LEED Building Tax Opportunities

By Charles Goulding, Jacob Goldman and Nicole DiMarino

Charles Goulding, Jacob Goldman, and Nicole DeMarino explain the accelerating pace of energy efficient building certification and the tax savings incentives associated with this important environmental effort.

LEED building certification is quickly becoming the Marquee standard for best of breed buildings. LEED buildings are typically entitled to substantial tax benefits, and tax professionals should recognize LEED building proposals as tax planning opportunities. LEED is administered by the U.S. Green Buildings Council and stands for Leadership in Energy and Environmental Design. The LEED ratings system establishes 69 rating points and four categories of accomplishment, with the highest being LEED Platinum, followed by LEED Gold, LEED Silver and LEED certified.

Figure 1

Certification Level	Rating Points
LEED Certified	26-32
LEED Silver	33-38
LEED Gold	39-51
LEED Platinum	52-69

On June 8, 2007, Yudelson Associates, an organization that monitors LEED data, announced that there are now 6,300 buildings in LEED registration and that to date 820 completed building projects have become LEED certified. A November 13, 2007, Wall Street Journal article noted that in a recent seven month period 2.2 billion square feet of commercial construction space was registered for LEED, which is much less time than the seven years it took to register the first 1 billion in square footage.[1] Achieving the coveted LEED certification level has impacted an ever expanding category of buildings. In addition to LEED industrial buildings, LEED office buildings, and LEED retail stores, we now have LEED schools, LEED bank branches, and our first LEED car dealership, which is a Toyota dealership in McKinney, Texas. [2]

The tax opportunities with LEED buildings relate to the large number of LEED ratings points involving energy cost reduction. Out of the 69 total LEED rating points, over 20 points relate to energy criteria, with 10 points specifically designated for energy optimization. The Energy Policy Act of 2005 (EPAct) provides for up to a $1.80 per square foot immediate tax deduction for achieving specified energy cost reductions above ASHRAE 2001 building energy code performance standards. The $1.80 per square foot tax deduction is the maximum tax deduction, but within the $1.80 deduction amount there are three building sub system tax deductions up to 60 cents per square foot for lighting, HVAC (Heating, Ventilation and Air Conditioning) and the Building Envelope (the building's exterior shell). ASHRAE stands for the American Society of Heating Refrigeration and Air Conditioning engineers. LEED certification requires compliance with the more rigorous ASHRAE 2004 building code standards. This means that achieving LEED status should put a building owner well on its way to simultaneously obtaining EPAct tax benefits. EPAct tax deductions are currently available for projects completed between January 1, 2006, and December 31, 2008. There are bills currently before Congress to extend EPAct through December 31, 2013.

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Figure 2

Potential EPAct Tax Deductions Available for LEED Certified Buildings Currently in Registration:					
Total	Lighting		HVAC	Building Envelope	Total
Square Footage	Minimum Deduction	Maximum Deduction	Maximum Deduction	Maximum Deduction	
2,200,000,000	$ 660,000,000	$1,320,000,000	$1,320,000,000	$1,320,000,000	$ 3,960,000,000

The 2.2 billion of commercial LEED projects have the potential to obtain almost 4 billion in EPAct tax deductions as presented in Figure 2.

LEED and EPAct Modeling Requirements

Further facilitating EPAct tax deductions for LEED buildings is the mutual requirement that both LEED building compliance and EPAct tax compliance be documented by building energy computer simulation modeling (modeling). The modeling process requires that the energy performance characteristics of the Lighting, HVAC mechanical systems, and Building Envelope be inputted into specialized computer programs called models. Normally, highly skilled engineers perform the modeling task. It is particularly important to use a highly skilled engineer when modeling building energy solutions, since the engineer will often need to create a documented math algorithem to properly reflect the equipment's energy performance. To obtain EPAct tax benefits only an IRS approved modeling software can be used. To date IRS has approved eight modeling softwares in the following versions:

Additional modeling softwares are currently seeking IRS approval.

The EPAct model technique is somewhat different than LEED modeling so the engineer/modeler should not commence a project where tax savings are desired without speaking to a tax expert familiar with the nuances of EPAct tax modeling.

