opportunities for western coal supplies toward international markets. Myron Ebell, director of energy and global warming policy at the Competitive Enterprise Institute (CEI), noted the irony of this scenario: “[T]his President’s anti-energy policies are putting the U.S. on the path to a future whereby: (1) we export our affordable energy to China; (2) China uses this affordable energy to build energy-intensive renewable energy generation, like massive wind turbines and solar panels; (3) and then the U.S. buys these expensive, renewable energy goods from China, using money borrowed from China.”⁴⁷

Regulatory Creep

One major threat to state implementation plans and private sector investment is the risk that EPA expands these rules. The speed with which EPA developed the GHG rule for reducing emissions from automobiles and light-duty trucks, which rapidly gave way to a follow-on rulemaking for additional model years and a new round for medium- and heavy-duty trucks, suggests that the Agency has no qualms about multiplying requirements.

Even with alleged limits to EPA authority via the questionably-legal Tailoring Rule, there is a high likelihood of EPA expanding various regulatory programs to new sectors, sources, and technologies. The Tailoring Rule demonstrates the willingness of EPA to import bureaucratic preferences into existing statutes, and the U.S. Chamber of Commerce warns that GHG regulation could easily “expand the regulated universe from 15,000 to over six million businesses, small and large.”⁴⁸ Marlo Lewis of CEI mindfully notes that, “[b]efore small businesses applaud EPA’s ‘Tailoring Rule,’ which temporarily exempts them from certain mandates, they should remember that Congress never authorized EPA to make climate change policy in the first place.”⁴⁹

¹ Robert L. Bradley, Jr. and his colleagues at the Institute for Energy Research have provided a variety of excellent resources that help to emphasize Simon’s energy and natural resource insights. See <http://www.masterresource.org/>; Bradley and Richard W. Fulmer, *Energy: The Master Resource* (Dubuque, IA: Kendall/Hunt, 2004); and Bradley, *Julian Simon and the Triumph of Energy Sustainability* (Washington, DC: ALEC, 2000).

² Paul Driessen, “Affordable Energy: The foundation of human rights and economic justice,” *The State Factor*, April 2010, http://www.alec.org/am/pdf/SF_Affordable%20Energy_final.pdf.

³ Bryce, 67.

⁴ The UN Human Development Index incorporates a variety of measures, from poverty and education to infant mortality and water sanitation.

⁵ Alan D. Pasternak, “Global Energy Futures and Human Development: A Framework for Analysis,” LLNL, October 2000, <https://e-reports-ext.llnl.gov/pdf/239193.pdf>.

⁶ Household impact estimated based on 1 MW providing electricity to roughly 1,000 U.S. homes.

⁷ NERC, “2010 Special Reliability Scenario Assessment.”

⁸ Scott DiSavino, “EPA regs may shut 70,000 MW of U.S. coal plants: FBR,” Reuters, December 13, 2010, <http://www.reuters.com/article/idUSTRE6BC3JN20101213>.

⁹ Credit Suisse, “Growth from Subtraction.”

¹⁰ Celebi, et al., “Potential Coal Plant Retirements Under Emerging Environmental Regulations,”

¹¹ ICF International (Commissioned by Interstate Natural Gas Association of America), “Coal-Fired Electric Generation Analysis,” May 11, 2010, <http://www.ingaa.org/File.aspx?id=10371>.

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¹³ American Coalition for Clean Coal Electricity, <http://www.cleancolusa.org/affordable>.

¹⁴ Harry Alford, “The Impact on Minority Owned Businesses,” Presentation to American Legislative Exchange Council, December 2010, <http://www.alec.org/AM/PDF/Energy/SNPS%202010%20Presentations/Alford.pdf>.

¹⁵Bezdek.

¹⁶Nicole V. Crain and W. Mark Crain, "The Impact of Regulatory Costs on Small Firms," Small Business Research Summary, No. 371, September 2010, <http://www.sba.gov/advocacy/853/2016>.

¹⁷National Federal of Independent Business, "Rising Energy Costs Take Toll on Small Business," <http://www.nfib.com/business-resources/business-resources-item?cmsid=46548#>.

¹⁸Paul Cicio, "EPA Regulations- Higher Costs and Uncertainty on Manufacturing Competitiveness and Jobs," Presentation to American Legislative Exchange Council, December 2010, <http://www.alec.org/AM/PDF/Energy/SNPS%202010%20Presentations/Cicio.pdf>.

¹⁹American Forest & Paper Association, "Reconciling the Cumulative Impact of Upcoming Air Regulations with a Sustainable Forest Products Industry," February 2010, <http://afandpa.org/WorkArea/linkit.aspx?LinkIdentifier=id&ItemID=1701>.

²⁰Fred Upton and Tim Phillips, "How Congress Can Stop the EPA's Power Grab," *Wall Street Journal*, December 28, 2010, <http://online.wsj.com/article/SB10001424052748703929404576022070069905318.html>.

²¹Maria Hegstad, "Facing Fears Over Rules' Costs, EPA Moves to Increase Benefits' Estimates," *Inside EPA*, November 26, 2010, https://environmentalnewsstand.com/component/option,com_ppv/Itemid,299/id,2346472/.

²²Jonathan A. Lesser, "Renewable Energy and the Fallacy of 'Green' Jobs," *The Electricity Journal*, V23, Issue 7, August-September 2010, 45-53.

²³Gabriel Calzada Álvarez, et al. "Study of the Effects on Unemployment of Public Aid to Renewable Energy Sources," March 2009, <http://www.juandemariana.org/pdf/090327-employment-public-aid-renewable.pdf>.

²⁴Manuel Frondel, Nolan Ritter, and Colin Vance, "Economic Impact from the Promotion of Renewable Energies: The German Experience," October 2009, http://www.instituteforenergyresearch.org/germany/Germany_Study_-_FINAL.pdf.

²⁵Martin Agerup and Hugh Sharman, "Wind Energy: The Case of Denmark," September 2009, http://www.cepos.dk/fileadmin/user_upload/Arkiv/PDF/Wind_energy_-_the_case_of_Denmark.pdf.

²⁶Daniel E. Klein and Ralph L. Keeney, "Mortality Reductions From Use of Low-Cost Coal-Fueled Power: An Analytical Framework," Twenty-First Strategies, McLean, Virginia, December 2002, <http://www.coalcandothat.com/images/content/MortalityRed.pdf>.

²⁷U.S. Chamber of Commerce comments to EPA on Docket ID No. EPA-HQ-OAR-2001-0017: National Ambient Air Quality Standards for Particulate Matter.

