

# Large EPAct Energy Tax Deduction Opportunities for Commercial Heaters

*By Charles Goulding, Jacob Goldman and Raymond Kumar*

Charles Goulding, Jacob Goldman and Raymond Kumar explain how large industrial and commercial facilities can reduce energy costs and cut their taxes through the use of new technology in combination with Code Sec. 179D.

**W**ith the enactment of the Energy Policy Act (EPAct) of 2005, tax deductions for various energy saving measures were made available to commercial and industrial buildings through Code Sec. 179D.<sup>1</sup> Moreover, technology advancements have not only decreased potential energy costs, but also have increased tax deduction opportunities.

In the northern United States, the cost of heating large industrial and commercial buildings—such as warehouses, industrial plants, car dealerships and auto repair garages—during cold winter months can be substantial. However, by installing energy saving devices encouraged by Code Sec. 179D, building owners can decrease heating costs and take advantage of available tax deductions to reduce taxes.

Because of the colder climate, many warehouses, industrial facilities, car dealerships and auto repair garages in northern states have heating systems but no air conditioning. The northern states that have a great deal of industry and commercial facilities include Minnesota, Wisconsin, Michi-

gan, Illinois, Indiana, Ohio, Pennsylvania, New Jersey, New York, Northern California and the New England states.

## **EPAct Tax Provisions**

Under Code Sec. 179D of the EPAct and the 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 does not qualify for the full \$1.80-per-square-foot deduction, it may qualify for a deduction on one or more of the three major sub-systems, which include (1) lighting; (2) HVAC (heating, ventilation and air condition); or (3) the building envelope (anything on the perimeter of the building that "touches" the outside, such as the roof, walls, windows, doors, the foundation and related insulation layers). Each component can qualify for a deduction of up to 60 cents per square foot under the EPAct.

## **Technology Improvements**

For most of these "Heat Only Spaces" (HO Spaces), the largest building energy costs are lighting and heating (in that order). Lighting typically makes up 50 to 70 percent (or more) of total building energy costs. The good news is that, as result of new energy-efficient lighting technology, most of

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Chart 1

| Combining EPAct Energy Efficient Tax Deductions<br>Energy Efficient Lighting & Heating Warehouse, Industrial & Car Dealer/ Repair Shop Facilities<br>Buildings with no Air Conditioning |   |   |   |  |                                     |  |            |            |            |            |
|---|---|---|---|--|-------------------------------------|--|------------|------------|------------|------------|
| (A)   | (B)   | Total Building                                |   | Total Building                                       |                                     | Total Tax Deduction at Facility Square Foot Levels |            |            |            |            |
|   |   | (C)   | (D)   | (E)  | (F)                                 |  |            |            |            |            |
| Lighting:<br>% of<br>Total<br>Building<br>Energy<br>Cost  | % of<br>Achieved<br>Lighting<br>Cost<br>Reduction<br>Compared<br>to<br>ASHRAE<br>2001 | Percentage<br>of Cost<br>Reduction<br>(A x B) | Cambridge<br>Heater<br>Cost<br>Reduction<br>% (20%<br>more<br>efficient<br>then<br>reference) | Combined<br>Cost<br>Reduction<br>Achieved<br>(C + D) | Total Tax<br>Deduction<br>Per Sq Ft | 50,000   | 100,000    | 200,000    | 300,000    | 400,000    |
| 70%   | 50%   | 35.00%  | 6%  | 41.00%   | \$ 1.20                             | \$ 60,000  | \$ 120,000 | \$ 240,000 | \$ 360,000 | \$ 480,000 |
| 65%   | 50%   | 32.50%  | 7%  | 39.50%   | \$ 1.20                             | \$ 60,000  | \$ 120,000 | \$ 240,000 | \$ 360,000 | \$ 480,000 |
| 60%   | 50%   | 30.00%  | 8%  | 38.00%   | \$ 1.20                             | \$ 60,000  | \$ 120,000 | \$ 240,000 | \$ 360,000 | \$ 480,000 |
| 55%   | 50%   | 27.50%  | 9%  | 36.50%   | \$ 1.20                             | \$ 60,000  | \$ 120,000 | \$ 240,000 | \$ 360,000 | \$ 480,000 |
| 70%   | 45%   | 31.50%  | 6%  | 37.50%   | \$ 1.20                             | \$ 60,000  | \$ 120,000 | \$ 240,000 | \$ 360,000 | \$ 480,000 |
| 65%   | 45%   | 29.25%  | 7%  | 36.25%   | \$ 1.20                             | \$ 60,000  | \$ 120,000 | \$ 240,000 | \$ 360,000 | \$ 480,000 |
| 60%   | 45%   | 27.00%  | 8%  | 35.00%   | \$ 1.20                             | \$ 60,000  | \$ 120,000 | \$ 240,000 | \$ 360,000 | \$ 480,000 |
| 55%   | 45%   | 24.75%  | 9%  | 33.75%   | \$ 1.20                             | \$ 60,000  | \$ 120,000 | \$ 240,000 | \$ 360,000 | \$ 480,000 |
| 70%   | 40%   | 28.00%  | 6%  | 34.00%   | \$ 1.20                             | \$ 60,000  | \$ 120,000 | \$ 240,000 | \$ 360,000 | \$ 480,000 |
| 65%   | 40%   | 26.00%  | 7%  | 33.00%   | \$ 0.60                             | \$ 30,000  | \$ 60,000  | \$ 120,000 | \$ 180,000 | \$ 240,000 |
| 60%   | 40%   | 24.00%  | 8%  | 32.00%   | \$ 0.60                             | \$ 30,000  | \$ 60,000  | \$ 120,000 | \$ 180,000 | \$ 240,000 |
| 55%   | 40%   | 22.00%  | 9%  | 31.00%   | \$ 0.60                             | \$ 30,000  | \$ 60,000  | \$ 120,000 | \$ 180,000 | \$ 240,000 |

