

ENERGY INCENTIVES

Deadline Approaches For Energy Efficiency Tax Breaks

If not extended, the tax benefits offered by EAct will expire at the end of this year

by charles r. goulding and jennifer pariante

With the passage of the Energy Policy Act of 2005, tax planning became an important consideration for a broad range of upgrades designed to improve energy efficiency. EAct created Section 179D of the Internal Revenue Code, which provides federal tax deductions as incentives to make buildings more energy efficient.

In 2013, energy efficiency tax planning has a special urgency. That's because the current Section 179D tax provisions are scheduled to expire on Dec. 31, 2013. A proposal to extend EAct for three years, through Dec. 31, 2016, and to expand the beneficiary categories, has been introduced in the Senate. That proposal includes a new Section 179E, with a provision for a \$4 per square foot tax deduction for so-called "deep retrofits."

Also on the subject of energy and taxes, the 30 percent wind tax credit has been extended for projects commencing in 2013. Most other alternative energy tax credits are scheduled to expire Dec. 31, 2016.

Given all this, it's worthwhile for facility managers to consider tax planning steps to maximize the current 179D EAct provisions. There are also some no cost ways to plan for the potential extension of 179D deductions and the expansion of energy-related tax benefits. Finally, facility managers should be aware that the IRS has made it easy to recoup any missed tax incentives back to Jan. 1, 2006, and they should understand the process for doing that.

Section 179D: Old and New

The Section 179D tax incentive provides for a \$1.80 per square foot EAct tax incentive for achieving a 50 percent overall energy cost reduction as com-

pared to a building built to ASHRAE 90.1-2001. For projects that don't achieve the full 50 percent energy cost reduction, there are tax deductions of up to 60 cents per square foot for lighting, HVAC, or the building envelope. Lighting has a special user-friendly prescriptive tax incentive starting at 30 cents per square foot for achieving at least a 25 percent watts per square foot reduction compared to ASHRAE 90.1-2001. The current lighting prescriptive method is based on pure wattage reduction without any benefits (power allowances) for lighting controls such as dimming, occupancy sensors or daylighting.

Under current law there are only two

Proposed Section 179F Tax Deduction Per Square Foot



% Improvement	Design	2yr M&V	Total
20-24%	\$0.60	\$0.40	\$1.00
25-29%	\$0.90	\$0.60	\$1.50
30-34%	\$1.20	\$0.80	\$2.00
35-39%	\$1.50	\$1.00	\$2.50
40-44%	\$1.80	\$1.20	\$3.00
45-49%	\$2.10	\$1.40	\$3.50
>50%	\$2.40	\$1.60	\$4.00



SOURCE: ENERGY TAX SAVERS

categories of tax beneficiaries, namely commercial building owners and designers of government buildings.

The current Senate proposal would extend EAct for three years, through Dec. 31, 2016. The proposal makes several significant changes. One is that the baseline would change from ASHRAE 90.1-2001; initially, the new baseline would be the 2004 version 90.1, and then it would change to 90.1-2007. While the new baselines may be tougher to meet, the rewards would be greater: A 50 percent energy cost reduction would qualify for a \$3 per-square-foot tax deduction. The deductions for individual systems would increase to \$1 per square foot. For the first time, wattage credits (allowances) would be provided for lighting controls.

Perhaps the most important change in the proposed law is the creation of an option for designers and certain other parties to obtain this benefit for all building categories, not just government buildings. This major development would enable REITs and nonprofits — nonprofit hospitals, nonprofit private colleges and worship facilities — to use EAct.

The Senate proposal includes a new Section 179F, which would provide a federal tax deduction of up to \$4.00 per square foot for commercial buildings 10 years old and older. (See “Proposed Section 179F Tax Deduction Per Square Foot” on page 60.) A certified retrofit plan would be required, with 60 percent of the projected benefit available on project completion and the remaining 40 percent based on measurement and verification two years after project completion.

