



2111 Wilson Boulevard Suite 500 Arlington VA 22201-3001 USA
Phone 703 524 8800 | Fax 703 562 1942
www.ahrinet.org

VIA EMAIL: ProgramDesign2017STD0059@ee.doe.gov

March 26, 2018

Mr. Daniel Simmons
Principal Deputy Assistant Secretary
U.S. Department of Energy
Office of Energy Efficiency and Renewable Energy
Building Technologies Program, EE-5B
1000 Independence Avenue SW
Washington, D.C. 20585-0121

RE: Energy Conservation Program: Energy Conservation Standards Program Design, Docket Number EERE-2017-BT-STD-0059

Dear Mr. Simmons:

On behalf of the Air-Conditioning, Heating, and Refrigeration Institute (AHRI), these comments are submitted in response to the Request for Information (RFI) on Energy Conservation Program: Energy Conservation Standards Program Design, Docket Number EERE-2017-BT-STD-0059. The RFI was issued by the U.S. Department of Energy (DOE or Department) on November 28, 2017 in the *Federal Register* (Vol. 82, No. 227). The Department requests public comments from interested stakeholders on flexible market-based policy approaches for the U.S. Appliance and Equipment Energy Conservation Standards (ECS) Program.

AHRI is the trade association representing manufacturers of heating, cooling, water heating, and refrigeration equipment. More than 300 members strong, AHRI is an internationally recognized advocate for the industry, and develops standards for and certifies the performance of many of the products manufactured by our members. In North America, the annual output of the heating, venting, air-conditioning, and refrigeration (HVACR) and water-heating industry is worth more than \$20 billion. In the United States alone, our members employ approximately 130,000 people, and support some 800,000 dealers, contractors, and technicians. In addition to its activities as a global standards developer, AHRI works closely with other global codes and standards developers as well as utilities to ensure their access to the latest technology and innovation from the HVACR and water-heating industry.

I. AHRI Appreciates the DOE's Efforts to Consider Market-Based Policy Mechanisms; however, AHRI Does Not Agree that the RFI's Market-Based Measures Are the Right Approach for the HVACR and Water Heating Industry.

AHRI appreciates the DOE's efforts to evaluate potential advantages and disadvantages for additional market-based approaches in the ECS program. AHRI supports the mission and purpose of the ECS program to find cost-effective approaches to improve energy efficiency of AHRI manufacturers' products. AHRI's members continually strive to innovate, design and manufacture products that are both energy efficient and meet consumer's needs for product choice. However, AHRI does not agree that any of the RFI's market-based policy mechanisms are viable and sustainable mechanisms that can be easily translated into the HVACR and water heating industries.

For more than thirty years, AHRI and its members have successfully worked with DOE and other interested stakeholders to find ways to improve energy efficiency of products within a mature regulatory program that has been subject to careful stakeholder input over numerous rulemakings. Now, the RFI discusses DOE's interest in a proposal to revise the ECS program with market-based policy mechanisms that are intended to reduce compliance costs, enhance consumer choice and maintain or increase energy savings. Some of these market-based policy propositions include averaging, credit-trading, and feebates—all that have been or are currently being utilized in other industries and not within the HVACR and water heating industries at the federal level. While AHRI appreciates these proposals and the aim to gain further flexibility and savings.

AHRI believes that a market-based policy approach on a component, appliance or equipment-level are not permitted by current law, and the RFI's suggested frameworks present their own regulatory burdens on the industry. The following section details AHRI's comments regarding the challenges that the RFI's market-based policy mechanisms presents.

II. The Market-Based Policy Mechanisms Raise Legal Concerns of Violating EPCA's Anti-backsliding Provision.

Many of AHRI members' products must comply with federal energy conservation standards prescribed by the Energy Policy and Conservation Act (EPCA), including air-conditioning equipment, heat pumps, furnaces, boilers, unit heaters, water heaters, pool heaters and vented room heaters. A majority of the federal conservation standards for AHRI manufacturers' products are performance standards that allow manufacturers to reach the minimum standard level without prescriptions on technology. EPCA requires DOE to conduct a cost-benefit analysis and weigh in a number of factors in determining a new or amended standard level. This process includes an economic justification criterion. Under EPCA, any new or amended standard for residential products is to achieve the maximum improvement in energy efficiency that DOE determines is technologically feasible and economically justified.

