BUSINESS ENERGY INCENTIVES

Energy-Efficient Commercial Buildings Property Deduction

BACKGROUND

A large percentage of domestic energy consumption can be attributed to commercial buildings. Such buildings are estimated to use approximately one-fourth of all the electrical energy consumed in the United States. Currently, no significant federal tax incentive exists to encourage the use of energy-efficient property in the construction of these commercial structures.

According to commentators, approximately 9 out of 10 commercial buildings were built over 15 years ago, and only a small percentage of those buildings have been updated to meet current energy usage standards. No significant federal tax incentive exists to encourage energy-efficient renovation of older commercial structures.

NEW LAW EXPLAINED

Deduction for energy-efficient commercial building property.- Taxpayers may claim a deduction for costs associated with energy-efficient commercial building property placed in service after December 31, 2005, and before January 1, 2008 (Code Sec. 179D(a), as added by the Energy Tax Incentives Act of 2005). The maximum amount that can be deducted is $1.80 per square foot of the building in question, less the total amount of deductions taken under this provision, with respect to the building, in any prior tax years. The basis of any property generating a deduction must be reduced by the amount deducted (Code Sec. 179D(b) and (e), as added by the Energy Act).

> **Comment:** According to the Joint Committee on Taxation, Description and Technical Explanation of the Energy Tax Incentives Act of 2005 (JCX-60-05*)*, if an individual credit for residential energy property under new Code Sec. 25C, as added by the Energy Act (¶205), or residential alternative energy property under new Code Sec. 25D, as added by the Energy Act (¶210), is allowed, with respect to property for which a deduction under this provision may be claimed, it is to be assumed that, in determining the annual energy and power costs of the building, the building contains the property for which the credit has been allowed, and any such costs cannot be taken into account for purposes of this provision.
>
> **Comment:** Although this deduction has value to owners of commercial lease property (see Comment below under Partial allowance of deduction), it is believed to be primarily targeted toward real estate businesses.

Public property. The IRS is required to issue regulations that allow a transfer of the deduction for energy-efficient commercial building property with respect to public property (Code Sec. 179D(d)(4), as added by the Energy Act). The regulations are to permit an allocation of any deduction associated with energy-efficient property installed in public buildings to the "person primarily responsible for designing the property." The deduction, therefore, will go to the party responsible for creating the energy-efficient environment, rather than to the public entity owner who is not a taxpayer. By expanding the incentive to include designers as well as owners, the intent is to encourage energy-efficient design and innovation in municipal buildings, such as public schools.

Energy-efficient commercial building property. In order to qualify costs as pertaining to "energy-efficient commercial building property," several criteria must be met. First, the costs must be associated with depreciable (or amortizable in lieu of depreciable) property that is installed in a domestic building that is within the scope of Standard 90.1-2001 (see Comment below for a discussion of this Standard). Second, the property in question must be installed as part of:

(1) the interior lighting system,

(2) the heating, cooling, ventilation and hot water systems, or

(3) the building envelope (Code Sec. 179D(c)(1)(C), as added by the Energy Act).

Comment: Code Sec. 179D does not define "building envelope" for the purposes of qualifying property as energy-efficient commercial building property eligible for the deduction. The term is defined, however, in new Code Sec. 25C(c)(2) as part of the definitions relating to the credit for residential energy-efficient property (Code Sec. 25C(c)(2), as added by the Energy Act; see ¶205). While Code Sec. 25C applies to residential and not commercial buildings, it would seem likely that a similar definition would apply for purposes of Code Sec. 179D. The U.S. Department of Energy defines a building envelope to include "everything that separates the interior of a building from the outdoor environment, including the windows, walls, foundation, basement slab, ceiling, roof system and insulation."

Third, the property must be installed pursuant to a plan intended to reduce the total annual energy and power costs of the building (with respect to interior lighting, heating, cooling, ventilation and hot water supply systems) by 50 percent or more in comparison to a reference building that meets the minimum requirements of Standard 90.1-2001. Such a plan must be certified by the IRS (see Certification, below) (Code Sec. 179D(c)(1)(D), as added by the Energy Act). The IRS is directed to consult with the Secretary of Energy and issue regulations describing detailed methods of calculating and verifying energy and power costs for this purpose using qualified computer software based on the provisions of the 2005 California Nonresidential Alternative Calculation Method Approval Manual (Code Sec. 179D(d)(2) and (3), as added by the Energy Act; see Regulations, below).