²⁸M. Harvey Brenner, Ph.D, Environmental Management, *Journal of the Air & Waste Management Association*, "Health Benefits of Low Cost Energy: An Econometric Case Study," November 2005.

²⁹The Annapolis Center for Science-Based Public Policy, "Economic Growth and Low-Cost Energy Drive Improved Public Health," 2006.

³⁰R. Steven Brown and Adam Fishman, "Status of State Environmental Agency Budgets, 2009-2011," ECOS Green Report, August 2010, http://www.ecos.org/files/4157_file_August_2010_Green_Report.pdf?PHPSESSID=28103b3a3de85644e325a030c4814bf1.

³¹"FY12 Cuts To EPA Grants May Spur States To Return Delegated Authority," *InsideEPA*, Jan. 26, 2011, http://environmentalnewsstand.com/index.php?option=com_ppv&view=article&id=2352434.

³²Brown and Sarah Hunt, "RECENT U.S. EPA POSITIONS ON INTERIM GUIDANCE, RULES, AND POLICIES," ECOS Green Report, December 2010, http://www.ecos.org/files/4316_file_December_2010_Green_Report.pdf?PHPSESSID=70ccd71bec5b496aa2f6fd196a6c7110.

³³Kathleen Hartnett White and Mario Loyola, "EPA's Regulatory Barrage and the Lone Star State," *Inside ALEC*, November/December 2010, www.alec.org/AM/PDF/InsideALEC-FINALPDF.Nov.Dec10.pdf; and Rick Perry, *Fed Up! Our Fight to Save America from Washington* (New York: Little, Brown and Company, 2010), 88-92.

³⁴Roger Martella, Interview with EnergyNow!, December 26, 2010, <http://www.energynow.com/node/2507#>.

³⁵Available at: <http://thehill.com/images/stories/blogs/govsletter.pdf>.

³⁶Chris Horner, "The Sierra Club's War on Coal," CRC Green Watch, November 2010, <http://www.capitalresearch.org/pubs/pubs.html?id=748>.

³⁷Stuart Parker, "Activists Shift Legal Strategy to Force GHG Limits at Existing Coal Plants," *Inside EPA*, December 2, 2010, http://environmentalnewsstand.com/component/option,com_ppv/Itemid,308/id,2348384.

³⁸Bryce, 66.

³⁹Andrew Revkin, "The Coal Age Continues," *The New York Times*, June 18, 2010, <http://dotearth.blogs.nytimes.com/2010/06/18/the-coal-age-continues>.

⁴⁰James Fallows, "Dirty Coal, Clean Future," *The Atlantic*, December 2010, <http://www.theatlantic.com/magazine/archive/2010/12/dirty-coal-clean-future/8307>.

⁴¹Bryan Walsh, "Political Battle Brewing over the EPA's New Emissions Regulations," *Time*, January 3, 2011, <http://www.time.com/time/health/article/0,8599,2040485,00.html>.

⁴²Senate EPW Minority Staff, "EPA's Anti-Industrial Policy."

⁴³OECD, "Economic Survey of the United States 2010," http://www.oecd.org/document/43/0,3343,en_2649_34569_46023275_1_1_1_1,00.html.

⁴⁴Fallows.

⁴⁵See 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 light blue line in the graph assumes the legislation is not enacted; the dotted light blue line assumes that the legislation is enacted. Both light blue 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 solid dark blue line shows concerted action by the

entire international community; the dotted light blue line assumes the rest of the world acts but the U.S. does not. As can be seen by comparing the dark blue and light blue lines, the rest of the world must reduce GHG emissions if overall atmospheric concentrations are to be meaningfully reduced. Note that this chart was produced by EPA. It is highly unlikely in any scenario that atmospheric concentrations of GHGs will ever achieve the levels EPA assumes without the type of intervention that EPA would like.

⁴⁶Thorning, "Questions & Answers."

⁴⁷Myron Ebell, Cooler Heads Digest, December 30, 2010.

⁴⁸Cited in "War on Western Jobs."

⁴⁹Christine Hall, "EPA Offers Draconian 'Guidance' for Global Warming Energy Restrictions," November 10, 2010, <http://cei.org/news-releases/epa-offers-draconian-%E2%80%9Cguidance%E2%80%9D-global-warming-energy-restrictions>.

LOOKING UP: AMERICA'S UNTOLD CLEAN AIR & WATER SUCCESS STORY

“There are laws aimed at pollution abatement, but they cannot bring clean air and water... it is invention and development, not legislation or regulation, that has proved our most reliable instrument of progress.”

-Henry B. du Pont, 1952

Considering the range of regulatory action on EPA's plate over the next five years and the crisis-of-the-week mentality of the environmentalist community and media, one could be forgiven for thinking the sky is falling in terms of air and water quality. The reality, though, is quite the opposite. Over the last forty-plus years, air quality has steadily improved, exceeding the success rates of other long-term trends like reduced populations on welfare and the lowered crime rate. Steven F. Hayward, author of the annual *Index of Environmental Indicators* and F. K. Weyerhaeuser Fellow at the American Enterprise Institute, took the opportunity of the Clean Air Act's 40th anniversary to point out four key facts:

- Nearly the entire U.S. has achieved clean air standards for four of the main pollutants regulated by the Clean Air Act (carbon monoxide, sulfur dioxide, nitrogen oxide, and lead);
- Parts of the country with the highest pollution levels have shown the biggest improvement;

