



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

OFFICE OF
AIR AND RADIATION

January 19, 2012

Dear ENERGY STAR[®] Stakeholder,

The U.S. Environmental Protection Agency (EPA) is pleased to announce the final 2012 recognition criteria for the Most Efficient of ENERGY STAR. In the second year of this pilot effort, eight product categories will be eligible for recognition: air-source heat pumps, boilers, central air conditioners, clothes washers, furnaces, geothermal heat pumps, refrigerator-freezers, and televisions. With this letter, the Agency is sharing final recognition criteria and a comment response document, along with instructions for obtaining recognition in 2012.

EPA thanks the 14 individuals and stakeholder groups who submitted comments in response to the 2012 proposal released on November 21, 2011. EPA appreciates the constructive input provided on both the overall pilot program and proposed product recognition criteria. Careful consideration has been given to a range of suggestions encouraging adjustments to the criteria—both tightening and loosening stringency, expansion of included product types, and improved harmonization with existing programs. In considering these comments, the Agency sought to balance stakeholders' feedback with the fundamental principles of this pilot program, including criteria that recognize truly exceptional efficiency performance.

In response to the input received and in consultation with the Department of Energy, the Agency has adopted the following changes to the November proposal:

- **90 AFUE for oil boilers:** Having reviewed savings information and model availability, EPA has concluded that recognizing 90 AFUE oil boilers is consistent with the intent of the ENERGY STAR Most Efficient designation, and has modified the criteria accordingly.
- **Consistency in refrigerator classifications:** A clarification has been incorporated into the recognition criteria indicating that unless otherwise noted, a product class is assumed to have automatic defrost.

The 2012 recognition criteria for ENERGY STAR's Most Efficient are summarized on the following page. In addition to meeting these performance requirements, products must be certified as ENERGY STAR by an EPA-recognized certification body. Additional details about each product area are included in the requirement documents attached to this letter.

SUMMARY OF ENERGY STAR MOST EFFICIENT 2012 FINAL PRODUCT CRITERIA

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		
Boilers	95 AFUE or higher; Oil Powered Boilers: 90 AFUE or higher		
Clothes Washers	Clothes Washer Volume	MEF	WF
	≤ 2.5 cubic feet	≥ 2.3	≤ 4.5
	> 2.5 cubic feet	≥ 3.0	≤ 3.3
Central Air Conditioners	≥18 SEER & 12.5 EER for split CAC, 16 SEER & 12 EER for packaged CAC; communications, system status, and automated configuration		
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	$P_{\max}=82*\text{TANH}(0.00084(A-150)+0.05)+12.75$ <p>Where:</p> <ol style="list-style-type: none"> 1. P_{\max} = maximum allowable On Mode Power consumption in W 2. A = viewable screen area of the product in square inches 3. TANH =hyperbolic tangent function 		

MOST EFFICIENT RECOGNITION

ENERGY STAR certified products meeting these requirements will be highlighted as Most Efficient for 2012 at: www.energystar.gov/mostefficient. For boilers, clothes washers, refrigerator-freezers, and televisions, the list will be drawn and periodically updated from ENERGY STAR qualified product lists. EPA will contact partners with certified products that meet the ENERGY STAR Most Efficient criteria to share the Most Efficient 2012 designation and usage guidelines (see 2012 Most Efficient marketing template enclosed below), 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 display 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.

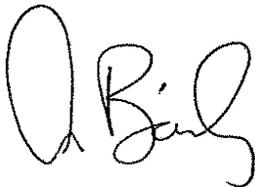
For all HVAC product categories *except boilers*, partners must continue to apply for Most Efficient recognition in order for the Agency to verify the communications/system status

requirements. To this end, manufacturers 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 Most Efficient 2012 designation will be provided along with Most Efficient designation usage guidelines. Since the recognition criteria have not changed, HVAC products recognized in 2011 need not be resubmitted.

The 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 2012 Most Efficient web page through December 31, 2012.

EPA looks forward to recognizing your ENERGY STAR Most Efficient 2012 products and helping consumers find them.

Sincerely,



Ann Bailey, Director
ENERGY STAR Product Labeling



Enclosures:

ENERGY STAR Most Efficient 2012 Requirements for Boilers, Central ACs and Heat Pumps, Clothes Washers, Refrigerator-Freezers, and Televisions (6 documents)

Comment Summaries and EPA Responses for Appliances, Televisions, HVAC Products, and General Topics (4 documents)