The Energy Tax Aspects of Restaurants

By Charles Goulding, Kenneth Wood and Amelia Aboff

Charles Goulding, Kenneth Wood and Amelia Aboff discuss how restaurants can reduce energy costs and cut taxes through the use of new energy-saving products, utility rebates and tax incentives.

Food service is a very competitive industry, where cost control is crucial. Fortunately, restaurants can use new energy saving products coupled with the wide range of utility rebates and tax incentives to greatly reduce energy-related operating costs.

Act Sec. 179D Tax Provisions

Under Section 179 D of the Energy Policy Act (EPAct)[1] and the underlying ASHRAE (American Society of Heating Refrigeration and Air Conditioning) building energy code, commercial buildings are eligible for energy efficiency tax deductions of up to $1.80 per square foot. If a building's energy reducing investment doesn't qualify for the full $1.80-per-square-foot deduction, deductions are available for any of the three major sub-systems, including:

1. lighting;
2. HVAC (Heating, Ventilation and Air Conditioning); and
3. the building envelope.

Each component can qualify for up to 60-cents-per-square-foot EPAct tax deductions. The building envelope is anything on the perimeter of the building that touches the outside world including roof, walls, windows, doors, the foundation and related insulation layers.

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Lighting Cost Reduction Opportunities

Restaurant Lighting opportunities can be analyzed based on:

1. type of food service facility; and
2. space area within the facility.

For energy code and tax purposes the *American Society of Heating, Refrigeration and Air Conditioning Engineers* (ASHRAE) defines food service facilities as either:

1. bar/lounge leisure;
2. cafeteria/fast food; or
3. family dining.

The ASHRAE 2001 watts per square foot baseline for each of these property categories and the respective wattage reductions required to obtain between 30- and 60-cent-per-square-foot lighting tax deductions are as shown in Chart 1.

To obtain an Energy Policy Act (EPAct) Section 179D minimum tax deduction of 30 cents per square foot, the facility has to reduce its watts per square foot from ASHRAE 90.1 2001 standards by at least 25 percent. Full tax deduction of 60 cents per square foot occurs with a 40-percent-watt- per-square-foot reduction.

Most states use ASHRAE 2004 building energy codes or higher. Under ASHRAE 2004, a cafeteria/fast food facility is already required to reduce its wattage by 22 percent as compared to the 2001 standard, so slight design changes further reducing to a tax qualifying 25-percent wattage reduction are relatively easy to achieve. Within a facility, spaces are normally divided between:

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Chart 1. EPAct Tax Deduction Wattage Targets by Restaurant Category

	2001 Standard (W/ft2)	25% Over 2001 (W/ft2)	40% Over 2001 (W/ft2)	% Difference between ASHRAE 90.1 2001-2004
Bar Lounge/Leisure	1.5	1.125	0.9	13%
Cafeteria Fast Food	1.8	1.35	1.08	22%
Family Dining/High End Restaurants	1.9	1.425	1.14	16%

Chart 2. Large Restaurant Chains Tax Deduction Opportunities

Property	Brands	# of Units	Total Square Footage	Lighting		HVAC Maximum Deduction	Building Envelope Maximum Deduction	Total
				Minimum Deduction	Maximum Deduction			
BRINKER (Based on 2008 10k SEC filing)	Chili's On The Border Maggiano's	2,100	10,500,000	$3,150,000	$ 6,300,000	$6,300,000	$6,300,000	$18,900,000
YUM! (Based on 2008 10k SEC filing)	KFC Pizza Hut Taco Bell Long John Silver's	3,200	9,600,000	$2,880,000	$ 5,760,000	$5,760,000	$5,760,000	$17,280,000
APPLEBEE'S (Based on 2007 10k SEC filing)	Applebee's IHOP	521	2,573,740	$772,122	$1,544,244	$1,544,244	$1,544,244	$4,632,732
DARDEN (Based on 2009 10k SEC filing)	Red Lobster Olive Garden Long Horn Steakhouse	1,773	11,879,100	$3,563,730	$7,127,460	$7,127,460	$7,127,460	$21,382,380

1. the customer serving area; and
2. the so-called "back of the house"—meaning kitchen, food prep areas, storage, walk-in coolers and freezers, utility rooms, offices and restrooms.

In general, the back-of-the-house spaces can use common categories of very efficient lighting to maximize energy savings, rebates and tax savings. Ambience in these areas is not as important.

In cafeterias and fast food types of restaurants, the kitchen portion of the back of the house is often part of the same room as the customer serving area. Generally, it is easy to design lighting in the one "main room" that will qualify for maximum utility rebates and EPAct tax incentives. It will also be easier to include the bar space in one-room fast food establishments, which often include pizzerias.

