

Testimony by Ted Gayer, Senior Fellow, Brookings Institution
Hearing on Energy Efficiency Legislation
U.S. Senate Committee on Energy and Natural Resources
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Chairman Murkowski, Senator Cantwell, and Members of the Committee, I appreciate the opportunity to appear here today to discuss energy efficiency legislation. Many of the points I will make come from articles I have co-authored with W. Kip Viscusi of Vanderbilt University.

I will offer four main points that suggest we should take a cautionary approach to applying overly-prescriptive mandates for energy efficiency levels. My comments are directed at the broader question of government mandates for energy efficiency, not the specific components of all the legislation you are considering today. But I do hope they can offer useful general guidance in considering government's role in regulating energy and in reducing pollution.

My first point is that market prices for energy and energy-intensive products provide important information about both the strength of consumer demand and the scarcity of supply, but the prices are misleading to the extent that they don't account for the associated pollution costs. In the market for appliances, for example, prices reflect how much consumers value certain features such as energy efficiency and convenience, and they also reflect constraints on production, such as the state of technology. The problem is that the price that shows up on a consumer's electricity bill does not account for the environmental damage caused by that person's energy use.

This leads to my second point: the best way to address environmental damage caused by energy use is for the government to charge a price for these pollution costs. By pricing pollution, consumers and businesses would face the full cost of their energy use, which would then create incentives to reduce pollution as cheaply as possible through some combination of new technologies, alternative fuels, and conservation.

There are a number of reasons why energy-efficiency mandates are more costly than the more market-friendly approach of setting a price on pollution. First, a one-size-fits-all energy-efficiency mandate ignores the substantial diversity of preferences, financial resources, and personal situations that consumers and businesses must consider. Regulators are less knowledgeable than consumers and businesses about the costs and desirability of various strategies to reduce pollution. That's why a signal to consumers and businesses in the form of higher prices leads to more cost-effective pollution reduction than a simple regulatory mandate. Second, by lowering the energy cost of using a product, an energy-efficiency mandate provides an incentive for using these products more, offsetting some of the energy reduction. Moreover, energy-efficiency mandates apply only to new products, which can create an incentive for consumers and businesses to retain older, less environmentally-friendly products. Regulations such as energy-efficiency mandates might be preferable to the market-based pricing approach when measuring pollution is costly or infeasible, or when those choosing the technologies do not pay for their energy costs, but this is not typically the case when it comes to energy use and greenhouse gases.

My third point is that, for the recent energy-efficiency mandates that Kip Viscusi and I examined, we found that although they are frequently advertised as "greenhouse gas initiatives," their environmental benefits are small and are frequently outweighed by the costs they impose. For example, for the recent fuel economy mandates for passenger cars, the EPA estimated they would cost \$192 billion, while the

greenhouse-gas benefits would only be \$46 billion – and most of these benefits would go to countries outside of the US. We examined energy-efficiency mandates for other consumer goods, such as clothes dryers and room air conditioners, and found a similar result: by the agencies' own estimates, the costs of these regulations outweighed the environmental benefits they achieved.

How then have the agencies justified energy-efficiency mandates that yield environmental benefits that are outweighed by their costs? This leads to my final point. In order to justify these mandates, the agencies assert that consumers and businesses are irrational when buying energy-intensive goods and thus receive massive benefits if the government restricts their choices. The agencies invoke broad references to the behavioral economics literature to support their claims of consumer irrationality, but they present little or no concrete evidence. They also ignore the key policy implication of behavioral economics, which is that it is more effective to address poor decision-making through soft regulatory “nudges” such as providing clearer information to consumers, rather than going straight to using costly mandates that restrict choice.

Given the political unpopularity of the more economically sound approach of levying a tax on pollution, I fear we are opting for policies that are advertised as environmental protection but are justified by weak claims of consumer protection. In other words, we are shifting regulatory priorities from the important goal of reducing the harm individuals impose on *others* (through pollution) towards the nebulous and unsupported goal of reducing harm individuals cause to *themselves* by purchasing purportedly uneconomic products. This shift results in a host of costly regulations that are less effective than a government policy that simply sets a price on pollution. It also establishes a dangerous precedent: if agencies can justify regulations on the unsubstantiated premise that consumers and businesses (but not regulators) are irrational, then they can justify the expansive use of regulatory powers to control and constrain virtually all choices consumers and businesses make.

To summarize: To the extent that energy prices fail to incorporate the environmental cost of energy use, the most sensible response is to price those pollution costs directly, and then allow consumers and businesses to respond to the higher prices as they see fit. Energy-efficiency mandates are inferior policies, but still may be better than doing nothing if the benefits exceed the costs. Unfortunately, by the agencies' own estimates, mandates frequently lead to minimal environmental benefits that are less than the costs. In an effort to justify these uneconomic regulations, the agencies have deviated from well-established economic tenets by asserting that consumers and businesses are irrational and that they therefore benefit from government mandates that restrict choice. The evidence for this view is weak, and assuming that citizens are not capable of making sensible decisions that affect their own pocketbooks is not the right way to advance the important goal of enhancing the quality of our environment.