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RESEARCH SUMMARY

ENERGY REGULATIONS: Protecting 'Irrational' Consumers From Themselves?

In recent years, federal agencies have issued energy-efficiency standards for everything from cars to light bulbs. These regulations are commonly billed as important efforts to reduce greenhouse gases.

But, according to a new study published by the Mercatus Center at George Mason University, the standards have a negligible effect on emissions. By the agencies' own estimates, the environmental benefits of these rules are minor, and cannot on their own justify the regulations. Thus, to justify these expensive new regulations, the agencies instead rely on the claim that the regulations save consumers' and firms' money, by forcing them to buy more expensive energy-efficient products. This is a departure from the traditional approach of conducting benefit-cost analyses, in that it assumes that consumers and firms make irrational purchasing decisions. Basing regulatory analyses on such an assumption could justify regulations that mandate virtually all choices consumers and firms make.

In "Overriding Consumer Preferences With Energy Regulations," Ted Gayer, co-director of the Economic Studies program at the Brookings Institution, and W. Kip Viscusi, University Distinguished Professor of Law, Economics, and Management at Vanderbilt, examine the economic justification for a major class of recent U.S. energy regulations by the Department of Energy (DOE), the Department of Transportation (DOT), and the Environmental Protection Agency (EPA). The case studies include mileage requirements for motor vehicles and energy-efficiency standards for clothes dryers, room air conditioners, and light bulbs.

Below is a brief summary. To read the study in its entirety and learn more about the authors, please click here.

SUMMARY

Benefits Based on Correcting "Irrationality"

The benefits claimed for this group of energy-efficiency regulations are overwhelmingly private benefits (i.e., benefits for individual consumers) derived from correcting purported consumer and firm irrationality. This proposition assumes that

a. consumers and firms are irrational and therefore harm themselves by not adequately valuing energy efficiency over other considerations when purchasing certain products; and

b. despite the substantial diversity of preferences, financial resources, and personal situations of consumers and firms, government agencies are better able to determine which products are beneficial to those purchasing them.

For more information or to meet with the scholars, contact
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The regulatory impact analyses examined in this study contain virtually no empirical evidence to support the irrationality proposition.

- This proposition ignores the fact that consumers and firms purchase products based on a number of factors—only one of which is energy efficiency.
- Government agencies exhibit a parochial bias by ignoring all product attributes other than energy efficiency.

ABANDONING CONSUMER SOVEREIGNTY

The only way these energy-efficiency regulations pass a benefit-cost analysis (BCA)—as required by the Administration's Office of Management and Budget (OMB) guidelines—is if one assumes that restricting choices actually benefits consumers and firms.

- The assumption that consumers and firms are unable to make sound choices is counter to economic literature on consumer and firm behavior and OMB guidelines.
- Abandoning the principle of consumer sovereignty shifts regulatory policy from an emphasis on mitigating harm individuals impose on *others* toward mitigating harm individuals impose on themselves.
- If government agencies justify regulations on the premise that consumers and firms (but not regulators) are irrational, they can justify the expansive use of regulatory powers to control and constrain any market choice deemed "irrational."

ENERGY-EFFICIENCY STANDARDS HAVE LITTLE EFFECT ON ENVIRONMENT

Notwithstanding the stated objective to reduce environmental pollution, including greenhouse gas emissions, the agencies' own estimates show that the environmental benefits are minor and cannot alone justify the regulations.

- Even the modest environmental benefits are overstated because they are based on projected benefits to the world—not just to citizens of the United States. *This appears to be the first time the U.S. government has employed this type of benefits measure.*
- According to well-established analysis standards, the value of a regulation's benefits is based on the willingness of U.S. citizens to pay for those benefits.
- This "global benefits" approach assumes that U.S. citizens are willing to pay the same for benefits to other countries as they would for benefits to the United States.
- The costs of the energy-efficiency regulations outweigh the estimated environmental benefits.

Fuel Economy Standards. Environmental benefits play a largely incidental role in the impact analyses of corporate average fuel economy (CAFE) standards for passenger cars and light trucks. The agencies that regulate these standards—the National Highway Traffic Safety Administration and EPA—estimate greenhouse-gas benefits make up less than 10 percent of the total claimed benefits. But when benefits are restricted to only the United States, they drop to just over 1 percent of total claimed benefits.

Clothes Dryers. DOE estimates the *global* greenhouse-gas emissions benefits of clothes dryer standards as between $93 million and $1.49 billion which is below the estimated private benefits range of $1.08 billion to $3.01 billion. Again, the purported private benefits made up most of the estimated benefits of this regulation.

Room Air Conditioners. DOE estimates the *global* greenhouse-gas emissions benefits of room air conditioner standards as between $77 million to $1.16 billion as compared with the estimated private benefits range of $570 million to $1.47 billion.

SUGGESTED SOLUTIONS

It should be a red flag when regulatory analysis defies the most rudimentary economic theory and assumes consumer and business behavior runs counter to rational choice. Indeed, there is no empirical evidence provided for the types of decision failures alleged in the regulatory impact analyses. To address the problem of unsound energy-efficiency benefit claims, the study's authors suggest:

- Require benefit-cost analyses for regulations to adhere to sound economic principles; in particular, a reduction in consumer choice (such as mandating energy efficiency levels) should be evaluated as a *cost*, not a *benefit*.
- OMB should require agencies to prepare analyses in which the impact on greenhouse-gas emissions in the United States—not the entire world—is the measure for claimed benefits.
- End the preponderance of energy-efficiency regulations that have little-to-no impact on greenhouse-gas emissions.