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Figure 3

IRS Approved EPAct Building Energy Modeling Software	
TRACE 700	Version 6.0.2.1
TRACE 700	Version 6.1.0.0
TRACE 700	Version 6.1.1.0
EnergyPlus	Version 1.3.0.018
EnergyPlus	Version 1.4.0.025
EnergyPlus	Version 2.0.0.025
Hourly Analysis Program	Version 4.31
Hourly Analysis Program	Version 4.34
VisualDOE	Version 4.1 build 0002
EnergyGauge Summit	Version 3.1 build 2
EnergyGauge Summit	Version 3.11
DOE-2.1E	Version 119
Owens Corning Commercial Energy Calculator (OC-CEC)	Version 1.1
Green Building Studio	Version 3.0

LEED/EPAct Strategy

Lighting Strategies

When combining LEED and EPAct tax planning strategies, a rigorous focus on energy efficient lighting including energy efficient lighting fixtures, lighting controls, and day lighting concepts is one of the best ways to maximize LEED rating points and EPAct tax deductions. The energy savings and tax deductions with day lighting systems are directly proportional to window to wall ratios and sky light to roof ratios. The more windows and skylights, the more daylight access and greater potential for energy savings and EPAct tax deductions.

Building Envelope/HVAC Strategies

To maximize building energy efficiency and tax deduction, the key is to start with a very energy efficient building envelope. An efficient building envelope will allow the building owner to right size the HVAC system, which for all practical purposes means downsize to the correct building size. Without a highly efficient building envelope and modeling data, historically the HVAC industry has often over sized the systems to avoid complaints. Because HVAC is the biggest building energy user, appropriately sizing the HVAC system can save tremendous energy costs.

New Building Codes Requiring LEED

Increasingly we are seeing two types of local area LEED building code standards being enacted. Some jurisdictions are requiring that all government buildings meet prescribed LEED standards. For example:

Arizona: Requires all state funded buildings to achieve LEED Silver certification.

California: Requires the design, construction, and operation of all new and renovated state owned facilities to be LEED Silver.

Michigan: All state funded new construction and major renovation projects over $1,000,000 must be LEED certified.

New Mexico: All public buildings over 15,000 square feet must be LEED Silver.

Note that with government buildings, the architect or engineer effectuating the energy efficient design is entitled to the EPAct tax deduction benefits. [3]

Other jurisdictions are going further and requiring that all new buildings meet specified LEED levels. For example:

Babylon, New York: Requires LEED certification for any new construction of commercial buildings, office buildings, industrial buildings, multiple residences, or senior citizen multiple residences over 4,000 square feet.

Calabasas, California: All nonresidential, city and privately owned buildings between 500 square feet and 5,000 square feet must meet the LEED Certified level. Buildings over 5,000 square feet must meet the LEED Silver level.

With the expansion of these building code requirements, virtually every building owner in the country with a national new building program is closely examining how to potentially achieve LEED status.

LEED and Energy Related Grants and Rebates

Many jurisdictions are beginning to offer LEED specific grants and rebates. For example, for new LEED buildings, LIPA, the electric utility in Long Island, New York, is offering major incentives up to:

1. $500,000 in LEED project grants
2. $100,000 in LEED building commissioning costs
3. $50,000 in LEED/EPAct modeling costs
4. $25,000 per LEED energy related rating point.

Most traditional utility rebates support the LEED energy optimization rating points, related to energy reduction particularly for lighting and lighting controls and multiple energy efficient HVAC projects.

LEED Tax Planning

Designing a facility to achieve LEED status takes a lot of time and effort and requires participation by numerous parties, including the designers and intended occupants of a facility. As soon as the tax professional learns that a LEED building is being contemplated, they should begin getting involved in the LEED tax planning aspects of the project. The energy efficiency breakpoints for tax deductions at the whole building and building subsystems should be examined, along with the utility rebate breakpoints to help the LEED designer understand all the economic benefits available to support the LEED initiative.

Conclusion

The widespread acceptance of the LEED rating point system by America's leading property owners, platforms substantial tax opportunities. The severity of the energy crisis is apparent to all Americans. Tax professionals who understand that LEED status embodies energy cost reduction can play an important part in helping to address one of our nation's biggest challenges.

Endnotes

1 Dana Mattioli, How Going Green Draws Talent, Cuts Costs, The Wall Street J., (November 13, 2007):B10.

2 Jessie Bove, Taking the LEED: Pat Lobb Toyota of McKinney, Texas, Becomes the First Auto Dealership to Win LEED Certification, Display and Design Ideas Magazine (March 1, 2007) *www.ddimagazine.com/displayanddesignideas/search/article_display.jsp?vnu_content_id=1003552525,* accessed November 21, 2007.

3 Code Sec. 179D (d)(4).