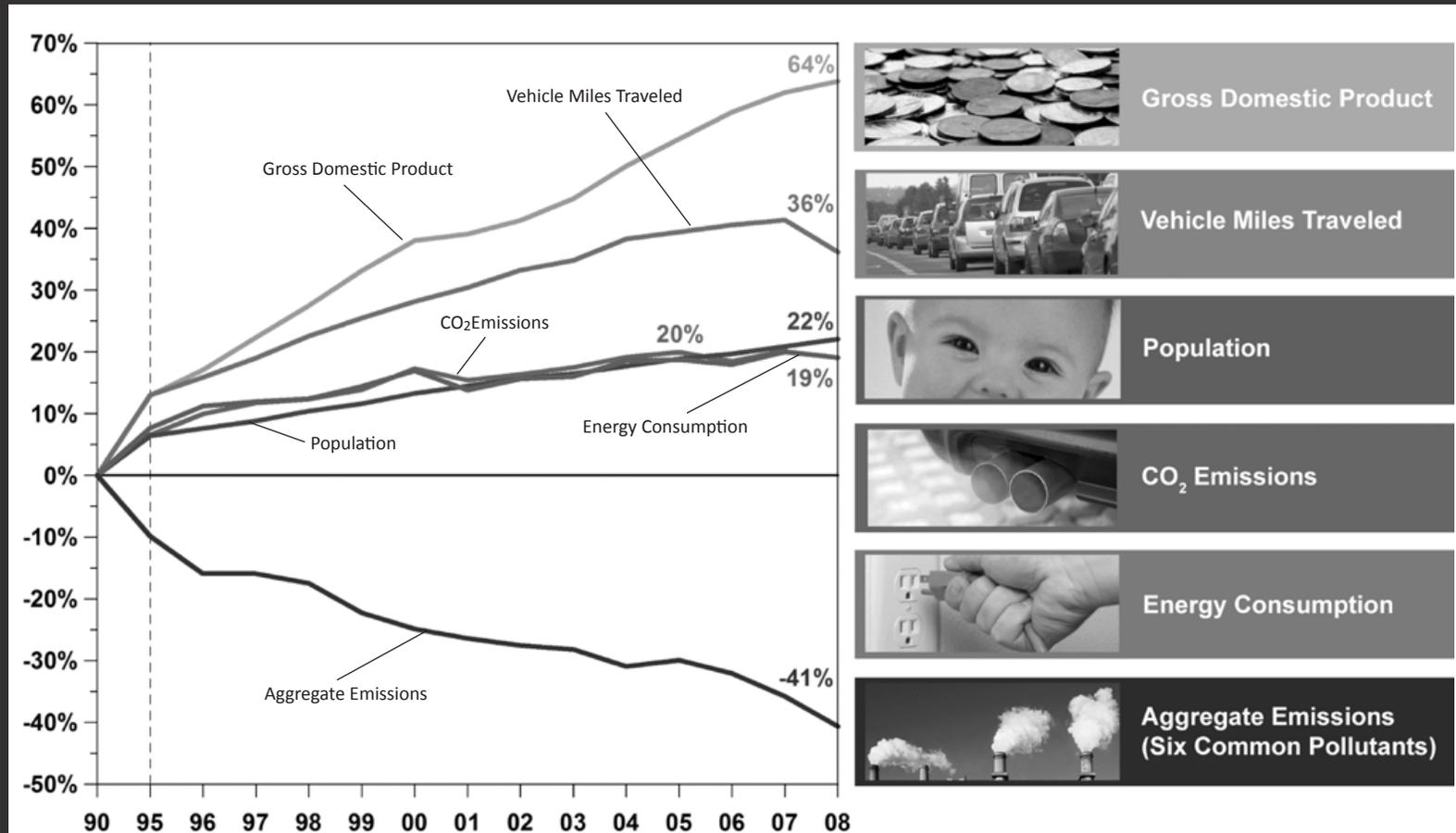
- Technological improvement has been the main driver in reducing air pollution;
- This long-term trend will continue for the next twenty-plus years.

The two figures on the following pages from EPA corroborate the broader point: Emissions of the worst pollutants have dropped dramatically over the last several decades while measures of economic progress have steadily improved.

What about energy efficiency and greenhouse gas emissions? Environmentalists and the media are always quick to point out that Americans consume more energy per capita than any other country on Earth, and that, with the world's biggest economy, we contribute significantly to overall greenhouse gas concentrations. However, the data also point to steady improvements on these fronts (especially in comparison to the rest of the world). For example, per capita CO₂ emissions fell 1.8 percent in the U.S. from 1990 to 2007 (See pg. 41).

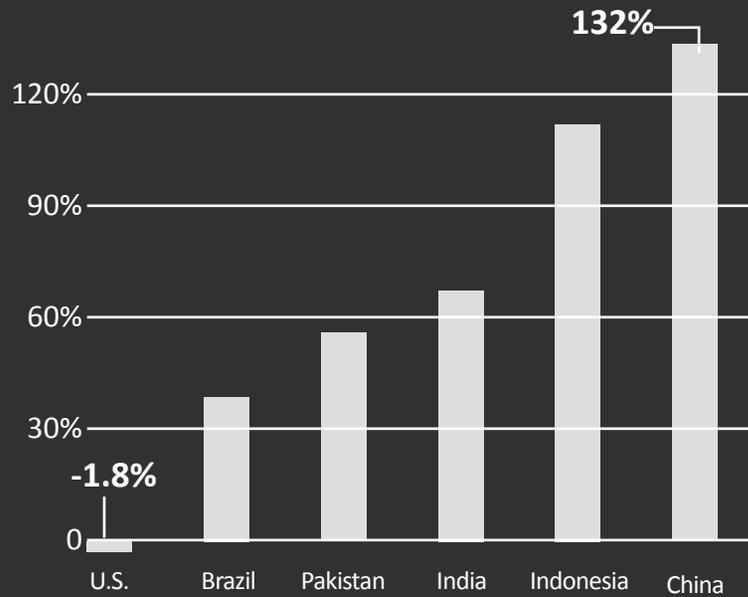
Two other important measures that show massive improvements: carbon intensity (metric tons of carbon dioxide per \$1,000) and energy intensity (amount of energy needed to produce \$1 of GDP). Between 1980 and

Comparison of growth measures and emissions, 1990-2008



Source: EPA, <http://www.epa.gov/airtrends/2010/report/airpollution.pdf>

Percentage Change in CO₂ Emissions Per Capita in the Six Most Populous Countries, 1990 to 2007



Source: International Energy Agency, "CO₂ Emissions from Fuel Combustion 2009," <http://www.iea.org/co2highlights/co2highlights.pdf>, 90-91

2006, U.S. carbon intensity fell 43.6 percent and energy intensity plummeted 42 percent.

