The LED Lighting/LEED Building Tax Advantage

By Charles Goulding, Jacob Goldman and Andrea Albanese

Charles Goulding, Jacob Goldman and Andrea Albanese explain how to identify and capture large EPAct tax deductions using LED lighting to reduce energy consumption.

LED Lighting LEED Building Tax Advantage

LED lighting is being rapidly introduced into leading buildings. LEED certification is the widely renown marquee standard for recognizing sustainable buildings and has become an essential criteria for claiming Class A office building status.

There are now approximately 6,000 LEED buildings in the United States with 19,000 buildings currently going through the U.S. LEED certification process. LEED buildings have a distinct tax advantage. Due to their already documented energy-reduction achievements, many LEED buildings will qualify for a $1.80, Energy Policy Act of 2005 (EPAct)[1] tax deduction with the right LED lighting designs. Although they are energy efficient and environmentally sustainable, most LEED certified buildings do not currently incorporate LED lighting when reducing energy consumption. This article explains how to identify and capture large LED lighting EPAct tax deductions.

Charles Goulding, Attorney/CPA, is the President of Energy Tax Savers, Inc, an interdisciplinary tax and engineering firm that specializes in the energy efficient aspects of buildings.

Jacob Goldman is an Engineer and Tax Consultant with Energy Tax Savers, Inc.

Andrea Albanese is an Analyst with Energy Tax Savers, Inc.

Standard EPAct Definition

Pursuant to Code Sec. 179D, as enacted by EPAct, building owners making qualifying energy-reducing investments in their new or existing building locations can obtain immediate tax deductions of up to $1.80 per square foot.

If the building project does not qualify for the maximum $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 subsystems: 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.

LED Lighting Defined

Commercial building facilities managers, financial executives and tax departments are beginning to encounter the first stages of the inevitable widespread introduction of light emitting diode (LED) lighting for building interiors.[2] These intriguing semiconductor devices produce powerful amounts of energy-efficient light with a much longer life cycle than current generation-lighting products. Despite current high-purchase costs for certain first mover applications, this method of lighting can result in substantially lower operating costs.

Table 1. GSA Potential LED/LEED Building Designer EPAct Lighting Tax Deductions

Property	Total Square Footage	Lighting Minimum Deduction	Lighting Maximum Deduction	HVAC Maximum Deduction	Building Envelope Maximum Deduction	Total
Mixed Use	361,000,000	$108,300,000	$ 216,600,000	$216,600,000	$216,600,000	$649,800,000

To consumers, the most familiar direct analogy to the fast-changing LED market is the replacement of incandescent bulbs by compact fluorescent (CFCs). When CFCs were first introduced, prices were very high, and despite the much longer life cycle, consumer acceptance was slow. Today, the benefits are widely accepted, and CFCs have assumed the most prominent position on home improvement and hardware store shelves.

Most of us are now familiar with a wide range of special-purpose LED applications, including traffic lights, exit signs, automobile tail lights and stage lighting. Now LED lighting is quickly mainstreaming into building interior applications. Property owners have less than three years remaining until December 31, 2013, in which to realize their LED lighting EPAct tax deductions.[3]

LEED Defined

Leadership in Energy and Environmental Design (LEED) is the fast growing marquee standard for sustainable buildings. LEED is the certification system established by U.S. Green Building Council (USGBC). The four certification achievements start at the LEED certified level and proceed to the higher LEED silver, gold and platinum levels.[4]

The Best LEED Building Large LED Lighting Tax Deduction Candidates

Nonconditioned LEED Buildings

Heating nonconditioned buildings, meaning nonairconditioned buildings, are typically very good candidates for the $1.80 LED tax deduction. The most common examples of nonconditioned buildings are warehouses,[5] manufacturing facilities,[6] self storage centers,[7] and the service areas of car dealerships.[8]

The mathematical reason for this is that in non-air-conditioned spaces, lighting makes up the largest portion of energy cost. Accordingly, a large reduction in lighting energy usage in nonconditioned spaces is much more likely to result in the 50-percent overall energy cost reduction required for the $1.80 cost tax deduction.

Conditioned LEED Buildings

In conditioned LEED buildings, meaning cooled buildings, air conditioning is the biggest building energy user. Conditioned LEED buildings will qualify for the $1.80 LED lighting tax deduction when the buildings have energy efficient HVAC systems.

The best building candidates for this opportunity will be buildings with the following types of HVAC: geothermal,[9] thermal storage,[10] energy recovery ventilation, magnetic bearing chillers,[11] gas electric hybrid chillers[10] and chilled beam technology. All buildings less than 150,000-square feet with chillers are good candidates. Hotels and apartment buildings with chillers are also good candidates.

To qualify for the $1.80 LED lighting tax deduction the building must be modeled in IRS-approved software. Building owners should use tax engineers who are intimately familiar with the EPAct building modeling process. An experienced tax engineer will be able to confirm before the LED LEED building lighting installation whether it is likely to qualify for the $1.80 LED lighting tax deduction.

Federal Government Moves to LEED Gold Standard

On October 28, 2010, the General Services Administration (GSA) raised the standard for all new federal government buildings and substantial building renovations to LEED Gold. This is an important development with major tax ramifications since the GSA has a portfolio of 9,600 owned or leased buildings totaling 361-million square feet.

