September 13, 2013

Amanda Stevens  
US Environmental Protection Agency  
Ariel Rios Building 6202J  
1200 Pennsylvania Avenue, NW  
Washington, DC 20460

RE: ENERGY STAR® Clothes Dryers Draft 2 Version 1.0 Specification

Dear Ms. Stevens,

On behalf of the Super Efficient Dryer Initiative (SEDI), represented by the Collaborative Labeling and Appliance Standards Program (CLASP), Vermont Energy Investment Corporation (VEIC), and Grasteu Associates, we respectfully submit the following comments on the ENERGY STAR® Program Requirements Product Specification for Clothes Dryers: Eligibility Criteria Draft 2 Version 1.0. SEDI is supported by the Northwest Energy Efficiency Alliance, the Northeast Energy Efficiency Partnerships and fourteen individual North American energy efficiency programs and advocates:

BC Hydro Pacific Gas & Electric  
Connecticut Light & Power Sacramento Municipal Utility District  
Connecticut Natural Gas Silicon Valley Power  
Efficiency Vermont Southern Connecticut Gas  
Long Island Power Authority United Illuminating  
National Grid Florida Solar Energy Center  
New Jersey Clean Energy Program San Diego Gas & Electric

Thank you for the opportunity to submit these comments.

Sincerely,

My Ton  
Christopher Wold  
Collaborative Labeling and Appliance Standards Program (CLASP)

Rebecca Foster  
Christopher Badger  
Vermont Energy Investment Corporation (VEIC)

Christopher Granda  
Grasteu Associates


SEDI Comments on the ENERGY STAR® Program Requirements
Product Specification for Clothes Dryers: Eligibility Criteria Draft 2
Version 1.0

Introduction
SEDI supports ENERGY STAR’s efforts to develop a specification that provides clear market signals to industry for the design and introduction of energy efficient clothes dryers. We anticipate that a strong ENERGY STAR specification will support the development of a robust market of qualified clothes dryers with a range of different performance levels, technologies, and price points. The Draft 2 Version 1.0 ENERGY STAR Program Requirements for Clothes Dryers goes a long way towards achieving this goal. In particular, we strongly support EPA’s decision to increase the stringency of the efficiency criteria and to require use of Appendix D2 of the DOE test procedure for the measurement of clothes dryer energy consumption.

ENERGY STAR Clothes Dryer Market Strategy
We encourage the EPA to provide additional guidance as to how the 2014 extension of the ENERGY STAR Emerging Technology Award (ETA) for clothes dryers and the ENERGY STAR clothes dryer program will work together in the market. Clear guidance for manufacturers, retailers, and energy efficiency program providers is needed to support the continued advancement of efficient clothes dryers in the market.

SEDI supports the EPA’s continued support of at least two energy performance levels, or tiers, as a way of encouraging manufacturers to introduce a range of new, more energy efficient products. We believe that the lower tier should be defined by the “ENERGY STAR Program Product Specification for Clothes Dryers” and the higher tier should initially be defined by the ETA requirements for clothes dryers and by the ENERGY STAR Most Efficient designation in the longer term. We recommend that EPA clarify how these three ENERGY STAR program designations will work together over time.

In addition, we support the EPA in harmonizing all ENERGY STAR program designations to measure performance using Appendix D2 of the DOE test procedure. The ENERGY STAR performance tiers should be designed to be consistent and complementary, provide a pathway for industry on desired improvements in clothes dryer efficiency, and seek to advance use of Appendix D2 of the DOE test procedure.

Definitions
SEDI supports EPA’s decision to expand the definitions of clothes dryers to cover full-size ventless electric clothes dryers and 120V ventless electric compact dryers. The new and expanded definitions for electric and gas dryers will allow new high efficiency products to qualify for the ENERGY STAR program and provide a broader range of choice for the end consumer.

Efficiency Criteria
SEDI supports EPA’s decision to revise the efficiency (Combined Energy Factor, CEF) criteria, which EPA estimates will provide 20% energy savings over the baseline. In 2011, SEDI engaged several clothes dryer manufacturers in order to better understand the energy saving potential for North American conventional clothes dryers. While the scope of these conversations was
limited to electric dryers, manufacturers identified several modifications to existing technology (e.g., increasing the air tightness of the unit) which combined together would substantively increase energy efficiency. In addition, recent Ecova testing identified a North American electric clothes dryer that increased its efficiency by 8%\(^1\) when operating in “eco-mode”.\(^2\) Ecova has also investigated the efficiency of gas dryers and identified several modifications that would improve efficiency.\(^3\) Based on this information, we believe the new proposed efficiency criteria is an achievable and critical first step in delivering on the energy savings potential of North American clothes dryers.