These numbers compare very favorably with efficiency in the rest of the developed world and indicate a strong non-governmental trend toward reduced emissions. As Robert Bryce of the Manhattan Institute noted, these improvements happened over a period (1980 to 2006) in which

Change in National Average Ambient Levels and Emissions 1980 - 2008*

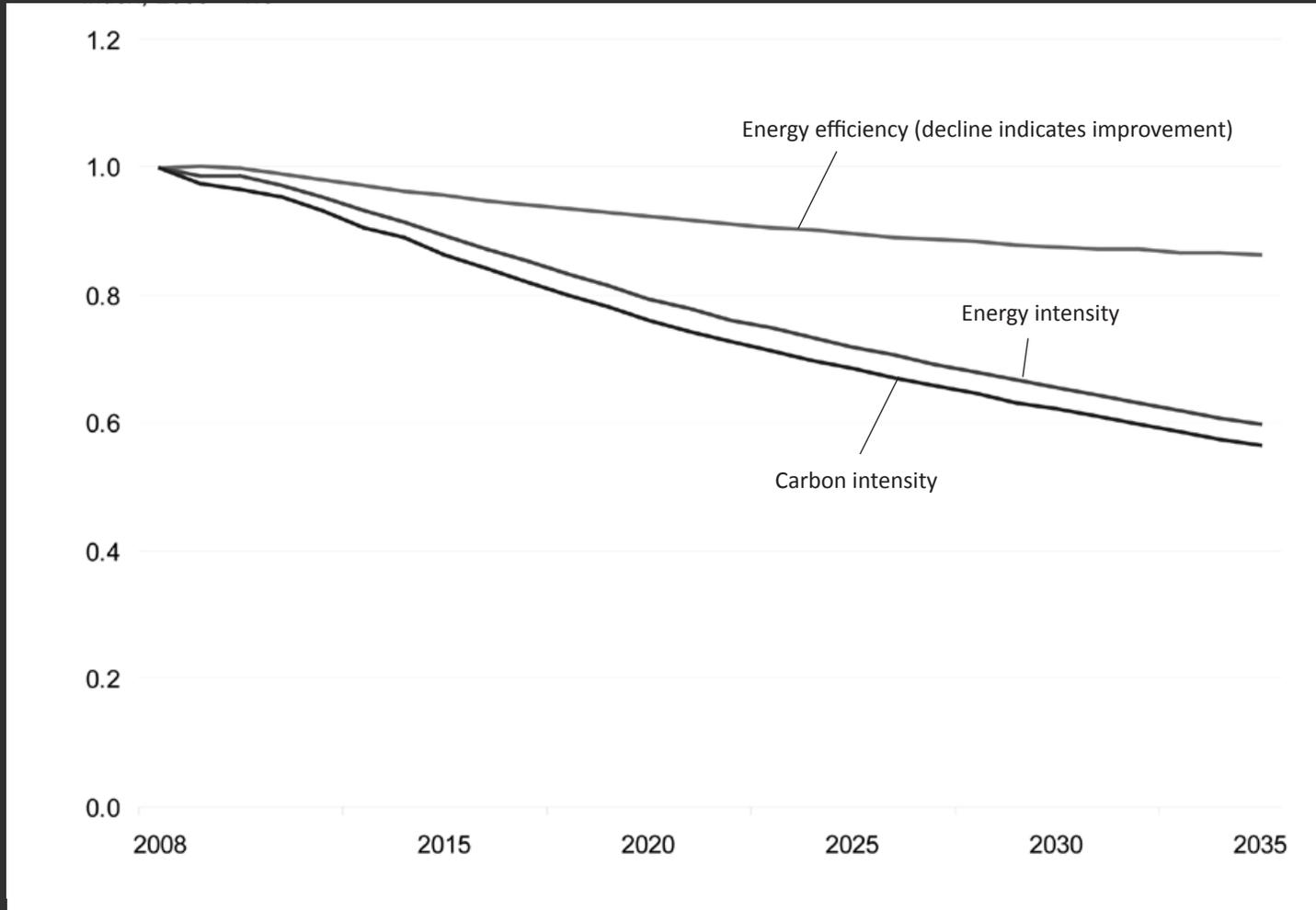
	Ambient	Emissions
Carbon Monoxide (CO)	-79%	-58%
Ozone** (O ₃)	-25%	-49%
Lead (Pb)	-92%	-96%
Nitrogen Dioxide (NO ₂)	-46%	-40%
Particulates (PM ₁₀), 1985 - 2008	-31%	-46%
Fine Particulates (PM _{2.5}), 1985 - 2008	-21%	-36%
Sulfur Dioxide (SO ₂)	-71%	-56%

*Except for PM10 and PM2.5.

**Emissions measure here is VOCs, a principal ozone precursor

Source: EPA.

Projected changes in indexes of energy efficiency, energy intensity, and carbon intensity in the AEO2010 Reference case, 2008-2035



Source: U.S. Energy Administration, http://www.eia.doe.gov/oiaf/aeo/otheranalysis/aeo_2010analysispapers/intensity_trends.html

U.S. GDP more than doubled and population increased 31.5 percent. Global trends indicate similar “decarbonization” over the last 100 years and are projected to continue through 2035:

According to Hayward, most of the credit for these successes in air quality goes to “market forces and economic growth, as can be seen by the fact that air pollution began dropping in the United States in the mid-1960s-*before* the first Clean Air Act passed.” In the case of electric generation, the newest technology represents marked improvement in efficiency and all major pollutants. An environmental regulatory regime that is hostile to major modifications or the building of new power plants prevents the leaps and bounds in environmental quality that can result from market-based innovation and technology diffusion.

¹Steven F. Hayward, “Two Cheers for the Clean Air Act,” *The American*, September 17, 2010, <http://www.american.com/archive/2010/september/two-cheers-for-the-clean-air-act>.

²<http://www.epa.gov/airtrends/2010/graphics/Figure3.gif>.

³Bryce, 140-141.

⁴Roger Pielke, Jr. *The Climate Fix: What Scientists and Politicians Won't Tell You About Global Warming* (New York: Basic Books, 2010), 74.

5

ALL ABOARD: STATE LEGISLATIVE RESPONSES



A variety of tools are at the disposal of state legislators to make their voices heard in early 2011 in opposition to EPA's regulatory train wreck. This publication provides an introduction to some of the approaches and language that has been utilized by legislatures in this session and the last, as well as some additional, innovative strategies being tested throughout the United States. There is no silver bullet for stopping EPA's power grab, and a full menu of options is listed below. The model legislation discussed below is available from www.alec.org.

Highest Priority for Early 2011

The highest priority should be to get the state on record as calling on Congress to stop this regulatory train wreck. The resolution is needed to bolster our allies in Congress and to show EPA and the Administration that consequences will follow across the country if they refuse to pull back.

