

# The LED Lighting Tax Aspects of Restaurants

*By Charles Goulding, Jacob Goldman and Daniel Audette*

Charles Goulding, Jacob Goldman and Daniel Audette discuss the benefits of installing energy-efficient LED lighting in restaurants.

Restaurants throughout the country are moving quickly to install energy-efficient LED lighting. Despite the typical high upfront costs, LED lighting offers exciting lighting design capabilities, energy savings, maintenance savings, utility rebates and substantial EAct tax savings that can make LED lighting the best overall choice. Before the widespread introduction of LEDs, it was often difficult to execute an energy-efficient design that would enable an entire restaurant to qualify for an EAct tax deduction.

## The EAct Tax Opportunity

Pursuant to Internal Revenue Code ("Code") Sec. 179D, as enacted by the Energy Policy Act (EAct),<sup>1</sup> building owners or tenants making qualifying energy-reducing investments 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 60 cents per square foot for each of the three major building subsystems: lighting, HVAC (heating, ventilating and air conditioning) and the building envelope. The

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building envelope is every item on the building's exterior perimeter including the roof, walls, insulation, doors, windows and foundation.<sup>2</sup>

## Lighting Tax Planning

### Design

To make the customer comfortable with familiar surroundings, national restaurants often want the same look and feel at each property. Some restaurants have interior ceiling designs with surfaces and hanging or mounted objects that limit lighting layouts to fixed spaces. The advantage of LED lighting is that it is very powerful light that can be focused exactly where lighting is needed. In fact, LED lighting greatly expands interior design alternatives. Restaurants typically use numerous lighting fixtures, and the maintenance costs for replacing previous generations of shorter life lighting projects could be quite expensive, particularly with high ceilings and other lighting in hard-to-reach locations.

### Space Combinations

Many popular restaurants have large open-design configurations that sometimes combine spaces devoted to a bar/lounge, dining and the kitchen. Here the EAct tax deduction opportunity is to use the lower wattage spaces to balance out higher wattage needs so that the overall lighting wattage is energy efficient and effectuate an EAct qualifying design. Although good building design should always trump tax, by working together, the tax advisor and the designer can often accomplish their mutual goals.

## Daylighting Combinations

Many restaurants have large window-to-wall ratios in the customer-serving areas. Some restaurants use skylights. Daylighting systems save lighting-related electricity by dimming or turning off lighting when natural lighting is available through windows and skylights. Here, the tax planning opportunity is to use daylighting systems, including shading and sensors, to optimize the use of the large 40-percent tax wattage power allowance for daylighting.<sup>3</sup> For example, for tax purposes a 100-watt fixture will be considered to be a 60-watt fixture if it is within the daylighting sensor controlled area, meaning daylight reaches the fixture. Note that to receive the 40-percent daylighting tax power allowance, the building must be modeled in IRS-approved building simulation software.

## LEDs and HVAC (Use the V)

HVAC is by far the largest energy user in restaurants. When building new facilities and upgrading existing facilities, restaurant owners should carefully consider installing the most energy-efficient HVAC equipment and HVAC controls systems available in the market. One important tax technique is to optimize the use of energy-efficient ventilation, which is the "V" in HVAC. Good ventilation is critical in restaurants due to kitchen fumes and long periods when customers are stationary. Energy-efficient ventilation optimizes the energy savings related to changing fresh outside air with the older previously circulated air. Energy Recovery Ventilation (ERV) is used to capture the energy being ventilated and exchange it with the fresh air being pulled in from the outside. In addition, since most restaurants are less than 75,000-square feet, installing a Variable-Air-Volume (VAV) packaged unit will generally qualify for an EAct tax deduction.

## LEED Restaurant Tax Planning

LEED stands for Leadership in Energy and Environmental Design and is the renowned standard for sustainable buildings in the United States.<sup>4</sup> Virtually all large expanding national restaurant chains have or are considering a LEED certification qualifying

restaurant design. Some shopping centers require restaurants to be LEED certified. In such situations, restaurants may receive expedited permits and zoning approval while typically earning higher utility rebates. For large chains, a LEED restaurant is a powerful tax planning tool since it already has a building energy simulation model that can be converted into the EAct tax model necessary for achieving the HVAC and building envelope EAct tax deductions. It is particularly important for large chains with new energy-efficient prototypes to perform an energy simulation model regardless of LEED goals. The model will make it clear whether the facility already qualifies for EAct tax savings or is on the cusp of qualifying for EAct tax savings.

McDonalds, Chipotle and Starbucks are among the growing number of restaurant chains incorporating LEED standards into their building design. According to an EARTH AND INDUSTRY article, Starbucks has even replaced all incandescent and halogen bulbs with LEDs in 8,000 stores and has made mandatory that all newly built Starbucks will obtain LEED certification.<sup>5</sup>

Independent restaurants are also taking advantage of LED lighting. For example, Red Stag, a Minnesota dining hall, achieved LEED certification using techniques such as converting almost 100 percent of their lighting to LEDs. Since so much of a restaurant's operating costs are directed toward energy use, much more so than the average small business, it is becoming a more common investment for a restaurant to achieve LEED certification points through energy-reduction measures.

## Putting the Prix Fixe Program Together

The most energy-efficient LED lighting based restaurant chain that will qualify for the highest level of tax deduction will be the one that puts it all together like a good Prix Fixe meal. Putting it all together means installing LED lighting, daylighting and high-efficiency HVAC with an emphasis on V. The chain that puts these together will achieve large energy savings, rebates and EAct tax deductions.

### ENDNOTES

<sup>1</sup> Charles Goulding, Jacob Goldman and Nicole DiMarino, *EAct Tax Deductions for Lighting Gain Wider Use*, BUILDING OPERATING MGMT., Jul. 2008, at 68-74.

<sup>2</sup> Charles Goulding, Jacob Goldman and Taylor Goulding, *The Economic, Business and Tax Aspects of Light Emitting Diode Interior Building Lighting*,

BUILDING OPERATING MGMT., Jan. 2009, at 31-32.

<sup>3</sup> Charles Goulding, Jacob Goldman and Taylor Goulding, *The Tax Aspects of "Daylight Harvesting,"* CORP. BUS. TAX'N MONTHLY, Aug. 2008, at 35-38.

<sup>4</sup> Charles Goulding, Jacob Goldman and Amelia Aboff, *How LEED 2009 Expands EAct*

*Tax Savings Opportunities*, CORP. BUS. TAX'N MONTHLY, Sep. 2009, at 11-13.

<sup>5</sup> Timothy Hurst, *All New Starbucks Stores to Be LEED-Certified*, EARTH & INDUSTRY, Nov. 12, 2009, available online at <http://earthandindustry.com/2009/11/all-new-starbucks-stores-to-be-leed-certified/>.