On behalf of the American Council for an Energy Efficient Economy (ACEEE), the Appliance Standards Awareness Project (ASAP), and the Natural Resources Defense Council (NRDC) we respectfully submit the following comments on the EPA ENERGY STAR’s Version 1.0, Draft 1 Specification for Commercial Boilers.

We support EPA’s initiative to develop an ENERGY STAR specification for commercial boilers, which are currently not included in the ENERGY STAR program. As EPA notes, the commercial boiler market is large, with 1.6 million installed units, and growing – particularly in the multifamily, school, and hospital markets. An ENERGY STAR specification is likely to positively influence these markets to select higher efficiency boilers and would be particularly useful for the multifamily sector. There is also significant variation in the efficiency of boilers found on the market with thermal efficiencies ranging from 77 percent to 98 percent, indicating an opportunity for energy savings through more efficient equipment.

We support the proposed specification of 94 percent thermal efficiency. The proposed specification of 94 percent thermal efficiency would deliver significant energy and emissions savings: according to EPA’s analysis, energy savings for products meeting the specification would be about 1,300 therms per year, and in total the specification could result in energy savings of 371 million therms per year and carbon dioxide emissions reductions of 1.9 million metric tons annually. There is also significant product availability at the proposed specification level, with 18 percent of products available on the market meeting the thermal efficiency and turndown ratio requirements. Finally, this level aligns with the FEMP criteria, which provides continuity for the market and increases the potential leverage of the specification.

We support the inclusion of a turndown ratio requirement. EPA has proposed a turndown ratio requirement of 5:1, meaning that to qualify a commercial boiler must be able to deliver a minimum firing rate that is at most 1/5 of its maximum firing rate. While in the long-term we encourage EPA to work with DOE to update the test procedure for commercial boilers to better capture part-load performance, requiring a minimum turndown ratio to qualify for ENERGY STAR is a good interim step to ensure that commercial boilers have the ability to operate at part load. The proposed turndown ratio is reasonable given the availability of commercial boilers at these levels. We also encourage EPA to consider establishing a mechanism to verify turndown ratio.

Thank you for the opportunity to submit these comments.

---

1 http://www.energystar.gov/sites/default/files/ENERGY%20STAR%20Commercial%20Boilers%20V1.0%20Draft1%20Cover%20Memo_0.pdf
Sincerely,

Harvey Sachs, Ph.D  
Senior Fellow  
American Council for an Energy-Efficient Economy

Joanna Mauer  
Technical Advocacy Manager  
Appliance Standards Awareness Project

Meg Waltner  
Manager, Building Energy Policy  
Natural Resources Defense Council