A model resolution has been developed for this purpose: Resolution Opposing EPA's Regulatory Train Wreck (see page 49). As adopted by Wyoming (Senate Joint Resolution 6¹) and Indiana (House Resolution 13²) in early 2011, this is the most up-to-date and comprehensive resolution on this issue. Calling on Congress to slow and stop EPA's train wreck is a critical first step for efforts to rethink and potentially replace existing federal environ-

mental institutions and statutes.³ Highlighting the scope of EPA's regulatory onslaught and the failure by the Agency to study the economic, employment, or environmental impacts of their rulemakings, this resolution calls on Congress to:

1. Adopt legislation prohibiting EPA by any means necessary from regulating GHG;
2. Impose a moratorium on any new air quality regulation for at least two years (unless to address an imminent health or environmental emergency);
3. Require the Administration to undertake a multi-agency study identifying all EPA regulatory activity and the cumulative effect on the economy, jobs, and American competitiveness.

Other Resolutions

Specific, coordinated resolutions from states in opposition to the pending EPA regulatory train wreck provide an excellent vehicle to express collective dissatisfaction and can offer guidance for both your state's Congressional delegation and state regulators required to carry out EPA's edicts. These resolutions highlight that states are not merely branches of the federal government and that the model of cooperative federalism upon which

the Clean Air Act is based is a thing of the past. The best resolutions clearly lay out the objections to EPA's agenda and offer comprehensive recommendations to rectify this train wreck. In 2010, two dozen states considered resolutions opposing EPA regulation of greenhouse gas emissions in a number of different ways. Individual rulemaking resolutions include:

[Resolution on Best Available Control Technology for Coal-Based Electric Generation](http://www.alec.org) (www.alec.org)

This resolution offers guidance to state regulatory agencies on how to interpret "Best Available Control Technology" when issuing Prevention of Significant Deterioration permits for the Best Available Control Technology requirements for greenhouse gases from coal-based electric generation (as mandated by EPA under the Clean Air Act beginning in 2011) to fully consider the need for new electric generation that is efficient and economically practicable. The resolution encourages accommodation of highly efficient power technologies, like super-critical and ultra super-critical coal-fired electric generating units, to serve the dual purpose of reducing the overall emissions profile of the electricity generation unit while providing efficient, affordable, and available power today and into the future. Considering the extremely vague guidance offered by EPA as to what constitutes "Best Available Control Technology," legislatures should consider weighing in to prevent overly restrictive interpretations that could devastate investment and certainty.

[Resolution to Retain State Authority Over Coal Ash as Non-Hazardous Waste](http://www.alec.org) (www.alec.org)

Passed by ALEC in early 2010, this resolution supports the 2000 EPA determination that coal combustion residuals do not warrant federal regulation as hazardous waste and concludes that states are best positioned to serve as the principal regulatory authority for CCRs as non-hazardous waste.

[Resolution in Opposition to EPA's Plan to Regulate Greenhouse Gases Under the Clean Air Act](http://www.alec.org) (www.alec.org)

This resolution, approved by ALEC in September 2008, opposes EPA's endangerment finding and any regulation of greenhouse gases, citing the massive economic burden that would result and the global nature of climate emissions.

[Resolution on Reform of New Source Review Regulations](http://www.alec.org) (www.alec.org)

This resolution supports Bush administration efforts to reform New Source Review regulations, which would allow necessary power plant upgrades to reduce emissions and improve efficiency without triggering costly and unmanageable regulations designed to apply to entirely new sources.

[Resolution in Opposition to EPA's Regulation of Greenhouse Gases from Mobile Sources](http://www.alec.org) (www.alec.org)

This resolution takes issue with the Supreme Court's review of climate science and Congressional intent in ruling that EPA has authority to regulate greenhouse gases under the Clean Air Act in *Massachusetts v. EPA*. It opposes the EPA endangerment finding and subsequent regulation of mobile source emissions.

[Resolution in Opposition of Carbon Dioxide Standards](http://www.alec.org) (www.alec.org)

This resolution opposes voluntary and mandatory carbon dioxide emission standards and cap-and-trade regimes as obstacles to economic growth, energy affordability, and electric reliability.

Enhanced Regulatory Review

An additional approach for legislatures is to establish more robust procedures for reviewing environmental regulatory enforcement, including development of State Implementation Plans to comply with EPA requirements. In the context of GHG regulation, *Inside EPA* recently argued that "[p]ermits issued after Jan. 2 will become the testing ground for the litany of economic harms predicted by industry, as litigation on the merits of EPA's

authority to limit GHGs will run well into 2011.”⁴ Improvements in regulatory review can enable greater legislative input on state implementation of EPA regulations as well as unnecessary and duplicative state policies.

In November 2010, the Institute for Policy Integrity released a comprehensive analysis and grading of the regulatory review processes for all 50 states. While this monograph has some problems with its overall ranking methodology, it does provide a glimpse into some of the legislative tools currently on the books.⁵ In addition to the tools discussed below, a new study entitled “Environmental Regulation in Michigan: A Blueprint for Reform,” provides lessons for all states. Written by Russ Harding, director of the Mackinac Center’s Property Rights Network and former director of the Michigan Department of Environmental Quality, the report outlines necessary regulatory innovations, from legislative approval of regulations to a regulatory bill of rights.⁶

Below are some ALEC model options for enhancing and improving legislative review of your state’s regulatory structure:

Climate Accountability Act (www.alec.org)

Endorsed by ALEC in 2010, this model bill requires that any government expenditure to reduce greenhouse gas emissions must, before implementation, provide the overall cost per ton of carbon dioxide-equivalent to be achieved by the policy. This bill is designed to ensure that states receive the greatest return possible on environmental investments.

Legislative Authorization

States should consider requiring legislative authorization for state participation in greenhouse gas regulatory programs. ALEC’s model State Responses to Kyoto Climate Change Protocol contains language that prevents state regulators, in the absence of an act of the legislature, from submitting to EPA or any other federal agency “any legally enforceable commitments related to the reduction of greenhouse gases” (available at www.alec.org).

Former Governor Dave Freudenthal of Wyoming seized upon similar language in the Wyoming Environmental Quality Act to make that case that the state could not participate in GHG regulation.⁷ Arizona H.B. 2442, enacted in 2010, also required express legislative authorization prior to any state regulation of GHG.

Notification Requirements

States can require environmental agencies to provide necessary notification to the legislature and relevant committees before submitting a State Implementation Plan for carrying out EPA requirements. For example, ALEC’s Ozone Attainment State Implementation Plan Act (www.alec.org) requires that an agency administrator must provide the appropriate legislative committee “with copies of any State Implementation Plan or other legally enforceable commitments... not less than 60 days prior to the submission” to the U.S. EPA.

Economic Impact Statements Act (www.alec.org)

ALEC’s model Economic Impact Statement Act is designed to provide environmental protection without compromising growth by requiring an economic analysis of new environmental regulations. Key components of the bill include: detailed short-term and long-term projections of the economic effects of regulation and legislative review of regulators.