Referencing the Amended DOE Test Procedure
As noted above, SEDI strongly supports EPA’s decision to use Appendix D2 of the DOE test procedure for the ENERGY STAR clothes dryer program. Laboratory testing conducted by DOE and Ecova on behalf of multiple SEDI sponsors demonstrates the energy savings potential of automatic termination; Appendix D2 allows manufacturers to measure and report on their use of this energy saving feature. Measuring clothes dryer energy consumption using Appendix D2 will more effectively differentiate efficiency performance between clothes dryers and incentivize manufacturers to improve automatic termination technology.

Removal of the Automatic Termination Criteria
SEDI supports EPA’s decision to remove the automatic termination criteria. Testing dryers using Appendix D2 of the DOE test procedure will incentivize manufacturers to design their products with automatic termination; therefore an additional requirement should not be necessary.

SEDI proposes that EPA collaborate with clothes dryer manufacturers to establish requirements for a clothes dryer user interface that offers an unequal choice hierarchy to encourage user selection of the automatic termination option rather than timed cycles. ENERGY STAR could further enhance this user interface requirement by requiring manufacturers to clearly identify the automatically terminated cycle option as the primary or preferred efficient option through labeling, placement on the control panel, and language in the product manual.

Reporting Requirement for Drying Time
SEDI supports EPA’s decision to remove the maximum dryer time requirement as proposed in Draft 1. As written, this requirement could have had the unintended consequence of preventing the early adoption of advanced clothes dryer technology (e.g. heat pump). As highlighted by Ecova on behalf of the California IOUs, conventional dryers could meet the ENERGY STAR specification requirements by significantly slowing down the drying time instead of utilizing improved clothes drying technology (e.g., automatic termination). SEDI encourages EPA to investigate this issue further in order to identify a solution that will both ensure new highly efficient technologies are not excluded from the program while also encouraging manufacturers to improve clothes drying technology.

To this end, SEDI also supports EPA’s decision to require manufacturers to report drying time.

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\(^1\) The clothes dryer was tested according to the DOE 2005 clothes dryer test procedure.

\(^2\) The final report summarizing this testing can be found on CLASP’s website: [www.clasponge.org](http://www.clasponge.org).

\(^3\) See NRDC's report on clothes dryer efficiency: [http://www.appliance-standards.org/sites/default/files/NRDC_Ecova_dryer_study_0.PDF](http://www.appliance-standards.org/sites/default/files/NRDC_Ecova_dryer_study_0.PDF)
This will allow EPA to track the drying time of new products entering the North American market and consider the need for a drying time requirement in future versions of the specification. SEDI also suggests that EPA require reporting of the clothes dryer rated ventilation rate (CFM) for qualifying models. Both of these metrics, drying time and ventilation rate, will help inform efficiency program estimates of heating and cooling impacts from ventilated dryers on residential homes.

**Achieving Benefits Through “Connected” Functionality**

SEDI agrees that maintaining openness, function, and communication technology neutrality toward “Connected” functionality in the ENERGY STAR clothes dryer requirements will allow EPA to avoid conflicts with the many interested parties working on integration of home appliances into a future, more intelligent grid.

We support EPA’s plans to work with DOE to develop a test procedure for “Connected” functionality. We also believe that any performance credit awarded for “Connected” functionality should be proportional to the energy efficiency benefit provided by that functionality to the individual customer or utility, and not provide a mechanism for manufacturers obtain ENERGY STAR qualification for clothes dryers that do not actually provide significant energy savings in typical use. Further, as initial improvements to conventional dryers seeking to meet the ENERGY STAR specification may include lengthening the drying time and reducing the heater power levels, it is important to not double count energy savings from any demand response functionality.

**Warranty**

SEDI encourages EPA to reconsider the decision to remove warranty requirements, especially as part of the ETA specification or ENERGY STAR Most Efficient, as warrantees may contribute to customer value without commensurate increase in incremental cost. We also believe warrantees can play an important role in increasing consumers’ willingness to adopt new technologies. As the laundry industry is developing and deploying new technology to meet or surpass the performance levels in the draft specification, SEDI asks that EPA ensure that qualifying products are covered by a meaningful warranty. SEDI suggests that EPA establish warranty requirements for ENERGY STAR clothes dryers that are double the current industry standard warranty duration, a precedent set in other ENERGY STAR specifications.