



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

OFFICE OF
AIR AND RADIATION

September 14, 2012

Dear ENERGY STAR[®] Partners and Stakeholders:

The U.S. Environmental Protection Agency (EPA) is pleased to announce that ENERGY STAR Most Efficient recognition will be transitioned out of the pilot phase and extended into 2013 as an ongoing element of the ENERGY STAR program. This letter provides highlights from our evaluation of the pilot program and proposes 2013 ENERGY STAR Most Efficient recognition criteria for 11 product categories.

ENERGY STAR Most Efficient Pilot Program Evaluation

As you are aware, the goal of the ENERGY STAR Most Efficient recognition program is to drive more energy efficient products into the market more quickly. Our evaluation of the pilot phase sought to document the extent to which the initiative shows early signs of having the potential to deliver on that objective. In addition to assessing any increase in recognized models on the market over the two-year period, we examined the potential for leveraging private sector activities to increase consumer exposure to the ENERGY STAR Most Efficient designation going forward. The evaluation also looked for early indications of any harm to the underlying ENERGY STAR label.

Key findings include:

- Overall, and in some categories in particular, the number of recognized models increased over the pilot period
- Visibility of the ENERGY STAR Most Efficient designation is beginning to grow
- Program uptake is increasing, in the form of marketing and promotion, across all three key partner categories: retailers, manufacturers, and energy efficiency program sponsors
- There is no indication of any discernible adverse impact in terms of consumer perception of the ENERGY STAR label

As a part of the pilot evaluation, EPA conducted guided interviews with a small group of early program participants, including manufacturers, energy efficiency program sponsors and one national retailer. A number of suggestions for improving the program emerged from these interviews related to program planning, program promotion, product availability and improving consumer understanding. These and other aspects of the evaluation are described in greater detail in a summary report which will be made available in the next few weeks.

EPA recognizes that going forward, the ENERGY STAR Most Efficient recognition program will serve the needs of some but not all energy efficiency program sponsors interested in promoting higher tiers of product efficiency. The Agency will continue to coordinate with the Consortium for Energy Efficiency (CEE) in the development of performance requirements for ENERGY STAR, ENERGY STAR's Most Efficient, and CEE tiers. EPA will also work closely with TopTen USA, exploring opportunities to build on our current partnership with them to ensure the programs complement each other rather than compete in the market.

2012 Outcomes

In the second year of the pilot, more than 1400 qualifying models from over 50 manufacturers are recognized as ENERGY STAR Most Efficient 2012. The number of models and manufacturers per category is noted in the following table.

ENERGY STAR Most Efficient 2012 Recognized Models As of 9/4/2012		
<i>Product Categories</i>	<i>Unique Models (#)</i>	<i>Manufacturers with Recognized Models</i>
Air-Source Heat Pumps	60	4
Boilers	74	11
Central Air Conditioners	72	6
Clothes Washer	66	8
Furnaces	131	5
Geothermal Heat Pumps	593	5
Refrigerators-Freezers	80	8
Televisions	337	27

2013 Categories and Recognition Criteria

For 2013, EPA and the U.S. Department of Energy (DOE) are proposing to add four new categories to the ENERGY STAR Most Efficient recognition program: ventilating fans, ceiling fans, computer monitors, and windows. These stood out in this year's review of ENERGY STAR product categories for having characteristics making them attractive for ENERGY STAR Most Efficient recognition. Among the pool of ENERGY STAR qualified ceiling fans and ventilating fans, a small subset incorporate direct current motors and use dramatically less energy. Triple pane windows offer a significant leap in energy performance compared to double pane. And the wide ranging energy performance among ENERGY STAR certified computer monitors offers the opportunity to further differentiate in a category of interest to early adopters.

Proposed recognition criteria for 2013 were developed in consultation with the DOE. Criteria for clothes washers and televisions are changed from 2012 in response to advances in the market. Further, EPA is proposing tailored requirements for ductless heating and cooling equipment recognizing different product applications than ducted products. For the remaining product types, 2012 recognition criteria have been maintained as the current levels continue to deliver on the program principle of recognizing the very top performers in a product category.

The proposed 2013 ENERGY STAR Most Efficient criteria are summarized below. In addition to meeting these performance requirements, products must be certified as ENERGY STAR by an EPA-recognized certification body. Additional detail for each product category is included in the requirements documents accompanying this letter.

