



SUSTAINABILITY SCENE

By Charles R. Goulding, Raymond Kumar
and Jennifer Pariente

LED LIGHTING CAN PLAY A KEY ROLE IN SECURING EPACK TAX BENEFITS

At the IMARK 2011 Energy Summit held on November 16-17 in Chicago, Illinois, a panel of senior lighting executives from Acuity Brands, GE Lighting, Hubbell Lighting, OSRAM SYLVANIA and Philips Lighting agreed that the fastest growing market segments for the adaption of LED lighting applications are:

- 1) Office buildings
- 2) Hospitality industry (hotels and restaurants)
- 3) Retail stores

This article explains how to optimize the Energy Policy Act (EPAct) tax opportunities related to these three important vertical market categories.

The EPAct Section 179D Tax Opportunities

Pursuant to Energy Policy Act (EPAct) Section 179D, facility owners making qualifying energy-reducing investments in their new or existing locations can obtain immediate tax deductions of up to \$1.80 per square foot. If the building project doesn't qualify for the maximum EPAct

Section 179D \$1.80 per square foot immediate tax deduction, there are tax deductions of up to \$0.60 per square foot for each of the three major building sub-systems: lighting, HVAC (heating, ventilating and air conditioning) and the building envelope. The building envelope is every item on the building's exterior perimeter that touches the outside world including roof, walls, insulation, doors, windows and foundation.

EPAct Tax Deduction Wattage Targets for the Three Major Market Segments

The following table presents the EPAct wattage targets for office buildings, the hospitality categories of hotels and restaurants, and retail. Tax deductions start at wattages at 25 percent more efficient than ASHRAE 90.1.2001 and the full deduction is achieved at 40 percent or better.

Building Type	2001 Standard LPD, W/ft ²	25% Improvement	40% Improvement
Office	1.3	0.975	0.78
Retail	1.9	1.425	1.14
Hospitality/Hotel	1.7	1.275	1.02
Bar Lounge/Leisure	1.5	1.125	0.90
Cafeteria/Fast Food	1.8	1.35	1.08
Family Dining	1.9	1.425	1.14

Office Buildings

Office buildings are excellent EPAct tax deduction candidates since the 0.78 watts per square maximum tax deduction wattage target is challenging for offices to meet with any lighting technology other than low wattage LEDs. The country's largest office buildings tend to be in major cities, many of which have recently enacted public benchmarking laws. These laws, generally applicable for buildings exceeding 50,000 square feet, compare building energy use by building category and assign a percentile. Landlords in the jurisdictions with benchmarking laws including California, New York City, Washington D.C., Austin and Seattle, are moving quickly to make certain that they are not in the bottom 50 percentile. One of the easiest ways to measurably improve one's rating is to install energy-efficient lighting, particularly LEDs. Office buildings with very energy-efficient HVAC and LEED certification may be platformed for larger EPAct tax deductions which can be used to offset the high cost of LED lighting.

Hospitality/Hotels

Hotels obtain special privileges under the EPAct tax provisions in that guest rooms are not subject to the tax bi-level switching rule and centralized HVAC is favored over individual room HVAC units. The hotel industry has reorganized after the economic downturn, and new owners are moving quickly to renovate hotels that in many cases have long deferred retrofit needs. LED lighting is particularly suitable for hotel guest room interior packages, which typically involve bathrooms, desk lamps, free standing lamps and bed lighting. Historically, many of these applications used incandescent lamps which are now being phased out by law for the period of 2012 through 2014.

Restaurants

Like hotels, restaurants were adversely impacted by the economic downtrend. Many independent restaurants went out of business and the national and regional chains have gained market share. The large chains are cost containment experts and they standardize lighting design applications. Powerful low-wattage LED lighting is particularly suitable for restaurant design themes. LED lighting enables a much smaller lightweight lighting fixture, which saves these restaurants interior ceiling costs and expands ceiling design options.

Retail

Facing the ever-growing onslaught of nimble competitors and the Internet, retailers must reduce operating costs and in many cases seek to become centers of attraction. LED lighting greatly reduces ongoing operating costs and focused beams of LED lighting are ideal for emphasizing specific merchandise offerings.

Conclusion

LED lighting is now mainstreaming into the major building categories including the three major building categories described above. Informed tax advisers can help their property owners get a better economic return and accelerate these cost savings and business enhancement opportunities.

Charles R. Goulding, Attorney/CPA is the President of Energy Tax Savers Inc., The EPAct 179D Experts, an interdisciplinary tax and engineering firm that specializes in the energy-efficient aspects of buildings. He can be reached at charles.goulding@energytaxsavers.com.

Raymond Kumar, CPA is an Analyst at Energy Tax Savers Inc., The EPAct 179D Experts.

Jennifer Pariente is an Analyst at Energy Tax Savers Inc., The EPAct 179D Experts.