these facilities either have, or are in the process of installing, highly energy-efficient lighting. In fact, to date, HO Spaces have been the largest beneficiaries of the EPAct lighting tax incentive.

Space heating and lighting consume most of the energy in non-refrigerated warehouses. Installing more efficient lighting to save electrical energy is a popular and first step but what about the gas-fired heating?<sup>22</sup>

### Improved Commercial Heaters

New, improved commercial heating systems can provide energy cost savings of eight percent or more over the ASHRAE 2001 building code

standards. There are multiple heater technologies suitable for the HO Spaces market, including direct-fired gas heaters, unit heaters and infrared (radiant) heaters. Some of the more popular highly energy-efficient heaters are the Cambridge Engineering direct gas fired blow-thru space heaters. The Cambridge units have been selected by the Environmental Protection Agency and Department of Energy as an energy partner to help save energy in commercial and industrial buildings. Besides being highly efficient, these units use natural gas as a fuel source. Natural gas is abundant in the United States and actually has been declining in price.

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This rule does not apply to a special company known as a "qualifying company" which is taxed in a similar manner to a partnership. This is covered later in this article. A "close company" is a company that is controlled by five or fewer individuals (with associated persons grouped as one individual). The "specified rate" (an interest rate set by the Commissioner of Inland Revenue for the purpose of setting the interest rate charged

for an unsecured loan). The rate is set almost regularly, however for the purposes of the dividend rules no consideration is made for the security offered for the loan and thus in many cases can be considered for a nearly secured loan. Also included is if the person holding the shares of shares issued to a trust or trust beneficiary for the purposes of their spouse. Unit trusts (a form of mutual fund) can support the ABC or a private bank which

for more on this subject. The dividend rule is subject to many provisions that are not covered in this article. The interest rate for the purpose of setting the interest rate charged for an unsecured loan is set by the Commissioner of Inland Revenue for the purpose of setting the interest rate charged for an unsecured loan. Unit trusts (a form of mutual fund) can support the ABC or a private bank which