Caution Note: While attempting to summarily describe the legislation, some commentators have stated that the deduction is available when property is installed pursuant to a plan to reduce total energy costs of a building by 50 percent. This is somewhat misleading. The actual legislative text states that costs must be reduced "by 50 percent or more in comparison to a reference building which meets the minimum requirements of Standard 90.1-2001" (emphasis added). While it is not clear from the Internal Revenue Code or Committee Reports exactly what this comparison entails, industry commentators are inferring that the energy consumption of the building in question must equal 50 percent or less of the amount of energy used by a comparable building that meets the requirements of Standard 90.1-2001. This seems like a logical conclusion considering the fact that newly constructed buildings have no historic consumption level to reduce.

Comment: It is also worthwhile to note that the 50-percent reduction refers to a reduction in energy and power cost to the taxpayer, rather than a reduction in actual units of energy consumed. As a result, a reduction in peak electricity usage will be more beneficial for a taxpayer trying to meet the 50-percent reduction goal than a reduction of energy used in non-peak hours, because energy used at peak times is significantly more expensive.

Caution Note: In order to qualify for the full deduction, the overall cost reduction plan must target all the systems specifically identified in Code Sec. 179D(c)(I)(D), namely the interior lighting, heating, cooling, ventilation and hot water supply systems. The targeted reduction applies to the overall energy savings, not the savings of any particular system.

Comment: Standard 90.1-2001 is a publication of the American Society of Heating, Refrigerating, and Air Conditioning Engineers (ASHRAE) and the Illuminating Engineering Society of North America (IESNA) (Code Sec. 179D(c)(2), as added by the Energy Act). The Standard provides minimum requirements for the design of energy efficient buildings other than low-rise residential buildings. It has general industry acceptance and has been incorporated in the International Energy Conservation Code (IECC) for 2003. Its language is often adopted into new building codes, and it also addresses modifications to existing buildings. A copy of the Standard and of the Tables referenced in Code Sec. 179D(f) can be accessed at www.ashrae.com.

Comment: The 2005 California Nonresidential Alternative Calculation Method Approval Manual is published by the California Energy Commission. It contains requirements for designing a calculation

computer program for use with California energy standards. A copy of the Manual can be accessed at http://www.energy.ca.gov/title24/2005standards/nonresidential_acm/ index.html.

According to the Joint Committee on Taxation, Description and Technical Explanation of the Energy Tax Incentives Act of 2005 (JCX-60-05), the methods for calculating energy and power costs must be fuel-neutral. In other words, the energy-efficiency measures must not discriminate between fuel sources. A building will be eligible for the deduction, therefore, regardless of whether it uses a gas or oil furnace or boiler, an electric heat pump or another fuel source. It is also the intention of the Joint Committee that the calculation methods provide suitable calculated energy savings for design methods and technologies not otherwise credited in either Standard 90.1-2001 or in the 2005 California Nonresidential Alternative Calculation Method Approval Manual, including:

(1) natural ventilation;

(2) evaporative cooling;

(3) automatic lighting controls, such as occupancy sensors, photocells and time clocks;

(4) daylighting;

(5) designs utilizing semi-conditioned spaces that maintain adequate comfort conditions without air conditioning or heating;

(6) improved fan system efficiency, including reductions in static pressure;

(7) advanced unloading mechanisms for mechanical cooling, such as multiple or variable speed compressors;

(8) on-site generation of electricity, including combined heat and power systems, fuel cells and renewable energy generation, such as solar energy; and

(9) wiring with lower energy losses than wiring that satisfies Standard 90.1-2001 requirements for building power distribution systems.

Certification. The definition of energy-efficient commercial building property requires that the taxpayer obtain certification of a plan to reduce the overall energy and power costs in connection with the installation of the property (Code Sec. 179D(c)(1)(D), as added by the Energy Act). While the IRS is charged with designing and governing this certification process, Congress has mandated a few procedural guidelines. First, certification must include inspection and testing by individuals recognized by an IRS-approved organization. These inspections and tests must be designed to ensure compliance with the energy saving plans and targets. Second, the procedures used in such testing must be comparable to the requirements in the Mortgage Industry National Accreditation Procedures for Home Energy Rating Systems (taking into account the differences between commercial and residential buildings) (Code Sec. 179D(d){6), as added by the Energy Act).