FOR MORE INFORMATION, CONTACT

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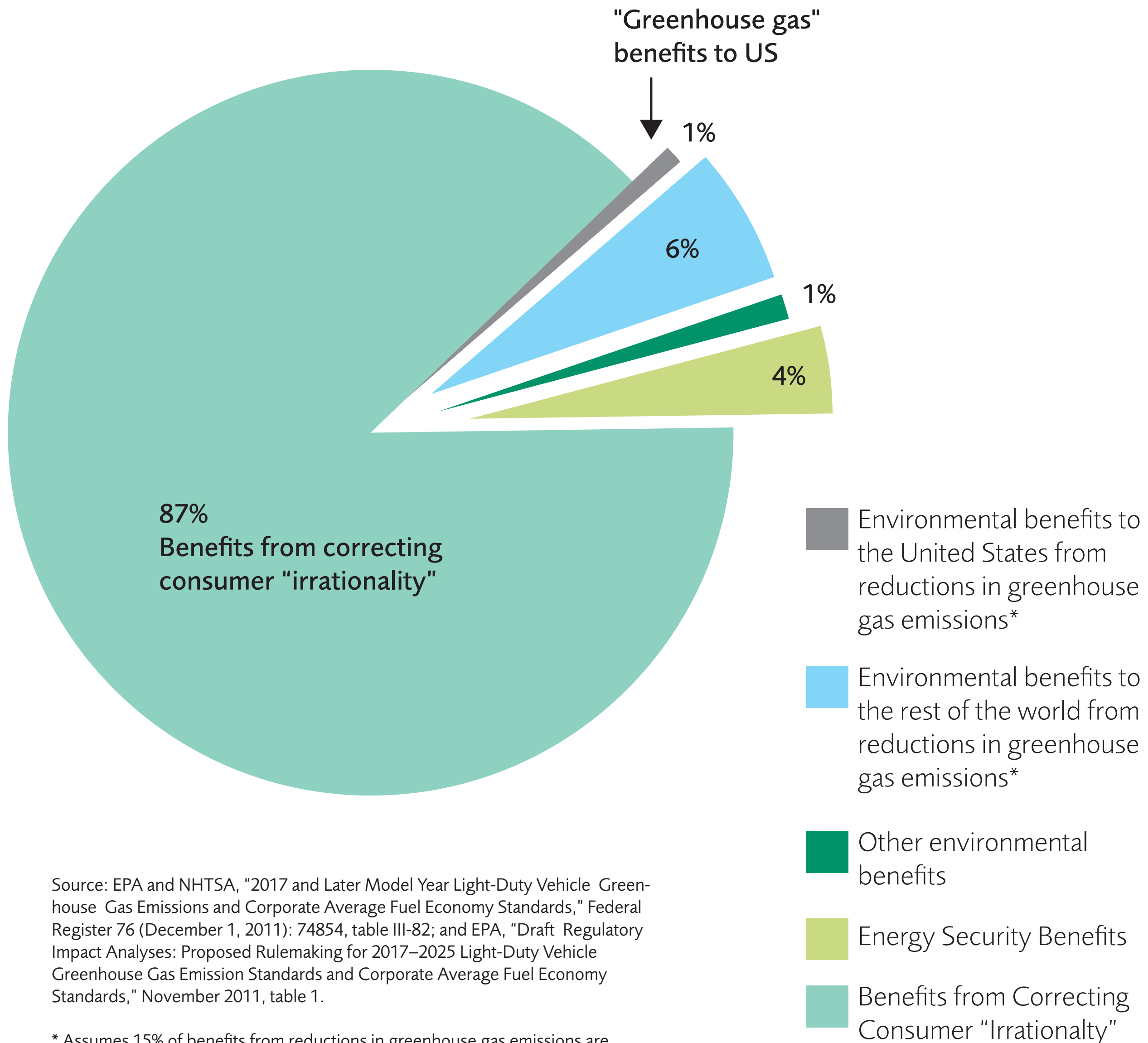
ABOUT THE MERCATUS CENTER

The Mercatus Center at George Mason University is a research, education, and outreach organization that works with scholars, policy experts, and government officials to connect academic learning and real-world practice.

The mission of Mercatus is to promote sound interdisciplinary research and application in the humane sciences that integrates theory and practice to produce solutions that advance in a sustainable way a free, prosperous, and civil society.

ENVIRONMENTAL BENEFITS FROM ENERGY EFFICIENCY REGULATIONS ARE NEGLIGIBLE

Regulatory Agency's Claimed Benefits from CAFE Standards for Passenger Cars and Light Trucks



Source: EPA and NHTSA, "2017 and Later Model Year Light-Duty Vehicle Greenhouse Gas Emissions and Corporate Average Fuel Economy Standards," Federal Register 76 (December 1, 2011): 74854, table III-82; and EPA, "Draft Regulatory Impact Analyses: Proposed Rulemaking for 2017–2025 Light-Duty Vehicle Greenhouse Gas Emission Standards and Corporate Average Fuel Economy Standards," November 2011, table 1.

* Assumes 15% of benefits from reductions in greenhouse gas emissions are attributed to the United States. This is the midpoint of 7 and 23, the range estimated by the Interagency Working Group on Social Cost of Carbon, "Technical Support Document: Social Cost of Carbon for Regulatory Impact Analysis under Executive Order 12866," February 2010.

Note: Percentages don't add up to 100 percent due to rounding.