Energy and Environment



A Pro-Growth Agenda for the 115th Congress







Energy and Environment

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Energy is the lifeblood of the economy. Thanks to affordable energy, the average person today lives longer and healthier, travels farther and faster in greater comfort and safety, and has greater access to information than the privileged elites of former times.

Carbon fuels—coal, oil, and natural gas—provide 82 percent of both U.S. and global energy, according to the U.S. Energy Information Administration. They are the world's dominant energy sources because, in most markets, they beat the alternatives in both cost and performance.

Critics claim carbon fuels have hidden costs that make them unsustainable. In the 1970s and 1980s, experts often depicted carbon fuels as both intractably polluting and rapidly depleting. Technological advances—spurred by sensible regulation and the market-driven imperative to minimize waste and improve efficiency—put the lie to those gloomy prophesies, as energy supplies increased while the air and water got much cleaner.

Today, critics claim unchecked carbon energy use will cause catastrophic climate change. However, the climate models producing scary impact assessments increasingly diverge from reality. More important, the climate change mitigation policies

those critics advocate pose serious risks to American prosperity, competitiveness, and living standards.

The wealth creation and technological progress made possible by affordable carbon-based energy make societies more resilient, as they protect people from extreme weather, improve health, and increase life expectancy. Since the 1920s, global deaths and death rates from extreme weather have decreased by 93 percent and 98 percent, respectively.

The war on affordable energy also raises serious humanitarian concerns, especially regarding the poor. Energy costs already impose real burdens on low-income households, including reduced expenditures for food, medicine, education, and late credit card payments. "Consensus" climatology implies that the Paris climate treaty's objective of limiting average global temperatures to 2°C above preindustrial levels cannot be accomplished without massive cuts in developing countries' current consumption of carbon fuels. Putting an energy-starved planet on an energy diet is bound to be a cure worse than the supposed disease.

Increasing the affordability of both U.S. and global energy is an important economic and humanitarian objective. Policy makers heeding the time-honored healer's maxim, "First, do no harm," should reject policies to tax and regulate away mankind's access to affordable energy.

REPUDIATE THE PARIS CLIMATE AGREEMENT

The Paris Climate Agreement endangers America's economic future and capacity for self-government. However, based on nothing other than President Obama's claim that the agreement is nonbinding, unenforceable, and, therefore, not a treaty, many lawmakers do not see how it would suppress domestic energy production or extort billions of taxpayer dollars in "green" foreign aid.

Three insights should inform legislative deliberation on the Paris Agreement.

First, the agreement is a treaty by virtue of its:

- Costs, risks, and "ambition" compared with predecessor climate treaties;
- Dependence on enactment of subsequent legislation by Congress;
- Intent to affect state laws;
- Degree of formality;
- Past U.S. practice; and
- General international practice with respect to similar agreements.

President Obama deemed what is clearly a treaty to be a nontreaty so he could claim authority to approve it unilaterally, knowing that if submitted to the Senate for its review, the pact would be dead on arrival.

Second, although each nation's emission-reduction pledges—known as nationally determined contributions—and associated plans to curb fossil-energy production and use are self-chosen and thus "nonbinding" under international law, that is a distinction without a difference.

Congress should:

- Clarify that the agreement is a treaty.
- Insist, per Article II, Section 2, of the Constitution, that proposed treaties are subject to the Senate's advice and consent.
- Schedule a ratification vote in the Senate, where the Paris Agreement would almost certainly fail to win the requisite support of "two thirds of the Senators present."

The agreement's reporting, monitoring, and verification provisions are legally binding. Those "procedural commitments" constitute the framework for a multidecade global political pressure campaign waged by a permanent coalition of 190-plus foreign governments, hundreds of multilateral bureaucrats, and scores of green lobbying groups. The coalition is primed to "name and shame" U.S. leaders who fail to propose increasingly "ambitious" nationally determined contributions and transform those "nonbinding commitments" into legally binding domestic policies and regulations. In addition, the agreement will pressure Congress to pay developing countries billions of dollars annually in "climate finance" for renewable energy projects.

Third, even if the next president opposes the Paris Agreement, he or she may be unable to cancel it upon taking office. The agreement enters into force after at least 55 countries representing at least 55 percent of global greenhouse gas emissions ratify it. Once the agreement enters into force, a nation may not notify its intention to withdraw until three years later, and withdrawal cannot take effect until one year after the United Nations receives the notification.

Experts: Myron Ebell, Christopher Horner, Marlo Lewis, William Yeatman

For Further Reading

Christopher Horner, "The Senate Must Confront the President on the Paris Climate Treaty," Competitive Enterprise Institute blog, April 21, 2016, https://cei.org/blog/senate-must-confront-president-paris-climate-treaty.

Steven Groves, "The Paris Agreement Is a Treaty and Should Be Submitted to the Senate," *Backgrounder* #3103, Heritage Foundation, March 15, 2016, http://www.heritage.org/research/reports/2016/03/the-paris-agreement-is-a-treaty-and-should-be-submitted-to-the-senate.

