



ENERGY CONSERVATION PROGRAM: Energy Conservation Standards for Residential Dishwashers; Proposed Rule

The proposed rule extends and updates the Department of Energy’s existing dishwasher energy standards under the Energy Policy and Conservation Act (EPCA) of 1975. The standards specify maximum annual energy and per-cycle water consumption for “standard” and “compact” models. As for other appliances, the Department of Energy (DOE) must evaluate the benefits and costs of upgrading these standards before issuing a new rule. On the basis of its calculations, the DOE claims that the rule will be cost-effective and that it is consistent with EPCA’s requirement that a new standard “be designed to achieve the maximum improvement in energy efficiency that is technologically feasible and economically justified.”

In a [public interest comment](#) published by the Mercatus Center at George Mason University, economist Robert J. Michaels calls into question the DOE’s calculations and its analysis of the benefits derived by consumers. By looking at the actual behavior of consumers, he determines that the DOE has not considered the true benefits and costs of the proposed rule and makes several recommendations to improve the quality of the proposed rule’s economic analysis.

FINDINGS

As it has done for other energy conservation rules, the DOE rationalizes its changes by claiming that “market barriers” (costly information, poor foresight, and inability to make economic calculations) induce consumers to choose appliances that inefficiently overconsume energy. There are several problems with the DOE’s analysis of consumer behavior and the benefits the DOE concludes consumers would receive from the proposed rule.

- Evidence from dishwasher sales (and the Energy Star program) shows that all but a small fraction of consumers are aware of energy costs and already choose relatively efficient models. Some models that comply with the proposed rule are already available to consumers.

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- The DOE biases its calculations of benefits by assuming that Americans will enjoy the full global benefits of certain emissions reductions (rather than a prorated share) while they bear all the costs under the proposed rule.

Even if all the benefit-cost summary figures are correct, the DOE acknowledges that substantial fractions of consumers will either lose or not gain from higher prices under the rule.

- The DOE acknowledges that over half of those who purchase compliant dishwashers will never see benefits from energy savings that exceed installation costs. Average lifecycle savings for consumers are typically \$21 or less.
- A majority of low-income and retiree households will either bear costs or see no benefit under the proposed rule.
- The DOE also acknowledges that increases in the costs of new dishwashers will discourage some consumers from purchasing them. Owners of inefficient dishwashers also may postpone purchasing new models because of higher costs under the proposed rule.
- The DOE estimates that high prices will mean that many households continue hand-washing their dishes at far higher energy and water costs than even a very inefficient dishwasher.

RECOMMENDATIONS

- The DOE needs to test the sensitivity of its findings to a range of assumptions, some of which even the DOE says need further testing. The DOE's decision to favor the new rule is based on a limited set of calculations that does not acknowledge fundamental uncertainties in the data used.
- The DOE should explain why the new rule is necessary (i.e., why the DOE does not expect consumers to continue choosing more economical models when doing so is cost-effective).
- The DOE should explain why it set a single standard for the great majority of dishwashers despite the wide differences in models and consumer preferences. It should also explain any other measures it considered to ease the financial burden on those who will use their dishwashers only infrequently.