



## ENERGY STAR® Program Requirements for Room Air Conditioners

### Partner Commitments

#### Commitment

The following are the terms of the ENERGY STAR Partnership Agreement as it pertains to the manufacturing of ENERGY STAR qualified room air conditioners. The ENERGY STAR PARTNER must adhere to the following program requirements:

- Comply with current ENERGY STAR Eligibility Criteria, defining the performance criteria that must be met for use of the ENERGY STAR certification mark on room air conditioners and specifying the testing criteria for room air conditioners. At its discretion, U.S. Department of Energy (DOE) may conduct tests on products that are referred to as ENERGY STAR qualified. These products may be obtained on the open market, or voluntarily supplied by PARTNER at DOE's request;
- Comply with current ENERGY STAR Identity Guidelines, describing how the ENERGY STAR marks and name must be used. PARTNER is responsible for adhering to these guidelines and for ensuring that its authorized representatives, such as advertising agencies, dealers, and distributors, are also in compliance;
- Qualify at least one ENERGY STAR qualified room air conditioner model within one year of activating the room air conditioners portion of the agreement. When PARTNER qualifies the product, it must meet the current criteria in effect at that time;
- Provide clear and consistent labeling of ENERGY STAR qualified room air conditioners. The ENERGY STAR certification mark must be clearly displayed on the top/front of the product (by placement of the ENERGY STAR mark on the FTC's EnergyGuide label, on product labels, and/or as a permanent mark), on the manufacturer's Internet site where information about ENERGY STAR qualified models is displayed, and in product literature (i.e., user manuals, spec sheets, etc.). It is also recommended that the ENERGY STAR certification mark appear on product packaging;
- Provide to DOE, on an annual basis, an updated list of ENERGY STAR qualifying room air conditioner models. Once the PARTNER submits its first list of ENERGY STAR qualified room air conditioner models, the PARTNER's company name will be listed as an ENERGY STAR PARTNER. PARTNER must provide annual updates in order to remain on the list of participating product manufacturers;
- Notify DOE of a change in the designated responsible party or contacts for room air conditioners within thirty days.

## Performance for Special Distinction

To receive additional recognition and/or support from DOE for its efforts within the Partnership, the ENERGY STAR PARTNER may consider the following voluntary measures and should keep DOE informed on the progress of these efforts:

- Consider energy efficiency improvements in company facilities and pursue to benchmark their buildings through the ENERGY STAR Buildings program;
- Purchase ENERGY STAR qualified products. Revise the company purchasing or procurement criteria to include ENERGY STAR. Provide procurement officials' contact information to DOE for periodic updates and coordination. Circulate general ENERGY STAR qualified product information to employees for use when purchasing products for their homes;
- Ensure the power management feature is enabled on all ENERGY STAR qualified monitors in use in company facilities, particularly upon installation and after service is performed;
- Provide general information about the ENERGY STAR program to employees whose jobs are relevant to the development, marketing, sales, and service of current ENERGY STAR qualified product models;
- Feature the ENERGY STAR mark(s) on PARTNER web site and in other promotional materials. If information concerning ENERGY STAR is provided on the PARTNER web site, DOE may provide links where appropriate to the PARTNER web site;
- Provide a simple plan to DOE outlining specific measures PARTNER plans to undertake beyond the program requirements listed above. By doing so, DOE may be able to coordinate, communicate, and/or promote PARTNER's activities, provide a DOE representative, or include news about the event in the ENERGY STAR newsletter, on the ENERGY STAR web pages, etc. The plan may be as simple as providing a list of planned activities or planned milestones for which the PARTNER would like DOE to be aware. For example, activities may include:
  - (1) Increase the availability of ENERGY STAR qualified products by converting the entire product line within two years to meet ENERGY STAR guidelines;
  - (2) Demonstrate the economic and environmental benefits of energy efficiency through special in-store displays twice a year;
  - (3) Provide information to users (via the web site and user's manual) about energy-saving features and operating characteristics of ENERGY STAR qualified products, and
  - (4) Build awareness of the ENERGY STAR Partnership and brand identity by collaborating with DOE on one print advertorial and one live press event;
- Provide quarterly, written updates to DOE as to the efforts undertaken by PARTNER to increase availability of ENERGY STAR qualified products, and to promote awareness of ENERGY STAR and its message.



