

December 10, 2021

Ms. Tanja Crk  
US Environmental Protection Agency  
Ariel Rios Building 6202J  
1200 Pennsylvania Avenue, NW  
Washington, DC 20460

Dear Ms. Crk:

The Consortium for Energy Efficiency (CEE) respectfully submits the following comments in response to ENERGY STAR® Version 3.0 Commercial Ovens Draft 2 Specification, released by the Environmental Protection Agency (EPA) on October 14, 2021.

CEE is the binational organization of energy efficiency program administrators. Historically, the CEE Board of Directors determined to build a single brand for efficiency and elected to create standing for the ENERGY STAR® Program rather than advancing the name recognition of CEE or other endeavors that existed at that time. The ENERGY STAR Program adopted specifications supported by CEE and program administrators, providing the confidence that utility ratepayer programs needed to invest in incentives in association with ENERGY STAR. This was a conscious investment and contribution of equity and the sanctioned obligations of utility members that include responsibility for delivering safe, reliable, and affordable service. Today, the staff and membership of the Consortium continue to perform diligence relative to the ENERGY STAR brand promise and associated performance specifications, given the very serious obligations entrusted to US and Canadian utilities as well as others sanctioned with advancement of voluntary market transformation efforts.

CEE members are responsible for ratepayer-funded efficiency programs in 38 US states, the District of Columbia, and four Canadian provinces. In 2019, CEE members directed approximately 70% of the \$9.3 billion in energy efficiency and demand response program expenditures in the two countries. These comments are offered in support of the local activities CEE members carry out to actively leverage the ENERGY STAR brand. CEE consensus comments are offered in the spirit of strengthening ENERGY STAR, so it may continue to serve as the national marketing platform for energy efficiency.

CEE highly values the role ENERGY STAR® plays in differentiating energy efficient products and services that the CEE membership supports locally throughout the US and Canada. We appreciate the opportunity to provide these comments.

## CEE Supports the Proposed Energy Criteria for Combination Ovens

CEE supports the proposed energy criteria for combination ovens. Based on review of the draft 2 data packet shared by EPA, the percentages of models that would meet the proposed criteria (pass rates), estimated energy savings, and payback are consistent with ENERGY STAR brand tenants and would offer an attractive opportunity for program administrators. As shown in Table 1, the pass rates range from 26 percent to 35 percent. The estimated payback is less than one year as shown in Table 2.

Table 1. Passing Rates and Annual Energy Savings for Draft 2 Combination Ovens

	# of Pass	# of Fail	Total	Passing Rate	Annual Energy Savings
<b>Gas - 5-40 Pan Capacity</b>	28	80	108	26%	608 Therms
<b>Electric - 5-40 Pan Capacity</b>	42	106	148	28%	9,551 kWh
<b>Electric - 3-4 Pan Capacity and 2/3-Size with 3-5 Pan Capacity</b>	6	11	17	35%	1,814 kWh

Table 2. Draft 2 Combination Ovens Average Installed Cost and Payback

Product Class	Efficiency Level	Annual Energy Use	Annual Operating Cost	Avg. Purchase Cost	Avg Payback (yrs.)
	Baseline	23,518 kWh/yr.	\$2,492.97	\$16,851.00	N/A
Electric, Combi Full and Half Size (5-40 pan)	ESTAR V3.0	13,968 kWh/yr.	\$1,480.59	\$17,385.33	0.7

## **CEE Supports the Proposed Binning for Full-size Electric Convection Ovens by Sheet Pan Capacity Into a $\geq 5$ Pans Bin and a $< 5$ Pans Bin**

In Draft 2 EPA proposes to bin full-size electric convection ovens by sheet pan capacity to include higher capacity ovens and better distinguish between low capacity and high-capacity ovens in the dataset. CEE agrees with EPA's assessment that 5 sheet pans-capacity is the most common size and that smaller capacity ( $< 5$  sheet pans) full-size electric convection ovens have different idle energy rates than ovens with higher capacities ( $\geq 5$  sheet pans). Recent test results suggest that low-capacity convection ovens, particularly 2 pans and 3 pans-capacity, tend to have lower cooking-energy efficiencies than high-capacity ovens. These low-capacity, essentially countertop ovens, have a distinct market application. The differing energy use profiles and market application provide a basis for 5 pans-capacity as the appropriate break point between high and low-capacity convection ovens.