Upscale restaurants, particularly those with interior lighting design packages, take more design effort to create energy efficient spaces that will qualify for maximum rebate and tax savings. Although the business need for a particular design may trump other available economic incentives, if the interior lighting designer and building's lighting designer work together they can often achieve all goals. Previously, it was difficult for high-end restaurant lighting designers to find energy efficient smaller profile wall sconces and other decorative lighting. Today, this challenge is often met with using substantially more energy efficient traditional lighting or very efficient LED (Light Emitting Diodes) lighting. LEDs are small semiconductors that use small wattages and also provide powerful light sources.[2]

Large Restaurant Chains Tax Deduction Opportunities

During the economic recession, many independent restaurants closed their doors. However, many of the larger family focused national chains have persisted. Some of the nation's largest restaurant chains have numerous brands and some substantial square footage. Chart 2 is intended to illustrate the potential magnitude of EPAct tax deductions available to these facilities.

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Restaurant Lighting EPAct Tax Planning Summary

Bar Lounge/Leisure

Consider expanding the lighting project so that the weighted average of the other food spaces enables the bar lounge/leisure area to qualify for tax savings.

Cafeteria/Fast Food

Attention to design should enable the spaces to qualify, especially if the behind the counter lighting space is retrofitted at the same time as the customer service area.

Family Dining/High-End Restaurants

Consider mixing in LEDs to achieve the desired wattage targets.

HVAC (Heating, Ventilation and Air-Conditioning)

Most restaurants use package roof top units for HVC needs. The key is to pre-order high efficiency new or replacement units. It is only the highest efficiency units that will generally qualify for utility rebates and tax savings. Most large restaurant chains utilize life cycle package unit replacement programs where they can plan into energy cost reduction, maximize utility rebates and EPAct tax savings.

Air Handling Equipment

In restaurants, the high ventilation levels necessary in commercial kitchens make efficient air handling systems particularly important. The opportunity to improve customer air quality means it is important for restaurants to consider the best of the breed air handling equipment. This equipment not only improves employee and customer health, it provides the added benefit of tremendous energy cost reduction which may be eligible for Section 179D EPAct tax savings.

Supplemental Electric Loads

Restaurants have numerous supplemental high-cost electric loads including freezers, refrigeration, ice machines, stoves, dishwashers, coffee makers, fryers, other kitchen appliances, food prep equipment, widescreen TVs and computers. Many utilities offer rebates for some of this equipment, particularly equipment that is at the energy star level or higher.

LEED Restaurants

LEED, which stands for Leadership in Energy and Environmental Design, is the coveted mark of achievement (based on points) to demonstrate a sustainable building. "The LEED program was originally better suited to large buildings and was first applied to office buildings," said Richard Young, a senior engineer with the Pacific Gas and Electric Food Service Technology Center[3]. Now, however, LEED is becoming more applicable to all types of buildings including restaurants, as the new 2009 LEED system includes a greater proportion of LEED points for energy reduction.[4]

LEED restaurants are particularly well positioned for EPAct tax savings since LEED restaurants must be modeled in energy simulation model software and the Section 179D deductions also require modeling in IRS approved software.

LEED Fast Food Franchises

Recently some of the leading large unit fast food restaurants

Chart 3. LEED Certified Fast Food Properties

Chain Restaurant	Location	LEED Status	Energy-Saving Measures
Dunkin' Donuts	St. Petersburg, FL	Certified	Insulated concrete form walls for reduced A/C loads, energy-efficient lighting with motion sensors & water-efficient plumbing fixtures
McDonald's	Chicago, IL	Gold	Energy-efficient LED lighting, solartubes for increased natural daylighting, heat recovery HVAC systems & rainwater-irrigated green roof
Chipotle	Gurnee, IL	Platinum	On-site energy production with a wind turbine, EnergyStar appliances, & LED lighting systems
KFC-Taco Bell	Northampton, MA	Gold	LED lighting, control system to encourage natural light use, solar air-preheat system to reduce HVAC loads, & water-efficient fixtures

have achieved their first LEED certified restaurants. Some of the first movers include McDonald's, Dunkin Donuts and Chipotle. This is a smart strategic move since it enables them to have an extremely energy efficient experimental/beta restaurants that can be closely evaluated. Very importantly, many local zoning and planning boards that may have reservations about issuing permits for fast food franchises are much more amenable to LEED design and in fact may fast track them. The following table summarizes the energy efficiency aspects of the three chains first LEED initiatives which in most cases should result in a $1.80 per square foot EPAct tax deduction per facility.

The LEED McDonald's and Chipotle locations listed in Chart 3 were both part of the LEED for Retail pilot program, which gives chain retailers and restaurants an opportunity to certify several properties based on the same LEED-approved sample location. In addition to fast-tracking the LEED certification process, having multiple, similarly designed energy-efficient properties allows results from one location to be easily duplicated for Section 179D tax deduction purposes.

Pizza Fusion, a Florida-based concept, has seven units registered in the LEED system and two in the final stages of completion. This is one example of up-and-coming chain restaurants aspiring to LEED standards, a smart move for energy-efficiency and corporate image as well as EPAct tax deductions.

Conclusion

Restaurants have new and expanded opportunities to use tax savings and rebates to save energy, and improve the customer environment. Many of these opportunities require a team approach involving design teams and tax professionals.

ENDNOTES

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

2 For more information on LEDs see Charles R. 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 31.

3 Jamie Hartford, *Updating LEED*, QSRMAGAZINE, *www.qsrmagazine.com/articles/exclusives/0508/leed-1.phtml*.

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