

The 2005 Energy Policy Act: What It Means To You and Your Business

What is the 2005 Energy Policy Act (EPAct 2005)?

Signed into law on August 8, 2005 and set to take effect on January 1, 2006, this milestone act addresses matters ranging from the generation, transmission, and distribution of our nation's energy to our country's energy consumption and the efficiency of certain end user products. Key elements of the bill include:

- New efficiency standards for specific lighting, distribution transformer, and motor products
- Commercial building tax deductions to reward the use of energy-efficient technologies
- New energy efficiency goals for Federal buildings
- Development of standards for electric-powered devices using standby power
- Enhancements to the capacity, efficiency, and reliability of the interstate electric transmission grid
- Rate incentives to assure the recovery of investments in new transmission facilities as well as accelerated depreciation for transmission and distribution assets

Specific to the lighting arena, EPAct 2005 will have a number of very positive impacts on the nation's awareness and use of lighting technology as well as on the many manufacturers who make up the lighting industry.

How does EPAct 2005 impact lighting end users?

The Department of Energy estimates that lighting accounts for 25% of the nation's energy expenditures and as much as 40% of the typical commercial building's energy bill. The nation's lighting users will benefit from EPAct 2005 by capitalizing on the opportunity to significantly reduce their energy consumption and costs via a broad range of powerful and energy-efficient lighting technologies widely available in the market. Commercial lighting users will also have the opportunity to qualify for tax deductions rewarding the use of specific energy-efficient technologies.

What are the key lighting-related measures addressed by EPAct 2005?

Efficiency Standards for Lighting Products

The act enforces efficiency standards related to such lighting products as medium-screw base compact fluorescent lamps, energy-saving magnetic fluorescent ballasts, and mercury vapor ballasts. Specifically, standards go into effect for:

- Products manufactured on or after January 1, 2006 for illuminated exit signs, torchiere fixtures, traffic signals, pedestrian crosswalk modules, and medium-screw base compact fluorescent lamps.
- Energy-saving magnetic fluorescent ballasts manufactured on or after January 1, 2009, sold by a manufacturer on or after October 1, 2009, or incorporated into a luminaire on or after July 1, 2010.
- Mercury vapor lamp ballasts, which cannot be manufactured or imported after January 1, 2008.

Tax Deductions for Commercial Buildings

EPAct 2005 offers a tax deduction of up to \$1.80 per square foot for the certified use of qualifying energy-efficient technologies in both new construction or renovation applications.

- These deductions will reward the usage of specific energy-efficient lighting and building envelope products that reduce the building's total annual energy and power costs by at least 50% more than the ASHRAE 90.1-2001 standard (a commercial building reference standard for state building energy codes put forth by the American Society of Heating, Refrigerating, and Air Conditioning Engineers).
- Technologies that would help a building qualify for this tax deduction include lighting, HVAC, hot water systems, and other building envelope products.
- Lighting systems, HVAC, and building envelope products are each eligible for a partial \$.60 tax deduction in the event that the building does not qualify for the full \$1.80 per square foot tax deduction but one of these qualifying systems meets its designated energy-savings target.
- The length of the provision is two years, with the tax deductions available for all property placed in service between January 1, 2006 and December 31, 2007.

For more information on these tax deductions or the ASHRAE standards, please visit <http://www.nema.org/>, <http://www.energycodes.gov/>, or <http://www.ashrae.org/>.

Next Generation Lighting Initiatives

EPAct 2005 establishes funding for research and development into next-generation lighting initiatives, including advanced solid state lighting technologies based on white-light emitting LEDs and OLEDs, products which hold great promise for providing bright and energy-efficient lighting in a variety of applications.

Energy Efficiency Standards for Federal Buildings

In an effort to set a sound example for the rest of the nation's estimated 4-5 million commercial buildings, EPAct 2005 establishes energy efficiency goals for existing Federal buildings. These standards increase by 2% per year such that the buildings achieve a 20% increase in efficiency by 2015.

Formal Recognition of the Energy Star[®] Program

EPAct 2005 formally recognizes the federal Energy Star voluntary program to identify and promote energy-efficient products and buildings through labeling. Lighting products currently involved in the Energy Star program include exit signs, residential lighting fixtures, and medium-screw base compact fluorescent lamps.

What types of lighting products would help contribute to a commercial building's eligibility for tax deductions?

Based on the efficiency goals established, eligible products would include a broad range of high-efficiency fluorescent and HID lamps, high-efficiency electronic, dimming, and electronic HID ballasts, daylight sensing and other lighting control products, and high-efficiency lighting fixtures.

Where can I turn for more details on EPAct 2005?

For more information on the product efficiency standards, commercial building tax deductions (and how to pursue them), or the complete list of measures comprehended within EPAct 2005, please visit any of the following sources:

- <http://www.nema.org/> or <http://www.nema.org/gov/energy/Energy-Legislation.cfm#policy>
- <http://www.aboutlightingcontrols.org/>
- <http://www.nema.org/gov/energy/upload/Conference%20Report.pdf> to review the EPAct 2005 document in its entirety