The authors believe that with some effort, 179D will be extended and 179F will be enacted. There does not seem to be any meaningful political opposition to these tax provisions. It is anticipated that Senate passage will come as a matter of course but that House passage may take some work. Building owners, facility managers and others in the industry should make their voices heard and let their Congressional representatives know they want this legislation passed. The most persuasive argument will be that these incentives bring project approvals over the tipping point — that many projects will not be started without the added return on investment generated by these incentives.

Planning Upgrades

Anyone contemplating a fluorescent lighting upgrade should attempt to do it before the year end. That's because the lighting-only tax deduction will be harder to achieve with a baseline of the ASHRAE 90.1-2004 standard, which could become effective Jan. 1, 2014 if the Senate proposal becomes law.

With HVAC, ASHRAE 90.1-2004 does not vary that much from 90.1-2001, so if the law is extended, the same measures that tend to qualify now will qualify under the standard of 90.1-2004. The HVAC measures that often qualify (subject to modeling) are as follows:

- Geothermal (ground source heat pumps)
- High efficiency water source heat pumps
- Thermal storage
- High efficiency VRF units in rental apartments/dorms/hotels
- Centralized HVAC in rental apartments/dorms/hotels
- Energy recovery ventilation
- Demand control ventilation
- VFDs on all major motors and compressors
- Direct fired heaters in industrial spaces without air conditioning

SENATE PROPOSAL TO EXTEND, EXPAND EACT

Section 179D Extended

- Deductions increased to maximum of \$3 per square foot
- Standard raised from ASHRAE 90.1 2001 to 90.1 2004, then to 90.1 2007
- Deductions now assignable by REITs and non-profits
- Expanded universe of certifiers
- Power allowances for controls
- 2016 expiration

Section 179F for Deep Retrofits Created

- Up to \$4 per square foot deduction with Certified Retrofit Plan
- Benefits come in two parts: 60 percent on project completion and 40 percent after two years based on measurement and verification
- Building must be at least 10 years old
- Measurement and verification required to avoid recapture
- 2016 expiration

- Chillers in buildings smaller than 150,000 square feet
- VAV (variable air volume devices) in buildings under 75,000 square feet
- Chilled beams
- Magnetic bearing chillers
- Gas-fired chillers combined with electric chillers to peak shave
- Combined heat and power installations

In addition, industrial space greater than 75,000 square feet with constant volume package units can often qualify for either the \$1.20 or \$1.80 deduction by installing energy efficient lighting that meets the standards for those deductions.

What's more, under current law, many heated (non-conditioned) warehouse and industrial buildings can meet the threshold for the \$1.80-per-square-foot deduction if they have installed energy efficient lighting and perform work on their heating systems and roof. Here's how it works. To qualify for the maximum 179D deduction of \$1.80 per square foot, a building must beat ASHRAE 90.1-2001 standards by a specified amount. Efficient lighting by itself may be enough to enable a building to hit that target. An owner can get only a 60 cents-per-square-foot deduction for lighting alone. But if the owner upgrades the roof and heater, those improvements can be grouped with lighting upgrades and will likely qualify for the maximum deduction. There are certain other conditions that must be met, but those are generally not hurdles.

All warehouse or industrial property owners interested in a heater upgrade or roof measure should, if they haven't done so already, install energy efficient lighting at wattage levels low enough to trigger the \$1.80-per-square-foot incentive before Dec. 31, 2013. It is particularly important for warehouse or industrial building owners who are preparing for a near term rooftop solar photovoltaic installation that requires roof work to act now. Many non-conditioned warehouse owners are upgrading to LED lighting using the \$1.80-per-square-foot deduction for that project.

In addition, many refrigerated warehouse owners are get-

ting tremendous lighting-related energy cost savings from LED lighting and typically qualify for a \$1.20-per-square-foot deduction.