Marlo Lewis, "The Paris Agreement Is a Treaty Requiring Senate Review," *OnPoint* No. 213, Competitive Enterprise Institute, February 24, 2015, https://cei.org/content/paris-climate-agreement-treaty-requiring-senate-review.

DEFUND THE UNITED NATIONS FRAMEWORK CONVENTION ON CLIMATE CHANGE

The United Nations Framework Convention on Climate Change (UNFCCC) is the name of both the climate treaty adopted by the first Conference of the Parties in 1992 and the U.N. agency that hosts international negotiations pursuant to the treaty, including negotiations pertaining to the Kyoto Protocol and the Paris Agreement.

It is longstanding U.S. policy that Palestinian statehood is a matter to be negotiated by Israel and the Palestinians, not imposed on Israel by the United Nations. To put teeth into that policy, Title 22, Section 287e, of the U.S. Code prohibits the U.S. government from funding any U.N. agency that "grants full membership as a state in the United Nations to any organization or group that does not have the internationally recognized attributes of statehood."

On December 18, 2015, the Palestinian Authority submitted its instruments of accession to the UNFCCC, and on March 17, 2016, the "State of Palestine" was accepted as a full member. A month later, 28 senators led by Sen. John Barrasso (R-Wyo.) sent Secretary of State John Kerry a letter explaining that U.S. law bars the federal government from providing taxpayer funds "to the UNFCCC and its related entities, such as the UNFCCC Secretariat, the Green Climate Fund, the Conference of the Parties (COP), and the Conference of the Parties serving as the meeting of the Parties under the Kyoto Protocol (CMP)."

The Obama administration argues that the UNFCCC is a treaty, not a U.N. agency, and hence is not subject to the prohibition. But as Sen. Barrasso and his colleagues point out, the U.N. Secretary-General appoints the executive secretary of the UNFCCC, and the first Conference of the Parties decided that the UNFCCC secretariat "shall be institutionally linked to the United Nations."

Moreover, the UNFCC is clearly a U.N. agency. According to its own website, the UNFCCC Secretariat:

- Has a staff of about 500 people from more than 100 countries;
- Provides technical assistance to an increasing number of specialized bodies related to the Kyoto Protocol and the Paris Agreement; and
- Hosts two to four international climate negotiations annually.

Congress should:

Defund the agency.

Just as Congress cut off funds to the United Nations Educational, Scientific and Cultural Organization (UNESCO) when the "State of Palestine" joined that organization in 2011, so now it should terminate funding for the UNFCCC and its related bodies, such as the Green Climate Fund.

Experts: Myron Ebell, Christopher Horner, Marlo Lewis, William Yeatman

For Further Reading

Sen. John Barrasso et al., letter to the Honorable John F. Kerry, Secretary of State, April 18, 2016, http://www.eenews.net/assets/2016/04/19/document_daily_01.pdf. Nicolas Loris, Brett D. Schaefer, and Steven Groves, "The U.S. Should Withdraw from the United Nations Framework on Climate Change," *Backgrounder* No. 3130, Heritage Foundation, June 9, 2016, http://www.heritage.org/research/reports/2016/06/the-us-should-withdraw-from-the-united-nations-framework-convention-on-climate-change.

OVERTURN OR AT LEAST DEFUND THE EPA'S CLEAN POWER PLAN

The Environmental Protection Agency's (EPA) so-called Clean Power Plan (CPP) is an unlawful power grab that will increase consumer electricity prices, reduce U.S. job growth and gross domestic product, and have no discernible effects on global warming or sea-level rise.

The CPP is unlawful in at least half a dozen ways. To mention just the most obvious flaws, Section 111(d) of the Clean Air Act, the CPP's putative statutory basis, authorizes the EPA to establish performance standards for existing stationary sources. What the CPP does instead is impose a partial ban—a nonperformance standard—on coal-based power. Moreover, instead of regulating individual "sources" (emitting facilities) as the statute requires, it regulates the market activities of source owners and operators.

The CPP is an extreme case of agenda-driven regulation. The EPA concocted novel meanings for "performance standard" and "source" to advance the Obama administration's war on coal. In a nutshell, the CPP sets a carbon dioxide $({\rm CO_2})$ emission standard for existing coal power plants that no new coal power plant can meet and then gives owners and operators the "choice" to comply by reducing the output of coal power plants, shutting them down entirely, or "investing" in new renewable generation.

Adding insult to injury, the restructuring of electricity markets under the CPP is to be accomplished chiefly through emission cap-and-trade programs—the same unpopular climate policy Congress has repeatedly rejected. The CPP is so legally challenged that on February 9, 2016, the Supreme Court took the unprecedented step of putting a stay on the rule, even though it had not yet been reviewed by a lower court.

