

Q & A DOCUMENT
ENERGY STAR® TELEVISION AND VCR PRODUCTS SPECIFICATION
REVISION

Why is EPA interested in the energy consumption of consumer electronics?

Consumer electronics sales are growing at an astounding rate. US households now own an average of 25 consumer electronics (CE) products and spend more than \$1,250 annually on these products. Sales of CE products grew 11% in 2004 and is expected to grow another 11% this year. By 2015, the number of CE products in each home is expected to rise by **35%**.

More products currently tends to mean greater energy consumption. Residential electricity demand is expected to **increase 119%** in 28 years (*International Energy Agency/US Energy Information Administration*). Residential electricity use by CE products alone has doubled since the late 1990s, and is responsible for up to **15%** of household electricity use (*Natural Resources Defense Council Study*) With about 266 million TVs currently in use, the number continues to grow by 3.5 million each year. Today, TVs account for about **4% of annual residential electricity** use in the US – enough to power all of the homes in New York state for an entire year (*Natural Resources Defense Council Study*).

Why is EPA revising the ENERGY STAR specification for televisions, television combination units and VCRs?

The current ENERGY STAR specification's focus on standby power does not reflect energy used by a product when it is operating. Active power consumption is becoming increasingly important due to changes in product technology and usage patterns that result in increased energy consumption. Such changes include:

- The advent of new display technologies, some of which *may* use significantly more energy than their traditional counterparts;
- The trend towards larger screen sizes;

- The marketing of televisions as part of “home theater packages,” which may be used in conjunction with a variety of audio and video devices, increasing overall system energy consumption;
- The burgeoning availability of new cable and satellite programming content, leading to increased television viewing; and,
- The growth in sales of game consoles, meaning there is an increase in the number of hours a typical television operates each day.

Moreover, it is currently possible for a television to earn the ENERGY STAR by meeting low standby levels while drawing significant power in active mode. This may lead to misinterpretation of the product’s overall energy efficiency by consumers. For these reasons, the current ENERGY STAR specification is insufficient to highlight the most efficient televisions in the marketplace.

How will EPA work with the international community on the development of a test procedure for televisions, television combination units and VCRs?

A number of key governments, including Canada, Australia and the European Union, have already expressed an interest in working with ENERGY STAR and the manufacturing community to develop a single, harmonized global test procedure for televisions. This test procedure could be used by each of these government entities, should they choose to implement policies to encourage the sale of more efficient televisions, thereby giving consumers a means to factor power consumption into the purchasing decision.

What is EPA considering for boxes or peripheral devices for televisions?

EPA is currently considering several options for a new, separate specification for these products. These options include (but are not limited to): setting energy-efficiency specifications for the products using a Duty Cycle Approach; setting energy-efficiency specifications for each operational mode of the product; and, addressing the product’s efficiency through its power supply. EPA will complete further research and communication with stakeholders prior to any decisions being made on the approach for this potential new ENERGY STAR specification.