November 15, 2021

Mr. Jon Passe
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue NW
Washington, DC 20004

Via email to energystarhomes@energystar.gov

Dear Mr. Passe,

The National Association of State Energy Officials (NASEO) respectfully submits these comments regarding the proposed ENERGY STAR Residential New Construction Program Roadmap Framework Document for Stakeholder Feedback. NASEO is the only national non-profit organization representing the 56-governor designated State, Territory, and District of Columbia Energy Directors and their offices. NASEO collaborates with State Energy Offices on topics that span energy programs and policies, including the development of energy codes and building labels and certifications.

NASEO supports EPA’s proposed roadmap and its focus on accelerating the voluntary deployment of new energy efficient and low-emissions technologies into new construction single-family homes and multifamily buildings. NASEO generally supports the proposed changes, including: Transitioning Version 3.0 ENERGY STAR Single-Family New Homes (SFNH) to Version 3.1; transitioning Multifamily New Construction (MFNC) Version 1.0 to Version 1.1; introducing new versions of Single-Family New Homes and Multifamily New Construction program requirements; and introducing a new ENERGY STAR certification label that incorporates technologies such as heat pumps, heat pump water heaters, induction cooking and electric vehicle charging capabilities. Specific comments for each proposal follow.

Re: Transitioning Version 3.0 ENERGY STAR SFNH to Version 3.1 and transitioning MFNC Version 1.0 to Version 1.1

NASEO supports transitioning all states using SFNH Version 3.0 and MFNC Version 1.0 to Version 3.1 and Version 1.1, respectively. NASEO is not aware of any data or analysis that would indicate a transition is not warranted or any data or analysis that would not support the transition timeline.
Re: Introducing new versions of Single-Family New Homes and Multifamily New Construction program requirements

NASEO supports the development of a SFNH 3.2 and MFNC Version 1.2 thermal backstop using the 2021 International Energy Conservation Code (IECC) as the baseline energy code requirement. Many of the State Energy Offices were deeply involved in the development of the 2021 IECC and support its use as the baseline for voluntary ENERGY STAR above-code programs. Advancing the thermal baseline of the ENERGY STAR program from the 2009 IECC to the 2021 IECC is appropriate, as the code has now been updated four times since the 2009 was published and because the ENERGY STAR residential program certifies “homes and apartments [that] are at least 10% more efficient than those built to code”¹. As noted in the framework document, U.S. DOE has determined that the “2021 IECC will improve energy cost savings by approximately 9% relative to the prior edition”. Previous code determinations published by U.S. DOE indicate that cumulative savings from the 2012, 2015 and 2018 codes contribute additional energy savings of more than 10% from the 2009 IECC baseline. Continuing to use the 2009 IECC as the thermal baseline is no longer appropriate considering the continued improvement of subsequent code editions which make a minimally code compliant structure built to more recent codes nearly equivalent to the thermal baseline of a 2009 compliant structure.

Re: Introducing a new ENERGY STAR certification label that incorporates technologies such as heat pumps, heat pump water heaters, induction cooking and electric vehicle charging capabilities

NASEO supports the development of a new voluntary ENERGY STAR certification that recognizes homes with next generation features and the proposed methodology which requires energy efficiency levels proposed in SFNH 3.2 and MFNC combined with the proposed requirements for space-conditioning heat pumps, heat pump water heaters, electric cooking, and EV charging capacity.

There are two proposed prescriptive requirements of which NASEO is generally supportive, but which we encourage EPA to further evaluate prior to issuance of the final rule. NASEO recommends evaluation of the benefit of “connected” requirement for heat pumps, heat pump water heaters, and the proposed exemption of induction cooking equipment for buildings financed with government subsidies.

Regarding the “connected” requirements for heat pumps and heat pump water heaters, these technologies can provide significant energy savings with or without ‘connected’ requirements, but the additional functionality enabled by ‘connected’ equipment brings value by enabling demand response and demand flexibility functions which can reduce energy expenses and reduce pollution. However, we encourage EPA to consider how availability of access to the internet in disadvantaged communities and/or rural areas may hinder the use of these technologies and determine if a ‘connected ready’ requirement which allows the use of equipment that does not have active communications equipment, but does possess data ports to enable later addition of such technology would be more appropriate for those communities lacking internet access.

EPA proposes that homes constructed with a government subsidy (affordable housing) can meet certification requirements with conventional electric cooktops instead of the induction cooktops that will be required of all other buildings. NASEO recognizes that induction ranges carry a price premium and may require cookware replacement at additional expense to the resident. However, NASEO suggests that EPA consider an approach where technology requirements avoid creating different standards for ENERGY STAR certified market rate and subsidized affordable housing. Regarding the specific question posed by EPA considering the allowance of conventional electric cooktops in market-rate housing, NASEO supports this alternative, but emphasizes that there should not be different standards for market rate and affordable housing.

NASEO supports the inclusion of EV charging capacity as a requirement for certification. Electric vehicle charging equipment costs significantly less to install at the time of construction than installing similar equipment as a retrofit. NASEO again emphasizes that EPA should maintain a consistent standard for market rate and subsidized affordable housing which will provide residents of both types of housing built to achieve this voluntary above-code program with the same benefits.

Thank you for this opportunity to comment.

David Terry
Executive Director, National Association of State Energy Officials