The EPA claims the CPP will deliver up to \$60 billion in climate benefits in 2030. That is flimflam. According to the agency's own climate model calculator, the CPP will avert 0.018°C of global warming by 2100—less than the margin of error for measuring annual changes in global temperature. The amount of warming averted in 2030 would be even more minuscule and undetectable.

The EPA estimates that utilities will spend \$5.1 billion to \$8.5 billion in 2030 to comply with the CPP. Several private-sector analysts project much higher costs. NERA

Congress should:

• Overturn the CPP and defund EPA actions to implement the rule.

Economic Consulting estimates that the CPP will increase electric sector expenditures by \$29 billion to \$39 billion annually, increase retail electric rates by 10 percent or more in 40 states, 20 percent or more in 17 states, and 30 percent or more in 10 states. The Heritage Foundation estimates that, by 2030, the CPP will have reduced average annual employment by nearly 300,000 jobs, reduced cumulative gross domestic product growth by \$2.5 trillion (inflation adjusted), and reduced cumulative household purchasing power by \$7,000 per person.

Experts: Myron Ebell, Marlo Lewis, William Yeatman

- William Yeatman, "CEI Comments on EPA's Clean Power Plan," Global-Warming.org, December 2, 2014, http://www.globalwarming.org/2014/12/02/cei-comments-on-epas-clean-powerplan/.
- Marlo Lewis, "How Can EPA's Clean Power Plan Deliver \$Billions in Climate Benefits If It Has No Detectable Impact on Global Temperatures, Sea-Level Rise, or Other Climate Indicators?" GlobalWarming.org, June 12, 2014, http://www.globalwarming.org/2014/06/12/how-can-epas-clean-power-plan-deliver-billions-in-climate -benefits-if-it-has-no-detectable-impact-on-global-temperatures-sea-level-rise-or -other-climate-indicators/.
- Eric Groten, "Here Be Dragons: Legal Threats to EPA's ESPS Proposal," Vinson & Elkins Climate Change Report, No. 22, September 2014, http://www.velaw.com/uploaded-Files/VEsite/Resources/ELR Here Be Dragons February2015 Groten.pdf.
- Nicolas Loris, "The Many Problems of the EPA's Clean Power Plan and Climate Regulations," *Backgrounder* No. 3025, Heritage Foundation, July 7, 2015, http://thf_media.s3.amazonaws.com/2015/pdf/BG3025.pdf.
- NERA Economic Consulting, "Energy and Consumer Impacts of EPA's Clean Power Plan," prepared for the American Coalition for Clean Coal Electricity, November 7, 2015, http://www.nera.com/content/dam/nera/publications/2015/NERA_ACCCE_CPP_Results_Nov72015.pdf.
- ——, "EPA's Illegitimate Climate Rule," *OnPoint* No. 196, July 28, 2014, http://cei.org/content/epa%E2%80%99s-illegitimate-climate-rule.

REPEALTHE EPA'S PURLOINED POWER TO LEGISLATE CLIMATE POLICY

In *Massachusetts v. EPA* (2007), the U.S. Supreme Court ruled that the 1970 Clean Air Act (CAA), enacted years before Congress's first climate change hearing, gives the U.S. Environmental Protection Agency "unambiguous" authority to regulate greenhouse gases (GHGs). The EPA has interpreted that decision as a license to steamroller congressional opposition to its climate policies.

In *Massachusetts v. EPA*, the Supreme Court ruled that the EPA must regulate greenhouse gas emissions from new motor vehicles under Section 202 of the Clean Air Act, if the agency determines that such emissions endanger the public health or welfare. The Court reasoned that GHGs fit the Act's "capacious definition" of an air pollutant and that regulating GHG emissions from new motor vehicles would not lead to "extreme measures."

However, neither the EPA nor the petitioners informed the Court what would happen once the agency established GHG emission standards for new motor vehicles. Under the EPA's longstanding interpretation, regulating any air pollutant under any part of the CAA automatically triggers regulation of "major" stationary sources under the Act's preconstruction and operating permit programs. The Court had unwittingly set the stage for an era of extreme measures.

Carbon dioxide is emitted in much larger quantities and by vastly more sources than the air pollutants the CAA was designed to regulate. Consequently, the EPA and its state counterparts faced the absurd prospect each year of having to apply the Act's preconstruction permits program to some 80,000 previously unregulated nonindustrial sources and the Title V operating permits program to 6.1 million such sources. Agency workloads would expand far beyond administrative capabilities, sabotaging environmental enforcement and economic development alike.

Congress should:

Amend the Clean Air Act to clarify that it never delegated to the EPA the authority to make climate policy.

