



Ms. Abigail Daken
Manager, ENERGY STAR HVAC Program
United States Environmental Protection Agency
Washington, DC 20460
(Sent via email to HVAC@energystar.gov)

July 7, 2023

Ms. Daken,

Thank you for the opportunity to provide comment on this important point. The Marley Company, LLC has the following concerns with the stated approach to discontinue the Energy Star program for Residential Boilers:

- 1) Eliminating Energy Star Program for Residential Boilers will encourage people to repair older inefficient boilers as opposed to replacing them with climate conscious drop-in alternatives.

Ending the Energy Star program for Residential Boilers misses an opportunity to improve the country's emissions and fuel efficiency. The boiler market is approximately a 90% replacement market and the ancillary equipment is costly to replace as well. When an existing 30-year old boiler reaches an "end of service" condition, currently, homeowners are financially compelled to replace their 30-year old boiler with a higher efficiency Energy Star listed model. If an Energy Star program for Residential Boilers is not available, more homeowners with those "end of service" boilers will either attempt repairs to the boiler, or replace it with the lowest cost (and the lowest efficiency) option available.

The country realizes a significant reduction in gas utilization when older existing boilers are replaced with right sized higher efficiency boilers, fulfilling the intent of the Energy Star Program.

- 2) The technology for a cold climate heat pump as a stand-alone appliance is not viable from a capability, manufacturing and scale perspective. Market acceptance has not been validated.

Cold climate heat pumps are not ready; they have not proven themselves to be commercially viable and the industry needs more time to perfect the technology. From our experience, after a technology is developed, the fastest transition to a viable product is in the time frame of 3-5 years for development and then typical optimization of the technology to become scalable and economically feasible. We fear removing the Energy Star programs for fuel-fired products in the near term will have a rebound effect with more people installing lower efficiency products simply due to initial product costs. These actions will be a set-back for the administration's climate change policies resulting in not only discomfort in the population but dangerous and potentially life threatening situations. Failure to understand the potential impact of cold temperatures can result in injuries, death and property damage.



The Marley Company questions how the Energy Star program can discontinue an established program for products and replace it with another program that has unmeasurable market presence¹. More specifically, at the expense of an existing and successful program, Energy Star intends to create a program that imparts a perception of a product preferred by the Agency. Although a handful of dissimilar products may be aggregated together at some level, the presence of such independent products does not indicate market acceptance of a combined product, product reliability, consumer confidence or any other metric of successful markets. Forcing a product type upon consumers is highly likely to result in an economic market failure.

The Marley Company is concerned the aggressive push towards heat pump appliance technologies may upset the intricate three-way balance between electrical generation, distribution, and appliances using the energy (GDU). This balance is critical to ensure the country transitions toward climate conscious alternatives. A GDU imbalance will delay the transition towards a more sustainable future.

3) There are other alternative approaches leveraging boilers which allow a viable transition, take advantage of existing available technologies and products that reduce carbon impact and allow for an orderly transition.

We recognize the transition of the heating industry towards decarbonized solutions, but this is a transition and will take time. Because our large country has complex interaction between the generation, distribution, and use of energy (GDU), we support a solution which takes advantage of alternate fuel solutions and hybrid solutions. Transitioning technologies requires that a disruption in the GDU balance is avoided. Today we have biofuel solutions available that work with boilers to reduce emissions. We see leveraging available heat pump technology with backup fuel-fired heating boilers and furnaces as viable options to maintain the GDU balance. The Marley Company is working within our trade association, AHRI, to develop a general proposal on how EPA and DOE can reference these hybrid solutions. To enable these we need Energy Star to support these existing technologies until the transitional pieces are available.

Clearly Congress showed support of these programs with the creation of the National Oil-Heat Research Alliance in 2000² and their continued support of blended fuels for use in these products receiving Inflation Reduction Act funding in 2022. One facet of The Marley Company's climate conscious plans was the release of Weil-McLain's brand of residential oil boilers as the first to market with B20 approved boilers in February 2023. These boilers qualify for Inflation Reduction Act funding. Additionally, the Weil-McLain brand is currently working towards the future release of B100 approved residential oil boilers to further the carbon reduction potential of these products. As recognized by congress, bio-fuels provide significant climate forward benefits to consumers who live in colder regions and in areas without robust electrical and natural gas services.

For these reasons, should the Agency implement the proposed path, the Agency will fall afoul of preserving the integrity of the Energy Star Program as directed in EPCA³. Similarly, pursuing this path runs counter to other provisions of EPCA as Congress, in the same law that created the Energy Star Program, expressed their intent for balancing energy consumption, energy security, and reducing pollution⁴ and made the explicit requirement that increases in the efficiency of covered furnace products are prohibited from shifting replacement products from gas to electric heating⁵.

¹ According to the Preliminary Technical Support Document from April 2022 (EERE-2019-BT-STD-0036-0021), DOE believes the total market for gas and oil fired residential boilers to be ~320,000 boilers as of 2008. Five percent of this market would equate to ~16,000 boilers per year.

² 42 USC §6201, Section 701.

³ 42 USC §6294a (c)(3).

⁴ 42 USC §6294a (a).

⁵ 42 USC §6295 (f)(1)(B)(iii)



4) Market maturity must not be confused with market failure.

Initially, as the majority of typical product technologies mature, the transition of the market penetration towards higher efficiencies slows based upon market demand. None of the markets identified in the sun setting policies are experiencing market failures. Rather this is a fundamental indicator of a mature market. The Marley Company is concerned with the fairness of EPA's actions, as ending the Residential Boiler Energy Star program due to an administration's policy change while maintaining other programs in similar mature markets results in bias against compliant products.

Eliminating the Energy Star programs for fuel-fired products because of policy calls for the examination of other product categories with high market penetration metrics than those fuel-fired product categories. There are 19 Energy Star product programs with 50% or more market penetration and another seven with more than 41% penetration.⁶ If the Agency chooses to end the three fuel-fired programs, it would seem 26 of the 78 other Energy Star programs, or one-third of the Energy Star programs must also be eliminated.

For these reasons, The Marley Company, LLC requests the Energy Star Residential Boiler Program, along with the Residential Furnace and Commercial Boiler programs be continued until an appropriate transition plan is developed.

Sincerely,

Phillip Stephens

Phillip Stephens,
Director, Product Compliance
The Marley Company, LLC

⁶ According to Energy Star's 2021 shipment report, the residential furnace program has 41% market penetration and the commercial boiler has 18% market penetration while Blu-Ray Players have 99%, dehumidifiers 94%, and dishwashers have 93% market penetration.