With government owned or leased space the Code Sec. 179 EPAct LED lighting tax incentives go to the designer or design team members that effectuate the energy-efficient LED design. Eligible design team members include, but are not limited to, architects, engineers, design and build contractors, lighting designers and energy service companies (ESCOs). The potential EPAct designer tax deduction for 361-million square feet are illustrated in Table 1.

Continued on page 45

Georgia H.B. 346 allows taxpayers to sell unused tax credits earned through donations of real property for conservation purposes, provided that the seller notifies the Department of Revenue within 30 days of the sale.

Indiana H.B. 1046 provides builders of residential homes a 50-percent property tax deduction for up to three single-family residences, townhouses or condominiums in the state that have never been occupied.

Technology Tax Credits

For fiscal years 2012 and 2013, **Maryland H.B. 587** extends application of the state's biotechnology investment incentive tax credit to investments in qualified Maryland biotech companies that have been in business up to 15 years. For all other years, only investments in companies in business 12 years or less have been eligible for the credit, which comprises up to 50 percent of the investment, with a maximum credit of $250,000.

New Mexico H.B. 273 reinstates the research and development small-business tax credit that had expired on June 30, 2009. Effective from July 1, 2011, until June 30, 2015, the law gives qualified research and development small businesses a credit equal to all gross-receipts taxes or 50 percent of withholding taxes paid on behalf of employees. To be eligible for the credit, a business must devote at least 20 percent of its expenditures to research and development, have 25 or fewer full-time employees, and have revenue of no more than $5 million.

Utah H.B. 496 provides income tax credits to businesses classified as technology and life-science companies by the North American Industry Classification System.

Virginia S.B. 1326 and H.B. 1447 enact a 15-percent income tax credit for qualified research and development expenses for tax years 2012–2016.

ENDNOTES

[1] This article is reprinted from the *State Tax Return* newsletter, a Jones Day publication, with permission. No portion of this article may be reprinted without express written permission from Jones Day. Because of its generality, the information contained herein should not be construed as legal advice on any specific facts and circumstances. The contents are intended for general information purposes only.

LED Lighting

Continued from page 14

Conclusion

LED building lighting has the advantage of a much longer useful life and the accompanying maintenance cost reductions, however it is currently expensive. The opportunity to increase a $0.60 lighting EPAct tax deduction to a $1.80 whole building energy cost EPAct tax deduction makes LED lighting much more economically viable. LEED buildings can use their existing building energy simulation models to quickly make the determinate if there is eligibility for the $1.80 maximum deduction.

ENDNOTES

[1] Energy Policy Act of 2005 (P.L. 109-58).

[2] Charles Goulding, Jacob Goldman and Taylor Goulding. *The Economic, Business and Tax Aspects of Light Emitting Diode Interior Building Lighting*, CORP. BUS. TAX'N MONTHLY, Jan. 2009, at 29.

[3] Charles Goulding, Taylor Goulding and Amelia Aboff, *How LEED 2009 Expands EPAct Tax Savings Opportunities*, CORP. BUS. TAX'N MONTHLY, Sep. 2009, at 11.

[4] Charles Goulding, Kenneth Wood and Raymond Kumar, *Optimizing the 3, 2, 1 LED Lighting Tax Deduction Countdown*, CORP. BUS. TAX'N MONTHLY, Jul. 2010, at 13.

[5] Charles Goulding, Jacob Goldman and Joseph Most, *Complete Warehouse Tax-Enhanced Energy-Efficient Design*, CORP. BUS. TAX'N MONTHLY, Aug. 2010, at 11.

[6] Charles Goulding, Daniel Audette and Spencer Marr,, *The EPAct Tax Aspects of Resurging U.S. Manufacturing Investments*, CORP. BUS. TAX'N MONTHLY, Jun. 2011, at 17.

[7] Charles Goulding, Raymond Kumar and Taylor Goulding, *Energy and Tax Savings Opportunities for Self-Storage Facilities*, CORP. BUS. TAX'N MONTHLY, Sep. 2010, at 13.

[8] Charles Goulding, Jacob Goldman and Raymond Kumar, *Energy Tax Aspects of Car Dealerships*, CORP. BUS. TAX'N MONTHLY, Jul. 2009, at 11.

[9] Charles Goulding, Joseph Most and Spencer Marr, *Energy Tax Aspects of Geothermal Heat Pumps*, CORP. BUS. TAX'N MONTHLY, Dec. 2010, at 13.

[10] Charles Goulding, Jacob Goldman and Taylor Goulding, *The Tax Aspects of Thermal Storage and Time-of-Day Pricing*, CORP. BUS. TAX'N MONTHLY, Nov. 2009, at 13.

[11] Charles Goulding, Jacob Goldman and Joseph Most, *Energy Tax Aspects of Chillers*, CORP. BUS. TAX'N MONTHLY, Oct. 2010, at 15.

LED Lighting for Fast-Food Restaurants

Continued from page 16

2010, Burger King was acquired by 3G Capital. 3G Capital has announced that the existing stores require $3 billion in upgrades. If these upgrades meet or surpass the EPAct energy standards, substantial EPAct tax deductions will be available.

Dairy Queen

At the ground level, ambitious franchisees are coming up with creative ways of reducing energy. One Chicago-based development group, CG Development Group, has applied a "whole-building" approach in order to cut its energy expenses in one of its Dairy Queen locations. The building shell is entirely thermally broken—that