To avoid administrative chaos, the EPA adopted a rule to "tailor" (amend) the Act's clear numerical definition of "major" stationary sources to exempt all but the largest greenhouse gas emitters from the permitting programs. In *Utility Air Regulatory Group v. EPA* (2014), the Supreme Court overturned the EPA's so-called Tailoring Rule, for the simple reason that agencies have no power to amend statutes. But to prevent *Massachusetts v. EPA* from spawning an administrative debacle, the Court had to engage in tailoring of its own. Without any textual support, the Court ruled that the EPA may include GHGs in the permitting programs for sources that are otherwise subject to such regulation but not for small sources that would otherwise be exempt.

Massachusetts v. EPA continues to undermine the separation of powers. Congress has often considered and rejected GHG cap-and-trade legislation, and a bill authorizing the EPA to restructure state electric power sectors would be dead on arrival. Yet the EPA's so-called Clean Power Plan would force most states to adopt cap-and-trade programs to restructure their power sectors. The CPP has egregious legal flaws above and beyond the Court's errors in Massachusetts v. EPA. Nonetheless, as long as Congress treats Massachusetts v. EPA as "settled law," the EPA will be continually tempted to usurp legislative power. Congress should curb the EPA's overreach by clarifying that it has no power under the CAA to make climate policy.

Experts: Myron Ebell, Christopher Horner, Marlo Lewis, William Yeatman

- Marlo Lewis, "EPA Regulation of Fuel Economy: Congressional Intent or Climate Coup?" *Engage*, Vol. 12, No. 3 (2011), pp. 36–46, http://www.fed-soc.org/publications/detail/epa-regulation-of-fuel-economy-congressional-intent-or-climate -coup.
- ——, "The Unbearable Lightness of *UARG v. EPA*," GlobalWarming.org, July 4, 2014, http://www.globalwarming.org/2014/07/04/the-unbearable-lightness-of-uarg-v-epa/.
- George F. Allen and Marlo Lewis, "Finding the Proper Forum for Regulation of U.S. Greenhouse Gas Emissions: The Legal and Economic Implications of *Massachusetts v. EPA*," *University of Richmond Law Review*, Vol. 44, No. 3 (2010), pp. 919–935.

REPEALTHE EPA'S CARBON DIOXIDE STANDARDS FOR NEW FOSSIL-FUEL POWER PLANTS

The U.S. Environmental Protection Agency's carbon dioxide emission standards for new fossil-fuel power plants would make energy more expensive by effectively banning investment in new coal generation—a policy Congress never approved.

The Clean Air Act gives the EPA no authority to kill the future of coal-based power. Yet under the New Source Performance Standards (NSPS) rule, if utilities want to build coal power plants they can, but doing so will bankrupt them. The rule sets a performance standard of 1,400 pounds of carbon dioxide per megawatt hour (1,400 lbs. CO_2/MWh) for new coal power plants. Since today's state-of-the-art coal plants emit 1,800 pounds of CO_2 per megawatt hour, the rule is a de facto ban on the construction of new coal plants.

The EPA claims that new coal plants can meet the standards by installing carbon capture and storage (CCS) technology. However, new natural gas combined-cycle power plants are already cheaper to build and operate than new coal power plants, and CCS can substantially increase the cost and construction time of coal plants. For example, Mississippi Power's Kemper CCS Project was originally estimated to cost \$2.2 billion. As of August 2016, Kemper is projected to cost almost \$6.6 billion and is nearly three years behind schedule.

Under Section 111(a) of the Clean Air Act, a performance standard must reflect the "best system of emission reduction" that is "adequately demonstrated," taking "cost" into account. CCS has not been adequately demonstrated to be cost-effective. No commercial, utility-scale CCS power plant is currently operating, and the handful under construction would be unaffordable absent generous subsidies.

CCS is not the best system of emission reduction for a more fundamental reason. Even with subsidies, CCS power plants are not commercially viable unless they can

Congress should:

Repeal the EPA's carbon dioxide standards for new fossil-fuel power plants.

sell the captured CO_2 to petroleum producers that inject it underground to coax stubborn crude out of older wells—a process known as enhanced oil recovery. However, when oil is combusted, it emits CO_2 . Based on Department of Energy and EPA data, the recovered oil emits more CO_2 than must be injected underground to extract it. In commercial practice—that is, when combined with enhanced oil recovery —the net emissions of a CCS power plant exceed those of a conventional coal power plant.

Repealing the EPA's ${\rm CO_2}$ standards for new coal power plants has an added benefit. The NSPS rule is the legal prerequisite for the agency's existing source rule—the so-called Clean Power Plan. Overturn the NSPS rule, and the CPP rule must fall as well.

