

Issue Brief & Situation Analysis

SNAPSHOT

- On May 18, EPA issued a notice outlining its proposal to phase out ENERGY STAR certification for natural gas furnaces by December 30, 2024.
- ENERGY STAR is a voluntary labeling and certification program designed to support the adoption of energy efficient products and practices.
- In its notice, EPA made it clear that this is just one step in its process to disallow other gas applications' ENERGY STAR certification in the future.
- The elimination of ENERGY STAR certification for natural gas furnaces will negatively affect consumers and substantially impact gas utility energy efficiency programs.
- The elimination of the ENERGY STAR certification program would eliminate residential gas furnaces recognition in federal tax credit programs, energy code reduction provisions and similar energy savings incentive programs.
- The elimination of natural gas furnaces from the program will result in significant unintended consequences, including leading consumers to choose less efficient equipment, ultimately increasing energy costs and emissions.
- The proposal would harm the EPA's equipment and utility partners, deprive consumers of accurate information about residential heating equipment, and lead to higher energy use and emissions.

ENERGY STAR: Natural Gas Furnace Notice

On May 18, the U.S. Environmental Protection Agency (EPA) issued a notice to ENERGY STAR residential heating and cooling equipment partners and other interested stakeholders outlining its proposal to phase out the labeling and promotion of residential gas furnaces and central air conditioners (CACs).

Specifically, EPA proposes to sunset the [ENERGY STAR Version 4.1 Specification for Furnaces](#) and remove CAC from the ENERGY STAR V6.1 Specification for CAC and Heat Pump Equipment effective December 30, 2024, with no new certifications accepted after December 30, 2023. The notice states that the proposed action is consistent with the EPA's focus on electric heat pumps and their ability to deliver energy-efficiency gains, pollution reduction, and cost-savings to consumers. Also, [EPA asserts its responsibility to guide consumers to choices supporting the electrification of residential space conditioning.](#)

Further, the notice explicitly states the following:

Notably, while indoor NOx pollution is associated with gas appliances, electric appliances are not responsible for any direct emissions and garner significant emissions reductions even when source or upstream emissions from electricity generation are factored in.

The notice also suggests similar proposals forthcoming for other gas and oil appliances including boilers, dryers and commercial packaged boilers.

EPA will be accepting comments through June 22, 2023. Interested parties are encouraged to submit feedback to HVAC@energystar.gov.

Background

The ENERGY STAR program, which is jointly managed by EPA and the U.S. Department of Energy (DOE), was established in 1992 and operates under the authority of the Clean Air Act Section 103(g) and Energy Policy Act of 2005 Section 131. The program exists to help consumers, government, and businesses adopt energy-efficient products and practices. Participation in ENERGY STAR is voluntary, and the program relies on voluntary consensus standards and a systematic process for developing ENERGY STAR specifications.

Natural gas utilities administer over 132 natural gas efficiency programs across 42 states, which collectively invest more than \$1.4 billion annually, in part to assist customers with the purchase and installation of gas-efficient appliances. According to AGA's 2020 Energy Efficiency survey, at least 30 natural gas utility respondents use ENERGY STAR in some capacity for at least one of their appliance rebate programs.¹

The U.S. EIA estimates that around 53.3 million households use a natural gas central warm air furnace.²

In 2021, 41% of gas furnace shipments met ENERGY STAR certification criteria, as well as 50% of gas clothes dryers, 57% of gas boilers (for 2020), and 8% of gas storage water heaters. There are also a substantial number of tankless water heaters that are ENERGY STAR rated. Almost twice as many tankless water heaters were shipped in 2021 than ENERGY STAR storage water heaters, and more than six times as many as heat pump water heaters. Combined, 19% of all gas water heaters shipped in 2021 were ENERGY STAR Rated.

Position

AGA strongly supports ENERGY STAR

AGA strongly supports the ENERGY STAR program's mission to provide "simple, credible, and unbiased information" on a product's energy efficiency. Consumers rely on the program to make well-informed decisions when purchasing furnaces and other appliances and equipment.³

AGA members are leaders on energy efficiency and use ENERGY STAR to promote energy efficiency.

AGA members are doing their part to create a more efficient energy economy. Natural gas utilities administer over 132 natural gas efficiency programs across 42 states, which collectively invest more than \$1.4 billion annually, in part to assist customers with the purchase and installation of these efficient gas appliances. To date, ENERGY STAR-certified gas furnaces have been a central offering within these programs. Many natural gas energy efficiency programs promote using ENERGY STAR home heating equipment and rely on ENERGY STAR certification when determining eligibility for utility-provided incentives, including appliance rebates.⁴

¹ American Gas Association. Natural Gas Efficiency Programs Report (2020). <https://www.aga.org/globalassets/aga-ngefficiency-report-py2018-5-2021.pdf>

² U.S. EIA. RECS Survey. <https://www.eia.gov/consumption/residential/data/2020/hc/pdf/HC%206.1.pdf>

³ Energy Star Overview. <https://www.energystar.gov/about>

⁴ American Gas Association. Natural Gas Efficiency Programs Report (2020). <https://www.aga.org/globalassets/aga-ngefficiency-report-py2018-5-2021.pdf>

By no longer allowing natural gas appliances from participating in the ENERGY STAR program, EPA, in a single action, would render several state-approved energy efficiency programs that aid customers in obtaining efficient appliances inoperable without substantial changes to program design.

