

July 7, 2023

U.S. Environmental Protection Agency  
1200 Pennsylvania Ave., NW  
Washington, DC 20460

RE: EPA Proposal to Sunset the ENERGY STAR® Boilers Specification and Launch a New Specification to Cover Heat Pump Hydronic Heating Appliances (Boiler Sunset Proposal).

Thank you for the opportunity to comment on the proposed sunset of the current ENERGY STAR® boilers specification and launch of new hydronic heating specification. This letter outlines the position of the North American Gas Heat Pump Collaborative (“Collaborative”) on this proposal.

The Collaborative is comprised of 17 gas and dual fuel utilities and energy efficiency organizations who recognize the vital role that gas heat pump technologies play in decarbonization. Our members represent over 33 million customers in the US and Canada and are focused on providing diverse solutions to equitably decarbonize with considerations for local and regional policies, climate, customer affordability, existing infrastructure, and grid composition to maximize carbon emissions reductions. The Collaborative’s mission is to accelerate the adoption of innovative technologies that advance energy efficiency and facilitate the decarbonization of North America’s gas network through market transformation initiatives. We are working to accelerate the commercialization of gas heat pump (GHP) technology which exceeds efficiencies of 100%. As part of this, we recognize the influential role ENERGY STAR® labelling has in both development and adoption of high efficiency technologies. The Collaborative and ENERGY STAR® share the desire to decarbonize and lower emissions. We see natural gas as a path to decarbonization with less cost to consumers, increased energy system reliability and safety.

On behalf of our members and their customers, the NAGHPC strongly opposes this proposal for these reasons.

- The ENERGY STAR® label has been effective at increasing adoption of efficient gas appliances and lowering emissions across the country.
- High-efficiency natural gas appliances provide reliable practical, low cost, and low emission optionality for consumers and provide a cost-effective path to achieving emission goals.
- Sunsetting the certification pathway also negatively affects consumers due to high costs of alternatives and potential lack of ENERGY STAR® rated products on the market.
- There are negative consequences, particularly to low and moderate -income consumers, to removing the ENERGY STAR® label from gas boilers and other gas appliances.
- Sunsetting the certification pathway is inconsistent with Inflation Reduction Act Section 13301.
- GHPs should be included in the new ENERGY STAR® specification for Heat Pump Hydronic Heating Appliances.

**The NAGHPC believes it is critical to maintain product offerings which have been vetted by the market as cost-effective and energy efficient.** Furthermore, Air to Water Heat Pumps (“ATWHP”) should be recognized as a separate product category, rather than replacement of gas boilers. There are such significant differences in technology that it is not appropriate to even consider referring to ATWHP units as Heat Pump Boilers.

**The ENERGY STAR® label has been effective at increasing adoption of efficient gas appliances and lowering emissions across the country.** The label is an indication to customers and contractors of verified product performance within and across product classes. From 2015 to 2021, the market for ENERGY STAR® gas appliances, including furnaces, water heaters, and dryers, increased significantly. Shipments of ENERGY STAR® furnaces grew by 123% during this period, with a market share rise from 26% in 2015 to 41% in 2021. Also, ENERGY STAR® tankless gas water heaters, which have the highest efficiency for gas, out-shipped electric heat pump water heaters at a pace of six to one.<sup>1</sup>

**High-efficiency natural gas appliances provide reliable, practical, low cost, and low emission optionality for consumers.** The energy savings potential and greenhouse gas reduction effects of GHP technology is paramount to the Collaborative's member utilities. Natural gas is projected to remain at 34% of the U.S. electricity mix by 2050.<sup>2</sup> Decreasing the amount of natural gas that is used per product would only be a benefit towards the decarbonization path. Like electric heat pump technology, gas heat pumps have efficiencies greater than 100%. Unlike electric heat pumps, gas systems use refrigerants with low or no global warming potential (GWP), thereby rendering gas heat pumps even more climate-friendly than alternative technologies. In some areas, natural gas heated homes consume less energy than homes with high-efficiency electric air source heat pumps. While electric applications can have a higher "site" rated energy efficiency, the full-fuel cycle energy requirements—the energy used or lost in energy extraction, processing, transportation, conversion, and distribution, including the generation and transmission of electricity—may be lower in some regions for natural gas than electric applications, including air-source heat pumps and combi units.<sup>3</sup> The calculation of energy savings potential should therefore factor in both site and source. Finally, fuel diversity is important for a stable, low-cost energy future. Promoting only electric equipment for residential heating and cooling puts immense pressure on grid capacity, leading to issues with reliability and resiliency of the electrical grid.