Experts: Myron Ebell, Christopher Horner, Marlo Lewis, William Yeatman

- Marlo Lewis, "Carbon Capture and Storage: Adequately Demonstrated?" GlobalWarming.org, March 31, 2016, http://www.globalwarming.org/2016/03/31/carbon-capture-and-storage-adequately-demonstrated/#more-25583.
- ———, "Southern Company Power Plant Investigation Misses Larger Policy Scandal," Competitive Enterprise Institute blog, July 8, 2016, https://cei.org/blog/southern -company-power-plant-investigation-misses-larger-policy-scandal.
- William Yeatman, "The Great Green Lie: CCS Today Is Not like Scrubbers in the 1970s (Part I)," Master Resource (blog), December 5, 2013, https://www.masterresource.org/environmental-pressure-groups/the-great-green-lie-ccs-today-is-not-like-scrubbers-in-the-1970s-part-i/.
- ———, "The Great Green Lie: CCS Today Is Not like Scrubbers in the 1970s (Part II)," Master Resource (blog), December 6, 2013, https://www.masterresource.org/environmental-pressure-groups/the-great-green-lie-ccs-today-is-not-like-scrubbers-in-the-1970s-part-ii-3/.
- ———, "Top Six Reasons the Carbon Pollution Standard Is Illegal," GlobalWarming. org, April 17, 2014, http://www.globalwarming.org/2014/04/17/the-top-six -reasons-epas-carbon-pollution-standard-is-illegal/.
- William Yeatman, Darin Bartram, and Justin Schwab, "Comments of the Competitive Enterprise Institute on Clean Air Act §111(b) Carbon Pollution Standards," Competitive Enterprise Institute, May 9, 2014, https://www.scribd.com/

doc/223510674/CEIWilliam-Yeatman-Darin-Bartram-Justin-Schwab-Comments -on-Carbon-Pollution-Standard-5-9-2014.

"Kemper County IGCC Fact Sheet: Carbon Dioxide Capture and Storage Project," MIT Carbon Capture and Storage Database, https://sequestration.mit.edu/tools/projects/kemper.html.

OPPOSE CARBON TAXES

A carbon tax is a market-rigging policy, not a free market one. It would not be revenue neutral and it would not displace greenhouse gas regulations. Even if the tax were revenue neutral, it would make the tax system less efficient, as politics—not the social cost of carbon, which is unknowable—would determine carbon tax rates. Moreover, even the most aggressive feasible carbon tax would have negligible climate impacts, while imposing significant costs on the economy.

The function of a carbon tax is identical to that of cap and trade: to pick energy market winners and losers. As President Obama put it, the point of pricing carbon is to "finally make renewable energy the profitable kind of energy in America."

As climate policy, carbon taxes are costly symbolism. A carbon tax phasing out all coal generation by 2038 would reduce employment by 600,000 jobs in 2023, reduce a typical household's annual income by \$1,200, and reduce the cumulative gross domestic product by \$2.3 trillion, according to a 2013 Heritage Foundation analysis. Yet even a carbon tax eliminating all U.S. $\rm CO_2$ emissions would avert less than 0.14°C of global warming in 2100, according to the EPA's climate model simulator.

A carbon tax would not be revenue neutral. Washington's big spenders have no interest in "tax reform" that does not also "enhance" revenues. And even a revenue-neutral carbon tax would make the tax system less efficient. The smaller the base on which a tax of a given size is levied, the more it adversely affects employment and distorts investment. The base of a carbon tax—a set of particular commodities or industries—is narrower than the base for retail sales, income, and labor taxes.

A carbon tax would not displace greenhouse gas regulations. The regulatory-litigation complex that is the administrative state enriches and empowers too many bureaucrats, activist groups, and corporate rent seekers for the global warming movement to seriously consider trading it all away for a carbon tax. It speaks volumes that all carbon

Congress should:

· Reject legislation intended to enact carbon taxes.

tax bills introduced to date have been designed to reinforce rather than replace greenhouse gas regulations.

Politics, not the unknowable social cost of carbon, would determine carbon tax rates. In debates over carbon tax rates, revenue-hungry agencies and anti-fossil-fuel politicians would patronize the social cost of carbon (SCC) modelers whose computers crank out the biggest, scariest numbers.

The power to tax is the power to destroy. Congress should not give the federal government another weapon for bankrupting industries that provide affordable, reliable energy to the people and economy of the United States.

Experts: Myron Ebell, Christopher Horner, Marlo Lewis, William Yeatman

- Marlo Lewis, "Why British Columbia's Carbon Tax Is Not Applicable to America," *On-Point* No. 198, Competitive Enterprise Institute, September 16, 2014, http://cei.org/content/why-british-columbia%E2%80%99s-carbon-tax-not-applicable-america.
- Oren Cass, "The Carbon Tax Shell Game," *National Affairs*, Summer 2015, http://www.nationalaffairs.com/publications/detail/the-carbon-tax-shell-game.
- James V. DeLong, *A Skeptical Look at the Carbon Tax* (Arlington, VA: George C. Marshall Institute, 2013), http://marshall.org/climate-change/a-skeptical-look-at-the-carbon-tax/.
- Chip Knappenberger, "Carbon Tax: Climatically Useless," Master Resource (blog), December 3, 2012, https://www.masterresource.org/carbon-tax/carbon-tax-climatically-useless/.
- Nicolas Loris, Kevin D. Dayaratna, and David W. Kreutzer, "EPA Power Plan Regulations: A Backdoor Energy Tax," *Backgrounder* No. 2863, Heritage Foundation, December 5, 2013, http://www.heritage.org/research/reports/2013/12/epa-power-plant-regulations-a-backdoor-energy-tax#_ftnref18.
- Robert P. Murphy, "Carbon Taxes and the Tax Interaction Effect," Library of Economics and Liberty, October 1, 2012, http://www.econlib.org/library/Columns/y2012/Murphycarbon.html.