Under the EPCA's "anti-backsliding" provision, DOE is prohibited from issuing new or amended standards that either increase the maximum allowable energy use or decrease the minimum required energy efficiency of a covered product.¹ The Corporate Average Fuel Economy (CAFE) standard utilize a fleet-based average fuel efficiency standard that require manufacturers meet a production-weighting harmonic fuel economy/emissions target. In the Auto industry, auto manufacturers must achieve an average fuel economy/emission goal to be in compliance with the CAFE standard. With regards to EPCA-covered products, the RFI speculates CAFE standards would hypothetically be implemented in one of two ways:

- (1) One method would average energy efficiency ratings of each product *regardless if the product was above or below the minimum energy efficiency rating* and compute an average of its energy efficiency rating. This method would allow products that normally would not meet the required minimum energy efficiency to be released into the market, contrary to the current law requiring that all products meet energy efficiency minimums. DOE would essentially be amending the decrease of the minimum required energy efficiency rating of a covered product in direct violation of the EPCA anti-backsliding provision.

¹ 42 U.S.C. 6295(o)(1)

(2) The other method would average all products offered above the energy efficiency minimum—which includes all currently compliant products, potentially increasing energy efficiency requirements above the already economically justified levels.

In either case, the outcome will violate EPCA statutory requirements.

The statutory limitations applicable to the proposed CAFE standards are present for credit-trading as well. Currently, manufacturers offer a range of products that provide consumer choice, from value products through to highly engineered maximum-technology (“max-tech”) products, but all of these products must meet the energy conservation standard. A credit-trading system is premised on the notion that products that do not meet this minimum will be available on the market because they are buoyed by credits. However, the anti-backsliding provision of EPCA prevents the market or sale of such products. Any new regulations promulgated must demonstrate economic justification and technological feasibility while saving maximum energy savings. This statutorily-mandated delicate balance will be disrupted by a credit-approach that either permits products below the minimum or, in effect, raises the minimum energy conservation standard by implementing refute on top of these minimums.

III. AHRI Members Do Not Agree with the Reporting of Production or Sales Data

Importantly, in order for any of the RFI’s market-based policy mechanisms to be successful, manufacturer disclosure and reporting of sales data to the government would be required to monitor compliance with the program. Currently, manufacturers prospectively certify to DOE that their products comply with energy efficiency minimums prior to making those products available for sale. The current regulatory framework does not require reporting on production levels or sales data. AHRI and other industry groups have opposed any attempts by third parties, including the government, to ascertain this data. First, the mere burden of collecting, collating, and supplying any data to the government necessarily entails bureaucratic schemes generally requiring employee-hours or investment to transmit the data. Second, and more importantly, sales data, production levels, and other market information is confidential business information, the public disclosure of which could cause significant harm to individual manufacturers and consumers. Third and finally, due to the distribution channels of HVACR products, there could be a significant time-lag between when a manufacturer sells a product and when that product is eventually consumed. Parsing the actual date of sale represents an additional hurdle in creating a CAFE style framework applicable to HVACR products.

IV. Enforcement for a Market-based Policy Mechanism Presents Its Own Challenges

As mentioned in the RFI, the enforcement for a market-based policy approach whether it be implementing CAFE standards, credit-trading or feebate programs would require DOE to establish additional data collection and monitoring to ensure compliance with the standard. AHRI opposes any structure that will require additional data collection because it creates burdensome compliance costs for the industry, and it presents a risk of disclosure of sensitive confidential business information that could have negative impacts on a competitive industry.

The HVACR and water heating industry manufacturers produce numerous complex products with a variety of product classes. The organization and implementation of a successful credit-trading market or feebate program within the HVACR and water heating industry would be a huge undertaking for DOE to administer. DOE would need to develop rules and processes for trading of credits within the HVACR industry; and for a feebate program, DOE would need to accommodate varying feebate schedules for the various types of product classes. This may be too numerous to administer.