As explained below, CEE supports the proposed energy criteria for full-size electric convection ovens  $\geq 5$  pans bin. We request EPA consider lowering cooking efficiency criteria for the  $< 5$  pans bin based on recent test data for 2 pans and 3 pans-capacity full size electric convection ovens.

## **CEE Supports the Proposed Energy Criteria for Full Size Electric Convection Ovens $\geq 5$ Pans Capacity**

CEE thanks EPA for aligning proposed criteria for full size electric convection ovens with a pan capacity of 5 or greater with CEE Tier 2. This alignment rewards manufacturers that sought to achieve CEE Tier 2 and reinforce the complementary relationship between ENERGY STAR and CEE multitier performance specifications. Twenty-eight percent of the high capacity full size electric convection oven models in the data set would qualify. EPA estimates an average payback of 1.7 years.

## **Proposed Levels for $< 5$ Pans Capacity May Overly Limit Selection of the Smallest Units (2 and 3 Pans Capacity)**

EPA would be well served to assess the market size and cooking-energy efficiencies of low pans-capacity full size electric convection ovens, particularly at the smallest sizes. We request EPA consider lowering cooking efficiency criteria for the  $< 5$  pans bin based on recent test data for 2 pans and 3 pans-capacity full size electric convection ovens or consider creation of an additional capacity bin. Recent test results from testing centers in

California for 2 pans and 3 pans-capacity ovens found cooking efficiencies typically range from high-60's to low-70's. This data indicates that the proposed minimum cooking efficiency requirement of 76% may overly restrict selection for these lower capacity ovens.

## **CEE Supports the Proposed Inclusion of Water Consumption Criteria**

The CEE Commercial Kitchens Initiative aims to provide clear and credible definitions in the marketplace as to what constitutes highly efficient energy and water performance in cooking, refrigeration, and sanitation equipment and then to help streamline the selection of products through targeted market strategies based upon the unique features of particular foodservice markets. CEE supports the EPA efforts to reduce water consumption through the ENERGY STAR Program. In Draft 2, EPA proposes the addition of water consumption criteria for combination ovens and water consumption reporting requirements for convection and rack ovens. CEE supports the proposed inclusion of water consumption criteria to support the ability of program administrators and consumers to realize water savings and address the energy-water nexus.

## **CEE Recommends EPA Assess Potential Unintended Consequence of the Proposed Water Consumption Metric**

EPA proposes gallons per hour per pan as the water consumption metric for both idle and cooking periods. EPA's basis for using gallons per pan per hour is to be consistent with as many other organizations' standards as possible. During the stakeholder webinar, EPA cited LEED V.4, Green Globes, ASHRAE 189 Standard for the Design of High-Performance Green Buildings Except Low-Rise Residential, and International Association of Plumbing and Mechanical Officials (IAPMO) Water Efficiency Standard (WE Stand) as standards with water consumption requirements. The metrics used by these standards are all on an hourly basis. Harmonization with other standards that have similar objectives to avoid market confusions is a reasonable consideration. During the ENERGY STAR stakeholder webinar, manufacturers' representatives commented that the time component could penalize faster cooking ovens, i.e., if the cooking cycle takes less than an hour the water consumption would have to be multiplied to what would be consumed in an hour. CEE recommends exploring this claim, and taking steps to avoid penalizing fast ovens that may ultimately use less water for a given task.

CEE would once again like to thank the EPA for the opportunity to comment on ENERGY STAR® Version 3.0 Commercial Ovens Draft 2 Specification. Please contact CEE Senior

Program Manager Bjorn Jensen at 617-337-9280 with any questions about these comments.

Sincerely,

A handwritten signature in blue ink, appearing to read "Ed Wisniewski".

Ed Wisniewski  
Executive Director