PROHIBIT USE OF SOCIAL COST OF CARBON AS A JUSTIFICATION FOR REGULATING EMISSIONS

The social cost of carbon—the damage supposedly caused by an incremental ton of carbon dioxide emitted in a given year—is an unknown quantity. By fiddling with speculative model inputs, SCC analysts can make renewables look like a bargain at any price and fossil fuels look unaffordable no matter how cheap.

SCC estimates are generated by computer programs called integrated assessment models, which combine nonvalidated climate parameters, made-up damage functions, and below-market discount rates, allowing SCC analysts to get almost any result they desire. The higher the SCC estimate, the more plausible the claim that the benefits of "climate action" exceed the costs. In 2013, the Obama administration increased its 2010 SCC estimates by almost 60 percent—as if global warming got 60 percent worse in four years.

However, recent developments in climate science—including the growing divergence between models and observations and numerous studies indicating that the vast majority of climate models are skewed toward greater warming—indicate that the state of the climate is better than feared, not worse than predicted. For example, there has been no trend since 1900 in U.S. hurricane-related damages once losses are adjusted for changes in population and wealth, and no trend globally since 1970 in the frequency and strength of landfalling hurricanes.

Two of the three assessment models used by the administration—known as Dynamic Integrated Climate-Economy (DICE) and Policy Analysis of the Greenhouse Effect (PAGE)—omit or severely underestimate the benefits of ${\rm CO_2}$ fertilization on food production. Those models are structurally biased. Their use in policy making flouts the Information Quality Act.

Congress should:

Prohibit agencies from using such computer-aided sophistry to justify regulations and defund Social Cost of Carbon modeling programs.

Even if all integrated assessment model inputs were correct, SCC estimation would still be one-sided and misleading, because it disregards the social costs of carbon mitigation policies.

The social benefits of carbon energy are substantial. For example, as climate economist Indur Goklany explains, capabilities supported by carbon energy—including mechanized agriculture, fertilizers, refrigeration, plastic packaging, and motorized transport of food from farms to population centers and from surplus to deficit regions—are among the chief reasons that deaths and death rates from drought have declined by 99.8 percent and 99.9 percent, respectively, since the 1920s. A meal that sustains a human life has a social value far exceeding the market price of the food.

Experts: Myron Ebell, Marlo Lewis, William Yeatman

For Further Reading

Marlo Lewis, "Menace to Society: Commentary on the Social Cost of Carbon," Global-Warming.org, February 27, 2014, http://www.globalwarming.org/2014/02/27/menace-to-society-commentary-on-the-social-cost-of-carbon/.

Roger H. Bezdek, *The Social Costs of Carbon? No, the Social Benefits of Carbon* (Oakton, VA: Management Information Services Inc., January 2014), http://www.americaspower.org/sites/default/files/Social_Cost_of_Carbon.pdf.

Kevin D. Dayaratna, Testimony before the House Committee on Natural Resources, July 23, 2015,

http://naturalresources.house.gov/uploadedfiles/dayaratnatestimony.pdf.

Alex Epstein, *The Moral Case for Fossil Fuels* (New York: Portfolio/Penguin, 2014).

Indur M. Goklany, "A Primer on the Death Toll from Extreme Weather Events: Context and Long Term (1900–2008)," *Observatory*, August 15, 2010, http://www.thegwpf.com/indur-m-goklany-global-death-toll-from-extreme-weatherevents-declining/.

Craig D. Idso, "The Positive Externalities of Carbon Dioxide: Estimating the Monetary Benefits of Rising CO₂ Concentrations on Global Food Production," Center for the Study of Carbon Dioxide and Global Change, October 18, 2013, http://co2science.org/education/reports/co2benefits/co2benefits.php.

- Institute for Energy Research, "Comment on the Technical Support Document: Technical Update of the Social Cost of Carbon for Regulatory Impact Analysis under Executive Order 12866," February 24, 2014, http://instituteforenergyresearch.org/wp-content/uploads/2014/02/IER-Comment-on-SCC.pdf.
- Patrick J. Michaels, Testimony before the House Committee on Natural Resources, July 22, 2015, http://naturalresources.house.gov/uploadedfiles/michaelstestimony.pdf.
- Robert Pindyck, "Climate Change Policy: What Do the Models Tell Us?" Working Paper No. 12944, National Bureau of Economic Research, July 2013, http://www.globalwarming.org/wp-content/uploads/2013/10/Pindyk-Climate-Change-Policy-What-Do-the-Models-Tell-Us.pdf.