Many new building projects that are in the design stage won't complete their projects until after Jan. 1, 2014. Because lighting is usually one of the last items installed, it may make sense to remain flexible on the lighting design and consider a more efficient lighting design if the larger lighting EPC Act tax incentive is enacted.

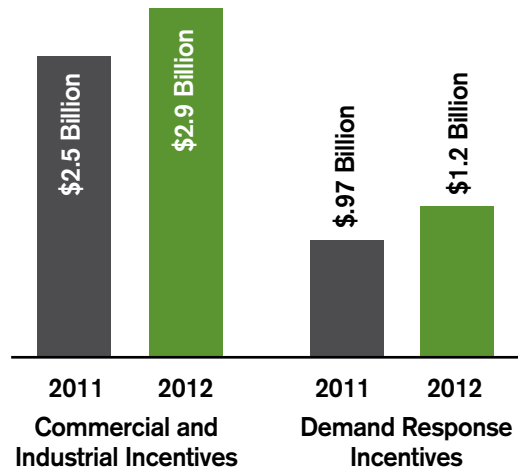
Benchmark With Energy Star

Property owners with buildings 10 years old or older should benchmark their buildings' energy use with Energy Star's Portfolio Manager software as soon as they can. While Portfolio Manager is not specifically mentioned in the proposed legislation, it is our belief that it will be the required software. Regardless, this benchmarking exercise should help identify low rated buildings, where the \$4 per square foot incentive is most likely to be available.

The building stock owned by nonprofit schools, hospitals and worship facilities should also be analyzed, because energy upgrades to those facilities will be eligible for federal tax deductions under the current Senate proposal for Section 179D. The same holds true of REIT properties. REITs own most of the institutional grade property in the United States, in particular most Class A office. REITs have large holdings in the state and city jurisdictions with newly enacted mandatory

Utility Incentives Growing

Like federal tax deductions and credits, utility rebates and other incentives can help to improve the return for energy-efficiency projects.



SOURCE: CONSORTIUM FOR ENERGY EFFICIENCY



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energy benchmarking rules, which provides them with a road map for buildings requiring energy upgrades.

The 30 percent wind tax credit has been extended for any project that begins in 2013. The extension of the wind tax credit is always controversial. Anyone interested in a wind project should make certain they meet the project com-

mencement standard in 2013. Historically, when the wind credit expires, the U.S. wind industry rapidly contracts.

Many important commercial alternative energy tax credits expire as of Dec. 31, 2016. These include the 30 percent solar tax credit, the 30 percent fuel cell tax credit, the 10 percent geothermal tax credit, and the 10 percent

combined heat and power tax credit. These projects are typically large capital projects that require long lead times to secure internal corporate approvals and external governmental permitting approvals. For example, a solar photovoltaic project for a large commercial building is a multi-million dollar project typically requiring board approval. In some states, required commercial solar photovoltaic interconnect approvals can take 200 to 300 days.

Capturing Missed Benefits

The IRS realized that, since Jan. 1, 2006, many commercial property owners missed their EPA Act 179D tax incentives when they completed lighting, HVAC, and roof projects. To make the tax incentive process easier and eliminate burdensome amended tax returns, IRS issued Revenue Procedure 2011-14. With this process, a commercial property owner can use IRS Form 3115 to calculate the missed incentive and report it on the next filed tax return. This process is particularly convenient for properties owned by multiple investors because individual investors do not have to amend their personal tax returns.

No one can be certain about future tax legislation. Some of the current energy tax incentives are very lucrative and may never be available again. With some of the commercial energy efficiency measures, such as energy efficient lighting, the economic payback is often already quite favorable and the tax savings is simply intended to accelerate what is already a good business decision. Now is the time to take a close look at tax planning considerations, whether that is maximizing the current 179D EPA Act provisions, recouping any missed tax incentives back to Jan. 1, 2006, or planning for the potential extension and expansion of energy-related tax benefits. ■

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