Partial allowance of deduction. A reduced deduction may be available with respect to a building even if the relevant energy-efficient property is not installed as part of a certified plan to reduce overall energy and power costs (Code Sec. 179D(d)(1), as added by the Energy Act). The IRS is directed to issue regulations containing specific energy efficiency targets, and methods of calculating such targets, for each of the separate systems listed in Code Sec. 1.79D(c)(1)(C). namely, interior' lighting, heating. cooling, ventilation and hot water (Code Sec. 179D(d)(1)(B), as added by the Energy Act). A taxpayer who replaces any of these systems in an existing building and meets the designated target will be eligible for a partial deduction (Code Sec. 179D(d)(1)(A), as added by the Energy Act). Interim targets for lighting systems have already been issued and are incorporated as part of Code Sec. 179D (see *Interim rules for lighting systems*, below).

The partial deduction is available for the costs of the energy-efficient system installed up to $0.60 per square foot of the building. These system-specific improvements are also subject to the IRS-designed certification process discussed above (Code Sec. 179D(d)(1)(A), as added by the Energy Act). Each certification will include an explanation to the building owner regarding the energy-efficiency features of the building and the projected annual energy costs (Code Sec. 179D(d)(5), as added by the Energy Act).

Comment: This partial deduction will be especially relevant to owners of commercial lease properties. Historically, such owners have avoided improving outdated systems because of the significant capital investment required and because their utility costs are simply passed on to tenants. It is hoped that the availability of this partial deduction will cause them to reconsider investing in energy-efficient systems.

Interim rules for lighting systems. As mentioned above, the IRS is directed to issue regulations setting forth energy-efficiency targets for each of the specific systems described in Code Sec. 179D(c)(1)(C). Prior to the release of these regulations, interim guidelines for lighting systems are provided by Code Sec. 179D(f). To qualify for the $0.60-per-square-foot deduction for system-specific energy-efficient property (see *Partial allowance of deduction* above), a lighting system must reduce lighting power density (LPD) by 40 percent of the minimum requirements contained in Table 9.3.1.1 or Table 9.3.1.2 of Standard 90.1-2001 (not including additional interior lighting power allowances). If the reduction in LPD is 25 percent of the minimum requirements, a $0.25-per-square-foot deduction is allowed. If the reduction is below 25 percent of the minimum requirements (50 percent in the case of warehouses), the target has not been met and no deduction is allowed (Code Sec. 179D(f), as added by the Energy Act).

If the reduction of LPD is between 25 percent and 40 percent of the minimum requirements, only a certain percentage of the deduction will be allowed (Code Sec. 179D(f)(2)(A), as added by the Energy Act). The deduction will be reduced by a percentage equal to the sum of 50 and the amount that bears the same ratio to 50 as the excess of the reduction over 25 percentage points bears to 15 (Code Sec. 179D(f)(2)(B), as added by the Energy Act).

Example (1): Assume Jones Corporation operates a 4,000-square-foot family restaurant. In an effort to save energy, Jones installs a new lighting system that reduces its LPD by 3,200 watts. Assume also that the minimum requirement contained in Table 9.3.1.1 for family restaurants is 1.6 watts/square foot or 6,400 watts for the Jones restaurant (4,000 x 1.6). Because Jones has reduced its lighting power usage by 3,200 watts, which is 50% of the minimum requirement (3,200/6,400), it is eligible for the entire amount of the partial deduction of $0.50 per square foot, or $2,000.

Example (2): If, however, Jones Corporation reduces its LPD by only 30% of the minimum requirements, or 1,920 watts (6,400 watts x 30%), the amount of the deduction will be prorated. Jones Corporation will only be able to deduct $1,334, or 66.67% of the otherwise allowable deduction ($2,000 x 66.67%). This percentage is equal to 50 plus 16.67. The 16.67 percentage points is the amount which bears the same ratio to 50 as 5 (30% minus 25%) bears to 15. In other words, 16.67/50 is equal to 5/15. Therefore, 16.67 is added to 50 to find the applicable percentage of the otherwise allowable deduction.

