



Clean Fuels
ALLIANCE AMERICA

HVAC@energystar.gov

July 7, 2023

U.S. Environmental Protection Agency
ENERGY STAR HVAC Program
1200 Pennsylvania Ave NW
Washington, DC, 20460

Re: ENERGY STAR Residential Boilers Discussion Guide: sunseting the ENERGY STAR Boilers specification and launching a new specification for air-to-water heat pumps.

Ms. Abigail Daken,

Clean Fuels is the U.S. trade association representing the entire biodiesel, renewable diesel, sustainable aviation fuel, and Bioheat[®] Fuel supply chain, including producers, feedstock suppliers and fuel distributors. Made from an increasingly diverse mix of resources such as recycled cooking oil, soybean oil, and animal fats, the clean fuels industry is a proven, integral part of America's clean energy future. We serve as the clean fuel industry's primary organization for technical, environmental, and quality assurance programs and are the strongest voice for its advocacy, communications, and market development.

We commend the U.S. Environmental Protection Agency's (EPA) ENERGY STAR program for its long list of accomplishments in support of energy efficiency and the fight against climate change. Since its inception in 1992, the ENERGY STAR program has established partnerships with thousands of private industry companies, utilities, state and local governments and environmental organizations to identify and promote efficient technologies in a broad array of product categories.

From its early successes in the computer and photocopier categories, the ENERGY STAR program has grown continuously to include heat pumps, furnaces, boilers, dishwashers, air conditioners, refrigerators and freezers, clothes washers and dryers, lighting, TVs, room air cleaners, vending machines, electric vehicle chargers, and an ever-growing list of new product types. The program has also importantly addressed the opportunity for achieving energy efficiency in whole buildings in the residential, commercial, institutional, and industrial sectors.

The ENERGY STAR program has proven that public-private partnerships can achieve both economic growth and environmental protection. The program has contributed to the creation of millions of well-paying jobs and billions of dollars of capital investment. At the same time, the program has achieved huge environmental benefits through the avoidance of billions of metric tonnes of greenhouse gas emissions.

The purpose of ENERGY STAR is to deliver cost-saving energy efficiency solutions that protect the climate, improve air quality, and protect public health. The label was designed to provide credible, unbiased information that allows consumers to make well-informed decisions. Additionally, the ENERGY STAR logo allows consumers to save energy and money when making buying decisions.

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These products have rightfully earned their ENERGY STAR label and have been independently certified to meet strict standards for energy efficiency. Sunsetting the certification pathway to the ENERGY STAR label for residential boilers will have inadvertent consequences. This sunset directly counters the goals of the ENERGY STAR program to provide consumer choice with the ability to compare the efficiencies of the appliances they wish purchase.

It is critical to preserve consumers' access to affordable, efficient residential furnaces. The sunsetting of these products will prevent the consumer from identifying the most efficient, lowest cost opportunities that they can afford while also reducing their greenhouse gas (GHG) emissions at home. We are concerned that this action is not in the best interest of the consumer who wants to reduce their GHG emissions at home but may not be able to afford the efficient electric equipment this notice requires through a forced market decision.

Clean Fuels fully understands the increasing urgency to decarbonize the building sector. As the leading organization in the United States for the production and utilization of low carbon fuels, we support the principle that decarbonization in residential buildings will require more than just efficiency gains in fuel-fired heating appliances.

However, the sunsetting of these products' participation in the ENERGY STAR program is inadvertently discounting decarbonization over efficiency. While we understand the focus on transitioning to the most energy efficient equipment available, the ENERGY STAR program is discounting the availability of readily available and cost efficient alternatives. Consumers want to decarbonize and are already doing so using Bioheat® Fuel. Bioheat® fuel is a blend of biodiesel and ultra-low sulfur heating oil. Bioheat® fuel is a blend of biodiesel and ultra-low sulfur heating fuel. A more eco-friendly alternative to both traditional heating fuel and natural gas, Bioheat® fuel can be used in existing home heating fuel systems. Bioheat® fuel is available right now and Clean Fuels has calculated that utilizing Bioheat® Fuel in home heating results in 870,000 MT CO₂e avoided/year.