Conditioning Regulation of Non-Pollutant Emissions on Science Act (www.alec.org)

This legislation requires a state environmental administrator to perform an assessment prior to implementing regulation of an emission not explicitly listed as a “pollutant” under the Clean Air Act. This includes a “regulatory right to know” disclosure to include: reasonable demonstration that authority is necessary to protect public health or welfare; whether there is a significant impact on energy availability or price; and if the regulation is feasible and superior to alternatives.

Opportunity to Correct Act (www.alec.org)

The Opportunity to Correct Act improves state oversight of compliance with state and federal laws. It allows the regulated community an opportunity to correct a violation prior to the issuance of a Notice of Violation.

Reclaiming State Sovereignty

With the growing threat of overbearing federal authority in a several areas, legislators are looking to new strategies to push back against the Leviathan and reassert Tenth Amendment authority. ALEC's recent "Restore the Balance" initiative offers a series of model bills and proposed constitutional amendments to emphasize state powers.⁸ From interstate compacts to the so-called Madison Amendment, available tools have been thoroughly discussed in "Reclaiming the Constitution: Towards An Agenda for State Action"⁹ and "Shields of Federalism: Interstate Compacts in Our Constitution"¹⁰ (both by Ted Cruz and Mario Loyola of the Texas Public Policy Foundation), and "The Federalism Toolkit: Ten Tactics for Citizens and States to protect Individual Liberty by Restoring State Sovereignty," by the Goldwater Institute's Nick Dranias.¹¹ States should consider legislation specific to the EPA threat posed in their state. For example, West Virginia Delegate Gary Howell has introduced the Intrastate Coal and Use Act, which would remove EPA permitting authority for coal staying within the state.¹²

Below are two targeted pieces of model legislation to help rectify federal-state imbalances as it relates to EPA:

State Sovereignty through Local Coordination Act (www.alec.org)

This model legislation grants city and town governments the authority to demand that the federal or state government coordinate its law or regulation with that of the local government when the federal or state government imposes a law or regulation more restrictive than local law or regulation. According to American Stewards for Liberty, coordination is mandated by federal law and "requires federal agencies to coordinate their plans, programs and management activities with local governments. It is a powerful

tool that can be used to protect private property rights, productive uses of land, and local economies from burdensome government regulations."¹³

State Regulatory Responsibility Act (www.alec.org)

This Act clearly establishes the role of a state environmental agency when confronted with attempted intrusive and unauthorized actions by the federal government. The purpose of the Act is to ensure the division of governmental responsibilities between the federal government and the states under the principles of federalism, so those state agencies are free to implement their powers without unauthorized federal interference. Toward that end, the legislation establishes three policies:

First, the Act prevents a state agency from complying with a federal requirement that is inconsistent with state law unless the requirement is clearly expressed in a federal statute or rule, and is adopted pursuant to the Federal Administrative Procedures Act.

Second, the Act precludes a state agency from allowing federal law to preempt state law unless the state Attorney General finds that such preemption is required.

Lastly, the Act prohibits state agencies from complying with any federal regulatory mandate or requirement unless adequate funds are provided, the state agency has express state statutory authority to implement the program, and the action does not conflict with state law. These provisions ensure that the state does not accept unfunded mandates and has the authority to implement a delegated program consistent with state law.

Other Avenues to Make Your Voice Heard

States should pursue all available legal means for opposing EPA regulation, including filing appeals of EPA rules or filing interventions of amicus briefs in the appropriate proceedings. As of late December 2010, 18 states are party to a case before the D.C. Circuit appeal on the EPA endangerment finding and GHG rules: TX, MI, HA, IN, KY, LA, NE, ND, OK, SC, SD, UT, MI,

AK, FL, VA, AL, and GA. One approach to this litigation, as proposed in New Hampshire in 2011, would require incoming Attorney Generals to join on-going lawsuits over EPA regulation.

State legislators should consider filing comments on individual EPA rules. While the Agency has proceeded on an unnecessarily rapid path to the regulatory train wreck, there should be an opportunity for state legislators to protect their constituents' interests by filing comments at www.regulations.gov.

Particularly if your federal representatives are on the fence about action to limit EPA's agenda, state legislators should write focused, joint letters to their Congressional delegations. For example, Wyoming's Joint Minerals, Business and Economic Development Interim Committee recently co-authored a letter to their incoming and outgoing Governors and Congressional delegation, asking them to "stand as one against the efforts of the United States Environmental Protection Agency (EPA) as they seek to regulate carbon dioxide and other greenhouse gases in the state of Wyoming."

Legislators should also consider holding oversight hearings over EPA's regulatory train wreck, including both regional and national EPA officials as well as state administrators.

ALEC members should also look to bring their case against EPA to the public by writing op-eds and pursuing other press opportunities to highlight the damage that this train wreck will cause to the local economy.

Finally, legislators should feel free to get in touch with ALEC and the Energy, Environment and Agriculture Task Force for additional resources. Clint Woods can be contacted at 202.742.8542 or cwoods@alec.org.

¹Introduced text available at: <http://legisweb.state.wy.us/2011/Introduced/SJ0006.pdf>.

²Text available at: <http://www.in.gov/legislative/bills/2011/PDF/HRESP/HR0013.pdf>.

³Examples of some of these comprehensive ideas can be found at: Steve Everley, "Why We Must Replace the EPA," January 27, 2011, <http://www.americansolutions.com/energytax/2011/01/why-we-must-replace-the-epa.php>; Jay Lehr, "It Is Time to Trust the States with Environmental Protection," *Environment & Climate News*, January 2011, http://www.heartland.org/environmentandclimate-news.org/article/28889/It_Is_Time_to_Trust_the_States_with_Environmental_Protection.html; and David Schoenbrod, Richard B. Stewart, and Katrina M. Wyman, *Breaking the Logjam: Environmental Protection That Will Work* (New Haven, CT: Yale University Press, 2010).

⁴Victoria Finkle, "With Stay Denied, State Permits Emerge as New Test for EPA Climate Rules," *Inside EPA*, December 15, 2010, http://environmentalnewsstand.com/component/option,com_ppv/Itemid,298/id,2348533/.

⁵Jason A. Schwartz, "52 Experiments with Regulatory Review: The Political and Economic Inputs into State Rulemaking," November 2010, http://policyintegrity.org/files/publications/52_Experiments_With_Regulatory_Review.pdf.