FREEZE AND SUNSETTHE RENEWABLE FUEL STANDARD

The Renewable Fuel Standard (RFS)—created by the 2005 Energy Policy Act and expanded by the 2007 Energy Independence and Security Act—requires refiners to blend increasing quantities of biofuel into the nation's motor fuel supply over a 17-year period (2006–2022). As RFS statutory targets diverge from marketplace realities, each year's obligations are actually set by Environmental Protection Agency officials in a setting rife with interest-group lobbying. Lawmakers should strive to restore predictability and choice to U.S. motor fuel markets.

The RFS is a textbook study in the law of unintended consequences. The program was supposed to benefit consumers. Instead, the RFS artificially bids up the price of corn, soy, and other crops, adding billions of dollars to food costs. In addition, the vast majority of biofuel is ethanol, which contains one-third less energy by volume than gasoline. Consequently, the RFS forces motorists to spend more for fuel and to fill up more frequently.

The RFS was supposed to benefit the environment. Instead, the program:

- Increases agricultural runoff, a major contributor to aquatic dead zones;
- Converts millions of acres of wildlife habitat in grasslands and wetlands into energy crop plantations;
- Increases net emissions of air pollutants, such as fine particulate matter (PM2.5) and nitrogen oxides (NO_x); and
- Produces more greenhouse gas emissions than the gasoline it replaces, according to some analyses.

Moreover, compared with the fracking revolution, the RFS has done little to reduce American dependence on foreign oil.

The RFS is incompatible with the constitutional principle of equality under law. It enriches some corn and soy farmers at the expense of poultry, hog, beef, and dairy farmers. The RFS literally compels one set of companies to purchase, process, and create a market for other companies' products. To see the anomaly, suppose instead of enacting renewable volume obligations for refiners, Congress enacted *input* volume obligations, compelling corn farmers to purchase annually increasing quantities of

Congress should:

- Freeze the renewable fuel standard's blending targets below the "blend wall"—the quantity of ethanol that can be sold domestically given the incompatibility of mid- and high-ethanol blends with the vast majority of vehicles and infrastructure, and anemic consumer demand for such blends because of their inferior fuel economy.
- Sunset the RFS after 2022 so that competition and consumer preference, not central planning and political pressure, determine which fuels succeed or fail in the U.S. marketplace.

specific types of seeds, fertilizers, and farm machinery. The howls from RFS supporters would be loud and furious—and justifiably so.

Experts: Myron Ebell, Marlo Lewis, William Yeatman

- Marlo Lewis, "Does EPA's Renewable Fuel Standard Increase Greenhouse Gas Emissions?" Competitive Enterprise Institute blog, August 4, 2016, https://cei.org/blog/does-epas-renewable-fuel-standard-increase-greenhouse-gas-emissions.
- ———, "Does Global Warming Policy Increase Midwest Summer Swelter?" Competitive Enterprise Institute blog, July 22, 2016, https://cei.org/blog/does-global-warming-policy-increase-summer-swelter.
- ——, "Gasoline or Ethanol: Which Is More Polluting?" GlobalWarming.org, August 7, 2015, http://www.globalwarming.org/2015/08/07/gasoline-or-ethanol -which-is-more-polluting/.
- ——, "Running Drivers into the Blend Wall: Push to Ratchet up Renewable Fuel Standards Rewards Ethanol Lobby at Consumers' Expense," *OnPoint* No. 219, Competitive Enterprise Institute, July 25, 2016, https://cei.org/content/running-drivers-blend-wall.
- Center for Regulatory Solutions, "Fields of Deception: How the Corn Ethanol Mandate Harmed the Prairie State," Small Business and Entrepreneurship Council, November 20, 2015, http://www.globalwarming.org/wp-content/uploads/2015/11/Fields-of-Deception-CRS-11.19.15.pdf.
- Tim Hogan, American Fuel and Petrochemical Manufacturers, Comment Letter on Renewable Fuel Standard Program: Standards for 2017 and Biomass-Diesel Volume for 2018; Proposed Rule, Docket ID No. EPA-HQOAR-2016-0004, July 11, 2016.

Dina Cappiello and Matt Apuzzo, "The Secret Environmental Cost of U.S. Ethanol Policy," Associated Press, November 12, 2013, http://bigstory.ap.org/article/secret-dirty-costobamas-green-power-push-1.

REQUIRE ALL AGENCIES TO MEET RIGOROUS SCIENTIFIC STANDARDS

Too often, the science that agencies use to justify regulations fails to meet even the most basic scientific standards to ensure that conclusions are valid. Reforms to the Toxic Substances Control Act (TSCA) employ some sound scientific principles, such as mandates for the EPA to rely on the best available science and to employ "weight of the evidence testing," but not all regulatory programs include such requirements.