**Sunsetting the certification pathway may negatively affect consumers due to high costs of alternatives and the potential lack of ENERGY STAR® rated products on the market in some regions.** In the absence of ENERGY STAR® labeled products, consumers may be more likely to opt for standard efficiency equipment. Gas boilers are more cost effective than electric heat pumps in some parts of the country. In these cases, the ENERGY STAR® label is an important market signal that supports consumers choosing highest efficiency equipment. Absent that signal, changing consumer habits could negatively impact contractors, especially small to medium size HVAC and plumbing contractors who have built a business promoting high efficiency boilers to their customers.

**There are negative consequences, particularly to low and moderate -income consumers, to removing the ENERGY STAR® label from gas boilers and other gas appliances.** Removing the ENERGY STAR® label could lead to a decrease in adopting higher-efficiency gas equipment in this customer base, as consumers may opt for lower-efficiency options due to first-cost burdens. These customers would then also pay higher monthly costs as their equipment would be of lower efficiency.

**Sunsetting the certification pathway is inconsistent with Inflation Reduction Act Section 13301.** The Inflation Reduction Act section 13301 provides a tax credit for energy-efficiency improvements of residential homes.

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<sup>1</sup> American Gas Association, AGA Empowering Consumer Choices, (June 2023), <https://www.aga.org/research-policy/resource-library/empowering-consumer-choices-analyzing-the-impact-of-the-energy-star-program-on-the-adoption-of-high-efficiency-gas-appliances/>

<sup>2</sup> <https://www.eia.gov/todayinenergy/detail.php?id=51698>

<sup>3</sup> National Research Council. 2009. Review of Site (Point-of-Use) and Full-Fuel-Cycle Measurement Approaches to DOE/EERE Building Appliance Energy-Efficiency Standards: Letter Report. Washington, DC: The National Academies Press.

Included in the list of qualified energy property are boilers. Sunsetting the certification pathway for boilers is inconsistent with the qualified energy property noted in section 13301.<sup>4</sup>

**GHPs should be included in the new ENERGY STAR® specification for Heat Pump Hydronic Heating Appliances.** GHPs are highly efficient (over 100%), have lower total GHG impacts, provide fuel diversification offering greater grid reliability and resiliency, and have lower operating costs than many alternatives. Including GHPs in the new ENERGY STAR® specification for Heat Pump Hydronic Heating Appliances will maximize GHG reduction opportunities leading to greater decarbonization sooner. While residential GHPs are not yet commercialized, we expect them to be a cost-effective product in many regions when they launch in 2023. We acknowledge that a gas heat pump water heater is further away from commercialization, but the hydronic coils present in residential GHPs still applies to the proposed sunset of this ENERGY STAR® label. Additionally, much cost data is not yet publicly available. Early pilot data is trending toward cost effectiveness. We expect additional data to be available in early 2024. We also expect the first cost for residential GHPs to go down significantly over time since this is both a new product and a new product category.

The Collaborative is confident that gas heat pump technology will be a reliable and low emission solution for customers as the market develops and matures in the upcoming years.

Thank you again for the opportunity to submit comments on this draft specification. Please contact Jaclyn Kahn (jkahn@resource-innovations.com) with questions about our comments.

Sincerely,



Alan García, Senior Director at NW Natural, Customer Lifecycle Management Chair, North American Gas Heat Pump Collaborative

#### Members of the Collaborative

- ATCO
- CenterPoint Energy
- Enbridge Gas
- FortisBC
- Intermountain Gas Company
- APGA Research Foundation
- National Fuel
- New Jersey Natural Gas
- Northwest Energy Efficiency Alliance
  - Avista Gas
  - Cascade Natural Gas

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<sup>4</sup> Text - H.R.5376 - 117th Congress (2021-2022): Inflation Reduction Act of 2022. (2022, August 16). <https://www.congress.gov/bill/117th-congress/house-bill/5376/text>

- Puget Sound Energy
  - Energy Trust of Oregon
- Northwest Natural Gas
- ONE Gas
- Peoples Gas & North Shore Gas
- SEMCO ENERGY Gas Company
- Southern California Gas Company
- Southern Company Gas
  - Atlanta Gas Light
  - Chattanooga Gas
  - Nicor Gas
  - Virginia Natural Gas
- South Jersey Industries
  - Elizabethtown Gas
  - South Jersey Gas
- Spire Energy