## ENERGY STAR® Criteria for Room Air Conditioners as of November 16, 2005

Below are the product criteria for ENERGY STAR qualified room air conditioners. A product must meet all of the identified criteria to be identified as ENERGY STAR qualified by its manufacturer.

1) DEFINITIONS:

- a) **Energy Efficiency Ratio (EER):** This is the ratio of the cooling effect measured in BTU per hour divided by the electrical energy input in measured Watts.
- b) **RAC:** The acronym for room air conditioner.
- c) **TTW:** Room air conditioner units without louvered sides are also referred to as “through the wall” units. TTW is the acronym of this term. These units may also be referred to as “built-in” units.
- d) **Casement-only:** Refers to a RAC designed for mounting in a casement window with an encased assembly with a width of 14.8 inches or less and a height of 11.2 inches or less.
- e) **Casement-slider:** Refers to a RAC with an encased assembly designed for mounting in a sliding or casement window with a width of 15.5 inches or less.
- f) **Reverse Cycle:** Refers to the heating function found in certain room air conditioner models.
- g) **PTAC:** The acronym for packaged terminal air conditioner. PTACs include self-contained air conditioning units and may connect to an external heating system or may include electrical resistance heating. PTACs are not covered under NAECA’s RAC product classes. EPACT mandates that ASHRAE Standard 90.1-2001 govern PTAC energy performance.

- 2) **QUALIFYING PRODUCTS:** Under the previous ENERGY STAR criteria, the existing eligible products were cooling-only RACs without reverse cycle, which consist of window RACs, through-the-wall RACs, and the casement and slider-casement RAC products. On October 1, 2005, the ENERGY STAR room air conditioner criterion expanded to include louvered and non-louvered reverse-cycle RACs (or heat pump RACs). Also, PTACs are not currently eligible for participation under this criterion.

- 3) ENERGY STAR Criteria: The EER must exceed the corresponding 2000 NAECA standard by 10%. Only those products listed in Section 2 that meet the criteria below may qualify as ENERGY STAR.

Capacity (BTU/hour)	Federal Standard EER (with louvered sides)	ENERGY STAR EER (with louvered sides)	Federal Standard EER (without louvered sides)	ENERGY STAR EER (without louvered sides)
< 6,000	≥ 9.7	≥ 10.7	≥ 9.0	≥ 9.9
6,000 to 7,999				
8,000 to 13,999	≥ 9.8	≥ 10.8	≥ 8.5	≥ 9.4
14,000 to 19,999	≥ 9.7	≥ 10.7		
≥ 20,000	≥ 8.5	≥ 9.4		
Casement	Federal Standard EER		ENERGY STAR EER	
Casement-Only	≥ 8.7		≥ 9.6	
Casement-Slider	≥ 9.5		≥ 10.5	
REVERSE CYCLE				
Capacity (BTU/hour)	Federal Standard EER (with louvered sides)	ENERGY STAR EER (with louvered sides)	Federal Standard EER (without louvered sides)	ENERGY STAR EER (without louvered sides)
< 14,000			≥ 8.5	≥ 9.4
≥ 14,000			≥ 8.0	≥ 8.8
< 20,000	≥ 9.0	≥ 9.9		
≥ 20,000	≥ 8.5	≥ 9.4		

- 4) Test Criteria: Room air conditioner manufacturers must self-test their equipment according to DOE's test procedure defined in 10 CFR 430, Subpart B, Appendix F.
- 5) Effective Date: The effective date of this criterion is **November 16, 2005**.
- 6) Future Criteria Revisions: DOE reserves the right to change the criteria should technological and/or market changes affect its usefulness to consumers, industry, or the environment. Keeping with current policy, industry/stakeholder discussions determine revisions to the criteria.