V. Normalizing across Energy Sources in the HVACR Industry Would be a Challenge

CAFE standards normalize across energy sources to generate an energy-equivalent fuel economy value that can be converted to different fuel types, i.e., alternative fuel vehicles. In the HVACR and water heating industry, the first challenge would be to develop an energy-equivalent metric that can be used for the many different fuel sources that AHRI member products use. A second obstacle is that converting different fuel types fails to account for the ECPA requirement of looking at site versus source energy. Site energy is a combination of primary (raw fuel, e.g., oil, natural gas, coal) and secondary energy (product created from raw fuel, e.g., electricity) that a consumer buys directly for use at their building.² Source energy is your total primary energy consumption, and accounts for the conversion of from primary into secondary energy.³ CAFE standards do not account for a source versus site energy conversion metric used in the HVACR and water heating industry.

The CAFE standard framework used in the auto industry would be difficult to replicate in the HVACR and water heating industry because AHRI's 300+ members manufacture approximately 2.7 million various HVACR residential and commercial products compared to the 490 models of energy-efficient autos on the market.⁴ Our member companies produce more than 90 percent of the residential and commercial air conditioning, heating, water heating, and commercial refrigeration equipment made in North America. The ECS program alone covers more than 60 types of products, all of which have numerous product classes under these product types.⁵ The mere scale and diversity of products regulated by DOE dramatically complicates the execution of a CAFE standard framework like that used by the auto industry.

VI. The Market-Based Policy Mechanisms Would Disrupt the Harmonization of North American Regulations and Standards.

The proposal of CAFE standards would disrupt the harmonization of regulations and standards within North America. National Resources Canada (NRCan) is the Canadian equivalent to DOE that focuses on all products manufactured and sold in Canada. NRCan's reporting framework for energy efficiency is modeled after the U.S. Similar to the U.S., data is reported to NRCan and requires manufacturers to certify their ENERGY STAR program and products listed on NRCan's website. A change to the current approach would impact the consistency relied upon by HVACR manufacturers doing business in North America. A harmonized framework creates a stable consistent regulatory environment, which is a benefit to industry.

VII. Market-Based Policy Mechanisms Could Potentially Eliminate Consumer Choices in Purchasing Products.

CAFE standards would likely reduce product choice for consumers. A consumer may not have a choice of what types of products they want installed in their home if installation is required at the end of the year. Consumers may have strong preferences for certain products installed in their homes depending on the climate of where they live, income levels, and space/venting restraints of their homes. For example, in the case of condensing and non-condensing heating products in replacement applications, new venting

² <https://portfoliomanager.zendesk.com/hc/en-us/articles/227118647-What-s-the-difference-between-Site-and-Source-Energy->

³ *Id.*

⁴ <https://autoalliance.org/energy-environment/>

⁵ Energy Conservation Program: Energy Conservation Standards Program Design, 82 Fed. Reg. 227, 56184 (proposed Nov. 28, 2017)

is frequently required to be installed along with the new condensing water heater, while a non-condensing water heater can generally be used with existing venting and drainage systems. Code and installation/application requirements may dictate which type of water heater a consumer may use. Reducing consumer choice can disparately treat some consumers over others. Compared to choosing a vehicle, there are less dependent factors that a consumer needs to consider in selecting a vehicle.

VIII. Conclusion

Again, AHRI appreciates DOE's efforts in identifying potential market-based policy mechanisms to be used in the ECS program. However, AHRI and its members do not agree that a market-based approach on an appliance/equipment level is the right step to increase energy efficiencies while reducing regulatory burden. Replicating the market-based approaches used in the auto industry is not easily transferable to the HVACR industry due to the complex products that our members manufacture when considered in conjunction with the distribution and installation of those products in both new and retrofit building projects. A market-based approach would be difficult to enforce on a large scale for our industry and it would place additional regulatory burdens for DOE, manufactures and interested stakeholders.

We appreciate this opportunity to provide these comments.

Respectfully submitted,

A handwritten signature in blue ink, appearing to read "Joe Trauger".

Joe Trauger
Senior Vice President, Policy and Government Relations