Removing gas furnaces and other products from ENERGY STAR would lead to worse outcomes

EPA should recognize that ENERGY STAR should be used to encourage consumers to pursue products that are best for their needs. Gas furnaces are more efficient and cost-effective than heat pumps in many parts of the country.

Removing the ENERGY STAR designation would lead consumers to make less informed decisions about their appliance and equipment selection, leading to adverse outcomes for energy costs, use, and emissions. Moreover, EPA's actions may negatively affect consumers seeking federal and state tax credits since ENERGY STAR-certified appliances may no longer exist for their homes.

EPA's proposed action is inconsistent with ENERGY STAR program guidance

Further, AGA believes that the proposed sunset of ENERGY STAR certification for natural gas furnaces is inconsistent with EPA ENERGY STAR Products Program Strategic Vision and Guiding Principles, which recognizes that ENERGY STAR specifications were designed "to treat fuel types separately, so that consumers may find the right products for the fuel type in their home."⁵

Forty-three percent of consumers use natural gas for space heating in their homes.⁶ This effort by EPA will confuse customers looking to maintain gas-powered equipment in their home, especially if that gas-powered appliance is the most efficient, lowest cost, lowest emissions, and most reliable solution for that home or business.

EPA's attempt to remove ENERGY STAR designation for natural gas furnaces to support electrification is wholly inappropriate and will lead to worse outcomes

EPA's support for the electrification of the heating sector will *increase energy use and emissions* in many parts of the country. One of the goals of the ENERGY STAR program is to incentivize the use of efficient appliances to reduce energy consumption. The U.S. Department of Energy has illustrated in an efficiency proceeding related to furnaces that encouraging fuel switching away from natural gas space heating will increase energy use, and customers will have higher overall energy consumption.⁷

Since more electricity would be needed if customers switched fuel sources, more dispatchable generation will be required to meet the additional electric load. Today's natural gas and coal-fired power plants have a typical 30-50% fuel conversion efficiency, which can lead to significant energy increases when measured on a full-fuel-cycle basis⁸, especially when a large portion of the electric generation fleet

⁵ Environmental Protection Agency. "ENERGY STAR Products Program Strategic Vision and Guiding Principles." https://www.energystar.gov/sites/default/files/asset/document/ENERGY_STAR_Strategic_Vision_and_Guiding_Principles.pdf

⁶ U.S. EIA. RECS Survey. <https://www.eia.gov/consumption/residential/data/2020/hc/pdf/HC%206.1.pdf>

⁷ *Energy Conservation Program: Energy Conservation Standards for Consumer Furnaces*, EERE-2014-BT-STD-0031, RIN 1904-AD20, 87 Fed. Reg. 40590 (July 7, 2022).

⁸ A full-fuel-cycle or "source" methodology is consistent with the approach taken in the EPA ENERGY STAR Portfolio Manager for commercial buildings.

is powered by fossil fuels and the percentage only increases during the colder periods.⁹ Degradation to overall energy efficiency is manifestly unsound economic and environmental policy.¹⁰ It is critical for EPA to understand that the natural gas delivery system is 92% efficient from production to the customer. Hence, direct use of natural gas is more efficient and has emissions benefits.

Importantly, the peak space heating load currently served by natural gas is significantly higher than the electrical system in most regions. The primary reason is that the existing gas energy storage and delivery infrastructure was designed to reliably serve customers through spikes in consumption during cold winters, while the electric system was designed for lower peak demand levels, driven mainly by summer air conditioning loads. Over the last five years, the combined demand for natural gas during the coldest winter month has been about 58% higher than the demand for electricity during the peak summer month within the buildings sector and about 84% higher than the demand for electricity for all end-uses, including space heating. Simply put, any effort to fully transition space conditioning to electric applications threatens system reliability in certain regions of the country.

AGA and its members will continue to invest in building reliable and resilient energy systems that can help accelerate emission reductions economy wide. Through continued innovation, investments in energy efficiency, and a transition to lower-carbon fuel sources, gas utilities and their customers can contribute to economy-wide decarbonization targets, including net-zero emissions. The continued availability and incentivization of efficient gas-end use applications are critical to those goals while addressing cost, customer equity, feasibility and energy reliability.

Next Steps & Action Items

EPA will be accepting comments through June 22, 2023. Interested parties are encouraged to submit feedback to HVAC@energystar.gov.

Stakeholders wishing to submit comments should underscore the impact of the proposal on the areas outlined above and **request that EPA withdraw its proposal.**

AGA will be taking the following actions: (1) AGA letter from Karen Harbert to EPA Administrator Michael Regan requesting withdrawal of the proposal, (2) joint comments with industry partners submitted to EPA by June 22 deadline, (3) congressional and stakeholder outreach.

⁹ See ISO New England, “December 24, 2022 OP-4 Event and Capacity Scarcity Condition,” (Jan. 5, 2023) available at <https://www.iso-ne.com/static-assets/documents/2023/01/december-2022-op4-coo-report.pdf> (Approximately 29% of the region’s energy demand was met by oil-fired generation on December 24, 2022 during a cold weather event, which exceeded all other generation fuels.).

¹⁰ U.S. Energy Information Administration, “More than 60% of energy used for electricity generation is lost in conversion,” July 21, 2020, available at <https://www.eia.gov/todayinenergy/detail.php?id=44436>.