This interim guidance does not apply, however, to certain lighting systems. Systems whose controls and circuitry do not fully comply with Standard 90.1-2001 are not covered by these rules, nor do the rules apply to systems that do not include bi-level, switching in all occupancies (except hotel and motel guest rooms, store rooms, restrooms and public lobbies). Lastly, systems failing to meet the minimum requirements for calculated lighting levels contained in the Illuminating Engineering Society of North America (IESNA) Lighting Handbook, Performance and Application, Ninth Edition, 2000, are not governed by this interim guidance (Code Sec. 179D(f)(2)(C), as ' added by the Energy Act).

Comment: It is interesting to note that interim guidelines were provided for lighting systems, but not for heating, cooling, ventilation or hot water systems. A possible explanation for this is that Congress understood that lighting costs account for almost 50 percent of older commercial building energy usage and that lighting is relatively easy to upgrade. Simple solutions, such as dimming and room occupancy sensors, can reduce energy usage drastically. Also, an appropriate and fair gauge of lighting efficiency was readily available. Another factor might have been the lobbying tenacity of the National Electrical Manufacturers Association, which strongly supported and proposed language for the interim guidelines.

Regulations. As mentioned above, the IRS is charged with issuing regulations that will govern the certification process. These regulations must include the proper methods of calculating and verifying various energy and power costs using qualified computer software, based on the provisions of the 2005 California Nonresidential Alternative Calculation Method Approval Manual (Code Sec. 179D(d)(2) and (3), as added by the Energy Act). In addition, Code Sec. 179D(g) directs the IRS to issue any regulations necessary to account for new technologies regarding energy efficiency and renewable energy for the purpose of determining energy efficiency and savings. The IRS must also issue regulations that will mandate a recapture of the deduction if any certified energy savings plan is not fully implemented (Code-Sec. 179D(g), as added by the Energy Act).

Comment: The deduction for energy-efficient commercial building property garnered Congressional and public support largely because it was performance, rather than cost, based. In other words, the availability of the deduction is dependent on quantitative reductions in energy usage, rather than on the amount of money paid for energy-efficient products. Tying the deduction to strongly enforced performance goals was seen as a method of fostering competition between, and innovation by, suppliers of different technologies. Price or cost-based incentives, on the other hand, are generally viewed more skeptically as artificially inflating prices and inviting corruptive practices.

Performance-based incentives, however, are harder to administer. This puts an onus on the IRS to promulgate regulations that incorporate strong, efficient and enforceable measures of energy efficiency. This is no small task.

Comment: The fact that this deduction is not effective retroactively creates somewhat of an inequity for taxpayers who sought to achieve energy efficiency prior to the passage of the Energy Act. The full deduction is available only for property placed in service after December 31, 2005, that is installed pursuant to a certified plan of overall cost reduction targeting multiple systems. A taxpayer who builds new construction using energy-efficient systems or installs the systems during a total renovation of an existing structure after December 31, 2005, therefore, will be entitled to a full deduction. In addition, a taxpayer who improves an existing building by installing energy-efficient systems on a piece meal basis after August 8, 2005, may be eligible for a partial deduction. However, taxpayers who built completely energy-efficient buildings or updated existing systems prior to January 1, 2006, receive no deduction. Although such taxpayers will have benefited from other tax incentives such as bonus depreciation, they were unable to claim an immediate deduction for such costs.

State Tax Consequences: Many states provide energy incentives through personal and corporate income tax credits. See ¶195 for a state-by-state summary of available credits.

Effective date. The provision applies to property placed in service after December 31, 2005 (Act Sec. 1331(d) of the Energy Tax Incentives Act of 2005). Code Sec. 179D, however, contains a termination clause rendering the deduction unavailable with respect to property placed in service after December 31, 2007 (Code Sec. 179D(h), as added by the Energy Act).

Law source: Law at ¶5195, ¶5205, ¶5210, ¶5240, ¶5245 and ¶5250. Committee Report at ¶10,190.

- Act Sec. 1331 (a) of the Energy Tax Incentives Act of 2005, adding Code Sec. 179D;
- Act Sec. 1331(b), adding Code Sec. 1016(a)(32), amending Code Sec. 1245(a) and Code Sec. 1250(b)(3), adding Code Sec. 263(a)(1)(K) and amending Code Sec. 312(k)(3)(B), as amended by Energy Act Sec. 1323(b)(3);
- Act Sec. 1331(d), providing the effective date.

Reporter references: For further information, consult the following CCH reporters.

- - Standard Federal Tax Reporter, 2005FED ¶29,412.023 and ¶30,909.025
- - Federal Tax Service, FTS §G:24.20