



## Proposed Recognition Criteria Computer Monitors

### Scope

*Included products.* Computer Monitors, as defined below, are eligible for ENERGY STAR® Most Efficient recognition in 2017.

**Computer Monitor:** An electronic display intended for one person to view in a desk based environment.

*Excluded products:* Signage Displays as defined by the ENERGY STAR Version 7.0 specification are not eligible for ENERGY STAR Most Efficient recognition in 2017.

### Recognition Criteria

1) Product must be ENERGY STAR certified consistent with applicable ENERGY STAR Partner Commitments and the requirements set forth in the ENERGY STAR Program Requirements Product Specification for Displays currently in effect. Product performance must be certified by a certification body recognized by the U.S. Environmental Protection Agency (EPA).

2) Additional requirements:

A. Total Energy Consumption ( $E_{TEC}$ ) in kilowatt-hours per year shall be calculated as follows:

$$E_{TEC} = 8.76 \times (0.35 \times P_{ON} + 0.65 \times P_{SLEEP})$$

Where:

$P_{ON}$  = measured On Mode power in watts;  $P_{SLEEP}$  = measured Sleep Mode power in watts;

B. Total Energy Consumption ( $E_{TEC}$ ) shall be less than or equal to Maximum allowable Total Energy Consumption in kilowatt-hours per year calculated as follows:

$$E_{TEC\_MAX} = 6.13 \times r + 55 \times \tanh(0.003 \times [A - 59] + 0.01) + 5.0$$

Where:

$A$  = viewable screen area in square inches;  $\tanh$  = hyperbolic tangent function; and

$r$  = Total Native Resolution in megapixels up to 5.0 megapixels total

Products with >5.0 megapixels Total Native Resolution can receive a maximum  $r$  of 5 megapixels, for a resolution allowance ( $6.13 \times r$ ) of 30.65 kilowatt-hours

### Recognition Period

EPA will add qualifying models to the ENERGY STAR Most Efficient 2017 product list for Computer Monitors from January 1, 2017 through December 31, 2017. The ENERGY STAR Most Efficient 2017 designation may be used in association with models recognized during this period for as long as the model remains on the market.