







# ENERGY STAR® Program Requirements for Televisions

## Eligibility Criteria (Version 3.0)

**DRAFT 2**

Below is the product specification for ENERGY STAR qualified TVs (Version 3.0). A product must meet all of the identified criteria to be labeled as ENERGY STAR by its manufacturer.

1) **Definitions:** Below is a brief description of TVs and other terms as relevant to ENERGY STAR.

- A. **Television (TV):** A commercially available electronic product designed primarily for the display and reception of audiovisual signals from terrestrial, cable, satellite, Internet Protocol TV (IPTV), or other transmission of analog and/or digital signals, consisting of a tuner/receiver and a display encased in a single housing. The product usually relies upon a cathode-ray tube (CRT), liquid crystal display (LCD), plasma display, or other display device.
- B. **Television Monitor:** An electronic product intended to display a video signal from an external tuner or other video source such as a VCR or DVD player on a CRT, LCD, plasma display, or other display device. For purposes of this agreement, this definition includes analog and digital television monitors. Television monitors with computer capability (e.g., computer input port) may qualify as ENERGY STAR under this specification as long as they (i) are marketed and sold to consumers as television monitors (i.e., focusing on television/video as the primary function) and (ii) incorporate Display Power Management Signaling (a standard from the VESA consortium for managing the supply of power of video monitors for computers through the graphics card) so that users may benefit from power management, allowing the product to automatically enter a low power mode after a certain period of inactivity, when it is being driven by a computer.

**Note:** The above definition for a TV Monitor is broadly consistent with the definition in the ENERGY STAR Version 2.2 specification, and identical to what was proposed by the Consumer Electronics Association in their comments on the Draft 1 Version 3.0 TV products specification, with the addition of Display Power Management Signaling for those products that are also sold with computer input ports, e.g., VGA. EPA has made this addition to ensure that consumers who purchase TV monitors and then elect to use them with computers may still benefit from the additional power consumption savings achieved through power management.

- C. **Rear-Projection TV:** A type of TV in which the display device is a projector that focuses images onto a screen located within the housing of the TV.
- D. **Direct-View TV:** A type of TV whose display device emits light either directly from the screen surface or transmits light from a source mounted directly behind the screen. Examples include CRT, LCD, and plasma display technologies.
- E. **TV Combination Unit:** A system in which the TV and an additional device(s) (e.g., DVD player, HDD, VCR, etc.) are combined into a single unit and which meets all of the following criteria: the additional device(s) is included in the television casing; it is not possible to measure the power requirements of the two (or more) components separately without removal of the television casing; and the system is connected to the wall outlet through a single power cable.

**Note:** The above definition for a TV Combination Unit is consistent with the definition for each type of Combination Unit (e.g., TV/DVD Combination Unit, etc) provided in the Draft 1 Version 3.0 TV products specification. EPA has combined the TV Combination Unit definitions in this Draft 2 specification to allow manufacturers flexibility in qualifying other types of TV Combination Units in the future, which are not currently available on the market, but would meet the definition provided above.

- F. **Component Television Unit:** A television system composed of two or more separate components (e.g., display device and tuner) marketed and sold as a television under one model or system









## 2. Tier 2: TBD

**Note:** At the July 19, 2007 ENERGY STAR TV Stakeholder meeting, CEA agreed to work with its members to develop a proposal regarding testing and suggested power consumption requirements for DAM. EPA looks forward to receiving this proposal from CEA, so that it may be integrated into the proposed requirements for the ENERGY STAR Version 3.0 TV products specification. In the interim, EPA received significant stakeholder feedback on the DAM requirements proposed in the Draft 1 specification, specifically focused on the power consumption requirements, the time limit for DAM, the functionality addressed by DAM, and how to test power consumption while in this mode. EPA has integrated this feedback into the Draft 2 specification where appropriate, and anticipates making further modifications once it receives CEA's proposal.

Additionally, at the July 19, 2007 meeting, a stakeholder requested that EPA consider TV products with Public Alert capabilities under this proposed Draft 2 specification, EPA requested information on the potential additional power draw of this feature and the period of time the product is in the elevated power state in the Action Items from the meeting but to date, has not received any additional information. As such, stakeholders are encouraged to provide information specific to the Public Alert feature in their comments on these proposed Draft 2 requirements, otherwise EPA will be unable to address this feature under the Version 3.0 TV products specification.

- C. **Standby Level:** To qualify as ENERGY STAR under both Tier 1 and Tier 2 of this specification, TVs, TV Combination Units, Television Monitors, and Component Television Units must not exceed power consumption of 1 watt in Standby Mode. Additionally, this lowest power consuming Standby Mode must be the default Standby Mode for the TV as shipped to consumers. Measurements are to be taken without a POD module, if present on the product, installed.

**Note:** Based on stakeholder feedback, EPA has clarified that the POD module, if available, should not be installed when determining power consumption in Standby Mode.

- D. **User Information Requirement:** In order to ensure that consumers are properly informed of the benefits of keeping their TVs in the default modes as shipped, particularly for those models that incorporate additional features and functionality that, if employed, would result in increased energy use beyond that intended by the ENERGY STAR requirements for On, DAM, and Standby Mode, the manufacturer will include with each TV one of the following:
- Information on ENERGY STAR and the benefits of keeping the TV at its factory default settings that meet ENERGY STAR criteria in either a hard copy or electronic copy of the user manual. Where necessary, manufacturers will also include language advising consumers that enabling certain features and functionality in their TV (e.g., instant-on) will increase its energy consumption, possibly beyond the limits required for ENERGY STAR qualification. This information should be near the front of the user manual; or,
  - A package or box insert on ENERGY STAR and the benefits of keeping the TV in its factory default modes. Where necessary, manufacturers will also include language advising consumers that enabling certain features and functionality in their TV (e.g., instant-on) will increase its energy consumption, possibly beyond the limits required for ENERGY STAR qualification.

**Note:** Several stakeholders asked if the User Information Requirement proposed in the Draft 1 Version 3.0 specification applied to all modes, or only to Standby Mode. EPA wishes to clarify that the User Information Requirement applies to all three operational modes specified: On Mode, Standby Mode, and DAM.

- 4) **Test Methodology:** Manufacturers are required to perform tests and self-certify those models that meet the ENERGY STAR guidelines.
- In performing these tests, partner agrees to use the test procedures outlined in Table 3, below, with the clarifications outlined in Section 4.E.1.
  - The test results must be reported to EPA.