Category	Requirements		
Boilers*	Gas Powered Boilers: 95 AFUE or higher; Oil Powered Boilers: 90 AFUE or higher		
Ceiling Fans	Efficiency (cubic feet per min/W) ≥170 high speed, ≥270 medium speed, ≥400 low speed		
Clothes Washers	Clothes Washer Volume	MEF	WF
	≤ 2.5 cubic feet	≥ 2.4	≤ 4.5
	> 2.5 cubic feet	≥ 3.2	≤ 3.0
Central Air Conditioners*	≥18 SEER & 12.5 EER for split CAC, 16 SEER & 12 EER for packaged CAC; communications, system status, and automated configuration		

Category	Requirements
Air-Source Heat Pumps*	≥18 SEER, 12.5 EER, & 9.6 HSPF for split systems; 16 SEER, 12 EER & 8 HSPF for packaged systems; communications, system status, and automated configuration
Ductless AC and Heat Pumps	≥20 SEER & 12.5 EER and (for heat pumps) 9.6 HSPF; filter check and service needed alerts
Computer Monitors	$P_{max} = (6 \cdot r) + (0.032 \cdot A) - 3.800$ Where: P_{max} = maximum allowable On Mode Power consumption in watts r = screen resolution in megapixels A = viewable screen area of the product in square inches
Furnaces*	≥97% AFUE; communications, system status, and automated configuration
Geothermal Heat Pumps*	Equivalent to Tier 3 levels established in the ENERGY STAR Program Requirements; communications, system status, and automated configuration
Refrigerator-freezers*	≤481 kWh per year; at least 30% better than Federal standard
Televisions	$P_{max} = 55 \cdot \text{TANH}(0.00083(A-150) + 0.055) + 12$ Where: P_{max} = maximum allowable On Mode Power consumption in watts A = viewable screen area of the product in square inches TANH = hyperbolic tangent function
Ventilating Fans	Bathroom/utility fans only; Efficacy(cubic feet per min/W) 7.5 cfm/W high speed for 10-89 cfm fans 6.8 cfm/W high speed for ≥90 cfm fans
Residential Windows	U-factor ≤0.20 Visible Transmittance(VT) ≥0.40 SHGC follows ENERGY STAR Version 5.0 Specification North American Fenestration Standard/Specification (NAFS) Performance Grade ≥15

*Proposed criteria carried over from 2012 for these categories.

ENERGY STAR Most Efficient 2013 Recognition

ENERGY STAR certified products meeting these requirements will be highlighted as ENERGY STAR Most Efficient for 2013 at: www.energystar.gov/moste efficient. EPA will contact partners with certified products that meet the ENERGY STAR Most Efficient criteria to share the 2013 ENERGY STAR Most Efficient designation and usage guidelines (see the 2013 Most Efficient marketing graphic shown on the next page), and invite them to augment their product listing with the following:

- A product photo in a jpg file of at least 200 pixels for the ENERGY STAR Most Efficient web page; and
- A product description for use on the web page (i.e., key features and functionalities). The first 50 words will be displayed beside the product photo on the web page; additional text will link to a separate web page.

For all HVAC product categories **except boilers**, partners must continue to apply for recognition in order for the Agency to verify the communications/system status requirements. To this end, partners must submit installation and maintenance manuals for the system confirming operation of the system controller, communications, system status and automated configuration capability. Documentation associated with the controller is acceptable if it can be associated with the HVAC equipment model numbers that are submitted for recognition. Once EPA has confirmed product eligibility for recognition, the 2013 ENERGY STAR Most Efficient designation will be provided along with ENERGY STAR Most Efficient designation usage guidelines. Since the recognition criteria have not changed, HVAC products recognized in 2012 need not be resubmitted.

For window products, partners will also need to apply for recognition in order for the Agency to verify that a product meets the recognition criteria outlined above. At a minimum, partners will need to submit the product's National Fenestration Rating Council (NFRC) Certified Products Directory Number, evidence of NAFS certification, and test reports indicating a Performance Grade of 15 or better. Detailed application instructions will be provided at a later date. Once EPA has confirmed product eligibility for recognition, the 2013 ENERGY STAR Most Efficient designation will be provided along with ENERGY STAR Most Efficient designation usage guidelines. Doors, skylights, tubular daylighting devices and special designation for dynamic window products are not being considered for 2013 but may be considered in the future.

The ENERGY STAR Most Efficient designation is intended for use at point-of-sale on point-of-purchase materials, product literature, and websites. It may not be factory-applied to products or product packaging. Failure to abide by these guidelines may result in loss of recognition. EPA will highlight recognized products on the ENERGY STAR 2013 Most Efficient web page through December 30, 2013.



EPA will hold a stakeholder webinar on **Thursday, September 27, 2012 from 11AM to 1 PM Eastern Time** to discuss the proposed 2013 recognition criteria. To participate in this webinar, please register with mostefficient@energystar.gov by Tuesday, September 25th. Please share written comments no later than **Friday, October 12, 2012** with mostefficient@energystar.gov.

EPA and DOE plan to finalize these recognition requirements by late-October 2012. Partners' certified products that meet these recognition criteria will be highlighted on the ENERGY STAR Most Efficient website beginning January 1, 2013.

Thank you for your support of the ENERGY STAR program.

Sincerely,

A handwritten signature in black ink, appearing to read "Ann Bailey".

Ann Bailey, Director
ENERGY STAR Product Labeling