⁶Russ Harding, "Environmental Regulation in Michigan: A Blueprint for Reform," 2010, <http://www.mackinac.org/archives/2010/s2010-04.pdf>.

⁷Cited in: Dustin Bleizeffer, "Governor: Wyoming can't control its greenhouse gases," September 11, 2010, *Casper Star Tribune*, http://trib.com/news/state-and-regional/article_4752f527-8e95-51e7-85c2-57310621ed2d.html.

⁸ALEC, "Restore the Balance," http://www.alec.org/AM/Template.cfm?Section=ALEC_Model_Legislation.

⁹Ted Cruz and Mario Loyola, "Reclaiming the Constitution: Towards An Agenda for State Action," November 2010, <http://www.texaspolicy.com/pdf/2010-11-RR11-TenthAmendment-ml.pdf>.

¹⁰Ibid., "Shields of Federalism: Interstate Compacts in Our Constitution," December 2010, <http://www.texaspolicy.com/pdf/2010-12-PP21-InterstateCompacts-tcruz-mloyola.pdf>.

¹¹Nick Dranias, "The Federalism Toolkit: Ten Tactics for Citizens and States to protect Individual Liberty by Restoring State Sovereignty," December 20, 2010, http://works.bepress.com/cgi/viewcontent.cgi?article=1000&context=nicholas_dranias.

¹²Taylor Kuykendall, "EPA responds to state mine legislation," *The Register Herald*, January 7, 2011, <http://www.register-herald.com/todaysfrontpage/x1919696049/EPA-responds-to-state-mine-legislation/print>.

¹³More information at: <http://americanstewards.us/coordination/coordination-main-page>.

APPENDIX A RESOLUTION OPPOSING EPA'S REGULATORY TRAIN WRECK

RESOLUTION OPPOSING EPA'S REGULATORY TRAIN WRECK

WHEREAS: The United States Environmental Protection Agency (EPA) has proposed or is proposing numerous new regulations, particularly in the area of air quality and regulation of greenhouse gases, that are likely to have major effects on the economy, jobs and U.S. competitiveness in worldwide markets;

WHEREAS: EPA's regulatory activity as to air quality and greenhouse gases has become known as the "train wreck," because of the numerous and overlapping requirements and because of the potentially devastating consequences this regulatory activity may have on the economy;

WHEREAS: Concern is growing that, with cap-and-trade legislation having failed in Congress, EPA is attempting to obtain the same results through the adoption of regulations;

WHEREAS: EPA over-regulation is driving jobs and industry out of America;

WHEREAS: Neither EPA nor the Administration has undertaken any comprehensive study of what the cumulative effect of all of this new regulatory activity will have on the economy, jobs and competitiveness;

WHEREAS: EPA has not performed any comprehensive study of what the environmental benefits of its greenhouse regulation will be in terms of impacts on global climate;

WHEREAS: State agencies are routinely required to identify the costs of their regulations and to justify those costs in light of the benefits;

WHEREAS: Since EPA has identified "taking action on climate change and improving air quality" as its first strategic goal for the 2011-15 time period, EPA should be required to identify the specific actions it intends to take to achieve these goals and to assess the total cost of all these actions together;

WHEREAS: The Legislature supports continuing improvements in the quality of the nation's air and believes that that such improvements can be made in a sensible fashion without damaging the economy so long as there is a full understanding of the cost of the regulations at issue;

WHEREAS: The primary goal of government at the present time must be to promote economic recovery and to foster a stable and predictable business environment that will lead to the creation of jobs;

WHEREAS: Public health and welfare will suffer without significant new job creation and economic improvement, because people with good jobs are better able to take care of themselves and their families than the unemployed and because environmental improvement is only possible in a society that generates wealth.

THEREFORE BE IT RESOLVED, that the legislature calls on Congress:

1. To adopt legislation prohibiting EPA by any means necessary from regulating greenhouse gas emissions, including if necessary defunding EPA greenhouse gas regulatory activities.
2. Imposing a moratorium on promulgation of any new air quality regulation by EPA by any means necessary, except to directly ad-

dress an imminent health or environmental emergency, for a period of at least two years, including defunding EPA air quality regulatory activities.

3. Requiring the Administration to undertake a study identifying all regulatory activity that EPA intends to undertake in furtherance of its goal of “taking action on climate change and improving air quality” and specifying the cumulative effect of all of these regulations on the economy, jobs, and American economic competitiveness. This study should be a multi-agency study drawing on the expertise both of EPA and of agencies and departments having expertise in and responsibility for the economy and the electric system and should provide an objective cost-benefit analysis of all of EPA’s current and planned regulation together.

Note: This resolution is pending approval as ALEC model legislation, but it represents a new trend in 2011 and is consistent with existing ALEC policy.

B

APPENDIX B WHAT STATES ARE REALLY SAYING ABOUT EPA GHG REGULATION

- **Arizona:** “EPA has now put Arizona, and other permitting authorities, in a difficult position by giving us very little time to evaluate and incorporate the ‘tailoring’ regulations into state law.... Completing the rule-making and SIP approval process in time to avoid EPA’s January 2011 construction ban deadline would be nearly impossible. Furthermore, the lawsuits that have been filed challenging the PSD and Title V GHG Rule make it difficult to justify expending any time on the rule.”
- **Arkansas:** “Arkansas does ‘not object’ to the earlier [SIP revision submittal] deadline, but only out of necessity, not out of reasonableness. Rationalizing reasonableness on the basis of a state ‘not objecting’ in this instance is hollow pretense. [Arkansas] disagrees with EPA’s rationale of ‘not objecting’ as conferring reasonableness on this deadline, and strongly urges against viewing stringent, shortened deadlines such as this as ‘reasonable’ in the future.”
- **Georgia:** “[W]e have major concerns with EPA’s strategy for regulating GHGs at stationary sources and with the EPA GHG guidance document. The timing that EPA has provided is not adequate and major disruptions to projects that have already been permitted, or have permit applications pending, are likely.”
- **Illinois:** “The cumulative efforts of Illinois EPA to address the Tailoring Rule is placing an enormous resource drain on our already stressed resources and involves the pulling of personnel from their normal day-to-day activities to assist in planning and implementation of the Tailoring Rule.”
- **Kentucky:** “The pretense of the need to complete the SIP Call by the implementation date of January 2, 2011 is necessitated solely by EPA’s circumvention of the normal SIP Call process, which would otherwise allow for a reasonable time frame to comply with the SIP Call process without adverse consequences ... the quick implementation of this rule will place a very heavy burden on our agency at a time when many critical issues face us and we are straining under unprecedented budgetary and staffing shortages.”
- **Louisiana:** “[G]lobal climate change is an issue that is best addressed through comprehensive federal legislation, rather than unilateral agency regulation, and [Louisiana] emphasizes that it does not support the manner through which EPA has chosen to regulate greenhouse gases under the Clean Air Act.”