Past efforts to promote scientific integrity have proved insufficient. For example, in 2000, Congress passed a law that called on agencies to follow guidelines for the purpose of "ensuring and maximizing the quality, objectivity, utility, and integrity of information (including statistical information) disseminated by the agency." (Pub. L. No. 106-554, Section 515) Unfortunately, those unenforceable guidelines have had little effect.

If Congress fails to pass legislation that provides enforceable standards for scientific integrity in government, consumers will be the ones to pay. Without such accountability, federal agencies will continue to use poor-quality data, weak studies, and excessive reliance on rodent studies of limited relevance to human health. Agencies use such

Congress should:

- Develop standards promoting scientific integrity that are mandatory and judicially enforceable, and ensure that they apply to all federal government departments and independent agencies, including the Environmental Protection Agency and the Consumer Product Safety Commission.
- At a minimum, demand that all scientific research employed to justify regulations relies on the "best available science" and pass a "weight of the evidence test."
- Require that policies and chemical prioritization schemes be based on complete risk assessments that consider actual exposures of the chemicals rather than hazard-based classification systems.
- Require agencies to apply the least burdensome regulation when selecting regulatory measures.
- Require all data and research used to justify regulations to be publicly available in order to promote transparency (with protections for confidential business information for companies that provide information).

incomplete and questionable science to justify excessively precautionary policies that ban or overregulate chemicals that are relatively safe and useful in consumer products. As a result, certain consumer products may soon disappear from the market, and innovation may dwindle as policy makers ban and eliminate many useful chemicals.

Such random elimination of technologies wastes the human ingenuity and investment that went into making those goods and denies society the benefits of those products. Innovators must then divert resources from new enterprises to find substitute products, which may pose new risks. The final result is a poorer, potentially more dangerous world.

Expert: Angela Logomasini

For Further Reading

Angela Logomasini, A Consumer's Guide to Chemical Risk: Deciphering the 'Science' behind Chemical Scares, Competitive Enterprise Institute, 2014, https://cei.org/issue-analysis/consumers-guide-chemical-risk.

Richard B. Belzer, "The Report on Carcinogens," *Issue Analysis* 2012 No. 1, Competitive Enterprise Institute, January 2012, https://cei.org/issue-analysis/report-carcinogens.

ADDRESS UNACCOUNTABLE ENVIRONMENTAL RESEARCH PROGRAMS

A number of "nonregulatory" environmental research programs have both regulatory and market effects. Although their effects are significant, the programs have limited systems to ensure accountability and scientific integrity.

In particular, the EPA's Integrated Risk Information System (IRIS) is a non-regulatory program that produces chemical risk assessments that other EPA divisions use to issue regulations under such federal laws as the Safe Drinking Water Act and the Clean Air Act. Yet, IRIS has received much criticism from scientific bodies and others for poor-quality research methodologies. In a 2011 report on IRIS's formaldehyde risk assessment, the National Academy of Sciences criticized the agency for "recurring methodologic problems," including repeated failures to provide "clarity and transparency of the methods," along with inconsistencies, poor research documentation, failure to follow EPA research guidelines, and other issues. At the end of the 2011 report, the National Academy of Sciences included a special section to provide suggestions for IRIS to improve its science, yet IRIS has failed to implement them adequately and continues to garner deserved criticism for problematic risk assessments.

Another program operating outside the regulatory process with little accountability is the EPA's "Safer Choice" program, formerly called "Design for the Environment." The program calls on companies to eliminate certain chemicals from their products voluntarily, largely on the basis of hazard classifications rather than on actual risk assessments. Yet hazard alone is inadequate for making decisions about chemicals because it fails to either consider actual risks related to real-life exposures or weigh the benefits

Congress should:

- Fold the funding and resources of the Integrated Risk Assessment System into the Toxic Substances Control Act (TSCA) program and require it to comply with scientific standards set up in the new TSCA law. Other divisions can still rely on IRIS data, which will be more valuable if those data comply with TSCA's scientific standards.
- Eliminate the EPA's hazard-based Safer Choice program, and use the funds to reduce federal spending.

against the risks. Yet Safer Choice is encouraging companies to deselect valuable products on the basis of hazard alone.

The passage of reforms to the Toxic Substances Control Act makes it an opportune time to leverage resources from programs that are currently outside the official regulatory process. Bringing programs such as IRIS under TSCA will better use those resources, eliminate duplication, and increase accountability in how such research is conducted.

Expert: Angela Logomasini

For Further Reading

National Research Council of the National Academies, *Review of the Environmental Protection Agency's Draft IRIS Assessment of Formaldehyde* (Washington, DC: National Academies Press, 2011), https://www.nap.edu/catalog/13142/review-of-the-environmental-protection-agencys-draft-iris-assessment-of-formaldehyde.