



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**  
WASHINGTON, D.C. 20460

OFFICE OF  
AIR AND RADIATION

August 1, 2017

Dear ENERGY STAR® Commercial Coffee Brewer Manufacturer or Other Interested Party:

The U.S. Environmental Protection Agency (EPA), finalized the first ENERGY STAR Commercial Coffee Brewer specification a year ago. Since finalizing the specification, EPA has received feedback suggesting it is necessary to consider additional factors, specifically average tank water temperature<sup>1</sup> and serving temperature<sup>2</sup>, when evaluating the efficiency of coffee brewers. To fully consider this feedback and possible changes to the specification, EPA is launching a commercial coffee brewer data assembly effort. Stakeholders are encouraged to share energy performance data no later than September 1, 2017.

Prior to finalizing the ENERGY STAR Version 1.0 Commercial Coffee Brewer specification, EPA worked extensively with manufactures and other industry stakeholders to assemble energy performance data, and outline ENERGY STAR certification requirements. The Agency received performance data on a variety of Type II batch commercial coffee brewers; however, the data did not include the average tank water temperature and serving temperature for all products. (As clarification, some product manufacturers may refer to the tank water temperature as the “coffee preparation temperature” or “brewing temperature” while serving temperature is sometimes referred to as “dispensing temperature.”)

EPA is now seeking performance data, including the average tank water temperature during ready-to-brew mode; the average tank water temperature during energy save mode; and the maximum serving temperature during the heavy-use brew test. The American Society for Testing and Materials (ASTM) F2990 – 12 *Standard Test Method for Commercial Coffee Brewers* specifies how to measure the tank water temperature and serving temperature. However, the test method does not *require* reporting the serving temperature during the heavy-use brew test, nor does it establish allowable minimum or maximum ranges for the average tank water temperature or serving temperature.

For most products, the amount of energy consumed to reach a ready-to-brew state is directly proportional to the tank water temperature. The Specialty Coffee Association of America recommends that water used for brewing should be 200°F ± 5°<sup>3</sup>. EPA anticipates the tank water temperature for most products to fall within this range; however, the Agency is also interested to learn from manufacturers who are able to deliver a quality product at a lower temperature. Therefore, EPA requests the opportunity to review the additional temperature data described, to better understand the impact on overall energy performance. EPA will consider whether the

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<sup>1</sup> Tank water temperature is measured using a beaded thermocouple, by placing it no closer than 1/2 in. (1.27 cm) from rear wall and bottom of the tank no closer than 1/4 in. (0.635 cm) from the heating element. (See ATSM F2990-12, Section 9.6 for reference.)

<sup>2</sup> Serving temperature is the temperature of the beverage delivered from a brewing machine, during the heavy-use brew test, measured at the dispensing outlet. (See ATSM F2990-12, Section 3.2.9 for reference.) The maximum temperature reading by the thermocouple should be recorded as the serving temperature. Measure using a thermocouple positioned on the inside of the bottom and center of the brew basket.

<sup>3</sup> <http://www.scaa.org/PDF/resources/golden-cup-standard.pdf>

impact of the additional data warrants amending the current ENERGY STAR certification requirements to address temperature.

Based on their design, EPA is under the impression that all Type II coffee brewers have an internal heated water tank. Therefore, it is possible to obtain an average tank water temperature reading for every product that meets the definition of a Type II coffee brewer. The Agency is interested in learning of designs where this may not be the case for Type II brewers.

EPA has posted a data assembly template available on the Product Development website at [www.energystar.gov/revisedspecs](http://www.energystar.gov/revisedspecs). Stakeholders are encouraged to apply the ASTM F2990-12 test method, fill out the data assembly template and submit the forms back to EPA. Please note that the data EPA is assembling for this revision does not need to be third-party certified. Once the data collection has concluded, EPA will share the results of its analysis and next steps, which may include releasing a Draft 1 Version 2.0 specification with revised certification criteria.

In addition to any new model data, EPA encourages stakeholders to re-submit data for models that may have been considered in the Version 1.0 dataset using the updated template. At this time, EPA is not planning to revise the scope of the product category, however, the Agency welcomes the submission of Type I single-cup data, in addition to Type II batch brewer data.

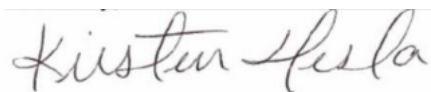
#### **Data Assembly**

EPA will consider all performance data shared with [commercialcoffeebrewers@energystar.gov](mailto:commercialcoffeebrewers@energystar.gov) by September 1, 2017. All performance data EPA receives will be masked; product manufacturers and models will not be disclosed.

To track EPA's progress in revising the ENERGY STAR Commercial Coffee Brewer specification, visit the Product Development website at [www.energystar.gov/revisedspecs](http://www.energystar.gov/revisedspecs). All specification development materials, including data plots to support the revised proposals, will be posted to this website.

Please feel free to contact me at (202) 564-2984 and [Hesla.Kirsten@epa.gov](mailto:Hesla.Kirsten@epa.gov) or Adam Spitz, ICF, at (916) 231-7685 and [Adam.Spitz@icf.com](mailto:Adam.Spitz@icf.com) with any questions regarding this specification revision, the test method, the data assembly template, or ENERGY STAR Partnership.

Sincerely,

A handwritten signature in cursive script that reads "Kirsten Hesla".

Kirsten Hesla, Product Manager  
ENERGY STAR Commercial Food Service