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- **Missouri:** “EPA’s timeline requiring Missouri to issue permits addressing GHGs beginning in January 2011 is aggressive. The controversial nature of regulating GHGs coupled with probable changes to permitting requirements make the task of informing and educating our stakeholders, legislators, and Department staff about the new requirements difficult in such a short period of time.”
- **Ohio:** “U.S. EPA will have not only the authority, but as part of the permitting process, permitting authorities will have an obligation to examine every small detail of a source. This is hardly ‘business as usual’... Ohio EPA does not have the technical expertise to attempt an analysis on every indirect emission of GHGs associated with a source.”
- **South Carolina:** “The GHG Permitting Guidance needs to be modified to provide clarity to the permitting authorities, not add more confusion.... Given the timeframe for implementation (January 2011), it is imperative that the EPA provides straightforward, defensible and timely guidance on permitting GHG emissions.”
- **Texas:** “EPA actions magnify the inappropriateness of regulating GHG under the [Clean Air Act] and are a further attempt to alter the literal interpretation of the Act. The proposals by EPA are an attempt to write policy that should be contemplated by Congress. EPA’s actions exceed its administrative authority to execute the laws that Congress has written.”
- **West Virginia:** “EPA has adamantly pursued a course that places states, which are generally the primary permitting authority, in a completely untenable position. If states ignore GHG entirely, EPA will find the permitting programs deficient. If states acknowledge GHG but fail to adopt EPA’s ‘tailoring’ approach, the states would be completely overwhelmed by the number of needed permits, effectively stopping the permit process. If states adopt EPA’s approach through whatever mechanism they can, many will be compromising their own principles and ideals of good policy while the permit programs remain open to litigation.”
- **Wyoming:** “[We] have serious concerns about EPA’s implementation timelines. Given that there are dozens of petitions concerning not only the Tailoring Rule but also the foundation for that rule, there is a high likelihood that any permitting strategy imposed on the states at this juncture is premature.”

All definitions from: U.S. EPA, "Terms of Environment: Glossary, Abbreviations and Acronyms," last updated June 18, 2009, <http://www.epa.gov/OCEPATERMS/>.

Attainment Area

An area considered to have air quality as good as or better than the national ambient air quality standards as defined in the Clean Air Act. An area may be an attainment area for one pollutant and a non-attainment area for others.

Best Available Control Technology (BACT)

An emission limitation based on the maximum degree of emission reduction (considering energy, environmental, and economic impacts) achievable through application of production processes and available methods, systems, and techniques. BACT does not permit emissions in excess of those allowed under any applicable Clean Air Act provisions. Use of the BACT concept is allowable on a case by case basis for major new or modified emissions sources in attainment areas and applies to each regulated pollutant.

Criteria Air Pollutant

The 1970 amendments to the Clean Air Act required EPA to set National Ambient Air Quality Standards for certain pollutants known to be hazardous to human health. EPA has identified and set standards to protect human health and welfare for six pollutants: ozone, carbon monoxide, total suspended particulates, sulfur dioxide, lead, and nitrogen oxide. The term, "criteria pollutants" derives from the requirement that EPA must describe

the characteristics and potential health and welfare effects of these pollutants. It is on the basis of these criteria that standards are set or revised.

Federal Implementation Plan (FIP)

Under current law, a federally implemented plan to achieve attainment of air quality standards, used when a state is unable to develop an adequate plan.

Fossil Fuels

Fuel derived from ancient organic remains; e.g. peat, coal, crude oil, and natural gas.

Hazardous Air Pollutant (HAP)

Air pollutants which are not covered by ambient air quality standards but which, as defined in the Clean Air Act, may present a threat of adverse human health effects or adverse environmental effects. Such pollutants include asbestos, beryllium, mercury, benzene, coke oven emissions, radionuclides, and vinyl chloride.

Major Stationary Sources

Term used to determine the applicability of Prevention of Significant Deterioration and new source regulations. In a nonattainment area, any station-

ary pollutant source with potential to emit more than 100 tons per year is considered a major stationary source. In PSD areas the cutoff level may be either 100 or 250 tons, depending upon the source.

Maximum Achievable Control Technology (MACT)

The emission standard for sources of air pollution requiring the maximum reduction of hazardous emissions, taking cost and feasibility into account. Under the Clean Air Act Amendments of 1990, the MACT must not be less than the average emission level achieved by controls on the best performing 12 percent of existing sources, by category of industrial and utility sources.

Mobile Source

Any non-stationary source of air pollution such as cars, trucks, motorcycles, buses, airplanes, and locomotives.

National Ambient Air Quality Standards (NAAQS)

Standards established by EPA that apply for outdoor air throughout the country.

National Emission Standards for Hazardous Air Pollutants

Emissions standards set by EPA for an air pollutant not covered by NAAQS that may cause an increase in fatalities or in serious, irreversible, or incapacitating illness. Primary standards are designed to protect human health, secondary standards to protect public welfare (e.g. building facades, visibility, crops, and domestic animals).

New Source Performance Standards (NSPS)

Uniform national EPA air emission and water effluent standards which limit the amount of pollution allowed from new sources or from modified existing sources.

New Source Review (NSR)

A Clean Air Act requirement that State Implementation Plans must include a permit review that applies to the construction and operation of new and modified stationary sources in nonattainment areas to ensure attainment of national ambient air quality standards.

Nonattainment Area

Area that does not meet one or more of the National Ambient Air Quality Standards for the criteria pollutants designated in the Clean Air Act.

Permit

An authorization, license, or equivalent control document issued by EPA or an approved state agency to implement the requirements of an environmental regulation; e.g. a permit to operate a wastewater treatment plant or to operate a facility that may generate harmful emissions.

Prevention of Significant Deterioration (PSD)

EPA program in which state and/or federal permits are required in order to restrict emissions from new or modified sources in places where air quality already meets or exceeds primary and secondary ambient air quality standards.

Scrubber

An air pollution device that uses a spray of water or reactant or a dry process to trap pollutants in emissions.

State Implementation Plan (SIP)

EPA approved state plans for the establishment, regulation, and enforcement of air pollution standards.

Stationary Source

A fixed-site producer of pollution, mainly power plants and other facilities using industrial combustion processes.

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