Efficient electric products like air source heat pumps are not the only products available to reduce petroleum consumption, improve energy security, and reduce pollution.

Homegrown biodiesel and renewable diesel are direct replacements for foreign oil, diversifying our energy portfolio and in turn improving our energy security. The Clean Fuels industry is investing billions to expand production of biodiesel to further extend consumer access to clean fuels. The 3 billion gallons produced by our industry displaces foreign fossil fuels, saving consumers money, significantly reducing carbon emissions, and reducing the environmental costs associated with petroleum. Additionally, biodiesel and renewable diesel reduce GHG emissions by roughly 72% on average based on their lifecycle emissions relative to petroleum diesel as calculated by U.S. Department of Energy Argonne National Laboratory's Greenhouse Gases, Regulated Emissions, and Energy Use in Technologies (GREET) Model.¹

Solely including electric products in the ENERGY STAR program will create a financial burden on people who cannot afford to replace their residential furnaces with electric heat pumps. The cost of converting to an electric air-source heat pump is substantial. At over \$20,000 on average, these systems are unaffordable for many low- and middle-income residents, even with a rebate.

In addition to saving consumers money, biodiesel also reduces particulate matter emissions. This benefits all populations including environmental justice communities. Clean Fuels Alliance America, through our continued partnership with Trinity Consultants, released a two-part study that quantifies the immediate community health

¹ Argonne National Laboratory, GREET1 Model (October 2022), available online at <https://greet.es.anl.gov>

benefits that can be measured in reduced medical costs and health care burdens from converting from petroleum-based diesel to B100.²

Combining Phase 1 and Phase 2 of the study, researchers found that switching to 100% biodiesel (B100) in the home heating oil sector studied would provide immediate community health improvements that include decreased cancer risk and burden up to 86%, 41 fewer premature deaths, 20,000 reduced asthma attacks, and 4,800 fewer sick/ work loss days. B100 can achieve these benefits by reducing pollution in residential heating. This study used a “bottom-up” approach, focusing on specific population groups such as those living in crowded urban housing complexes and portside communities.

The immediacy of these potential health benefits, especially for disadvantaged communities, is even more critical when one considers the time value of carbon.³ A reduction in GHG emissions now can avoid decades of associated heating, thus having significantly more value than carbon reductions made in the future. The importance of reducing carbon today cannot be understated as the Intergovernmental Panel on Climate Change (IPCC) clearly reaffirmed in their Sixth Assessment Report: Carbon reductions today are more important than carbon reductions in the future.⁴

In conclusion, this proposal to sunset the ENERGY STAR boilers specification and simply rely on the new specification for air-to water heat pumps is inconsistent with the EPA’s focus to deliver energy-efficiency gains, pollution reduction and cost-savings to consumers. Limiting the ENERGY STAR portfolio of product specifications and prescribing the equipment available counters the consumer choice aspect of the ENERGY STAR program. Removing the boiler specification certification and having the agency guide consumers to electrification will prohibit consumers from being able to responsibly compare the products as solely having ENERGY STAR for electrification will not prevent customers from purchasing boilers but will prevent costumers from making an educated choice in comparing the efficiencies of appliances.

Sincerely,



Kate Shenk
Director, Regulatory Affairs
Clean Fuels Alliance America

² Trinity Consultants, Assessment of Health Benefits from Using Biodiesel as a Transportation Fuel and Residential Heating Oil, (April 2022). <https://cleanfuels.org/resources/health-benefits-study>

³ National Biodiesel Board. Biodiesel.org. (2021). Cutting Carbon: Comparing Biomass-Based Diesel & Electrification for Commercial Fleet Use.

⁴ Intergovernmental Panel on Climate Change. (2021). Climate Change 2021: The Physical Science Basis. Contribution of Working Group I to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change.