## Voluntary Disclosure Regime

New Zealand sources. Companies make a significant contribution to

sought to voluntarily disclose assets held in offshore accounts before the special program deadline. Many individuals seeking to take advantage of the reduced penalties under the voluntary disclosure regime did not file

both upgrading their filing. If they do not file these new returns, they may be seen as prohibited by the IRS. The IRS is currently reviewing the

## Combining EAct Tax Deduction Incentives

The way to optimize energy and tax savings is by combining energy and tax planning. Tax departments and tax advisors, particularly those with warehouses, industrial plants and auto repair facilities, should first work with their facilities and energy planning departments to identify all HO Spaces and determine energy costs related to lighting and heating. Companies with multiple facilities should compare facilities. When those costs are high, or if the building energy code levels are at or below ASHRAE 2001 levels, the potential for savings is great. Moreover, when warehouse lighting is greater than 0.60 watts per square foot, there is an opportunity for both energy cost savings and large EAct tax deductions.

Chart 1 illustrates how energy-efficient lighting and energy-efficient heaters combine to produce enhanced EAct tax deductions for the HO spaces.

## EAct Deduction

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Installing more energy efficient warehouse heating systems represent a tremendous opportunity to save energy, reduce carbon emissions and significantly lower operating costs.<sup>3</sup>

Property owners in the colder winter regions should consider

Most utilities offer rebates for lighting upgrades and many gas utilities offer rebates for gas heater upgrades. With combined lighting and heater projects many utilities will offer additional bonus rebates for two or more energy reduction initiatives.

## **Benefiting from Prior Energy-Efficient Lighting Investments**

Since the enactment of the EAct tax incentives effective January 1, 2006, thousands of warehouses, industrial buildings and auto repair facilities have already upgraded to energy-efficient lighting. Some property owners may have upgraded their lighting even before January 1, 2006. Those who upgraded before 2006, or who may have missed taking some or all of the 60-cent-per-square-foot lighting EAct tax deduction, may be able to obtain up to a \$1.20 tax deduction and, in some cases, a \$1.80-per-square-foot tax deduction by upgrading their heating systems.

## **Conclusion**

The Code Sec. 179D EAct tax incentives were shrewdly designed to encourage property owners to take a comprehensive multifaceted approach to building energy cost reduction. Property owners who understand how the rules apply to Heat Only buildings with energy-efficient lighting now have the opportunity to greatly reduce their heating bills through utility rebates, falling natural gas prices and Code Sec. 179D EAct tax deductions.

## **ENDNOTES**

- <sup>1</sup> Energy Policy Act of 2005 (P.L. 109-58).
- <sup>2</sup> Ken Williams, Director of Marketing, Cambridge Engineering.
- <sup>3</sup> *Id.*

may turn their attention to the availability of the cost-based direct and indirect, and internal and external costs, and to the appropriateness of the allocation method used.

As the tax law continues to be subject to discussion and debate, on what expenses should be construed as "rewards" or shareholder activity. The OECD Guidelines provide only limited guidance on how to define these categories of activity and cost. The U.S. Services Regulations apply the "sole effect" test, and include a relatively narrow definition of shareholder expenses, which may increase the chances of conflict with recipient authorities. The use and choice of allocation keys may also be disputed by local tax authorities.

In addition to providing support for recharging and allocating the basic costs, entities are also frequently required to justify the mark-ups (if any) applied when recharging the HQBS. In many cases this may entail on the services of outside transfer pricing practitioners for this support. This may entail significant compliance costs for the business, and produce "final" mark-up outcomes ranging from three to ten percent for typical HQBS with relatively low perceived added value for the taxpayer's core business.

In the author's experience, some countries will insist on lower mark-ups for inbound than for

outbound. Some countries will insist on lower mark-ups for HQBS charges out of U.S. head offices. Using the SCM has the merit of avoiding the costs and potential conflicts associated with choosing a mark-up.

## **Double Taxation Consequences**

Following the increased focus of tax authorities on transfer pricing matters and the consequent explosion of transfer pricing adjustments, businesses now face an increased risk of double taxation when HQBS fees are partially or fully denied as deductible business expenses in the country of the paying group entity. Certain procedures, such as the EU's European Arbitration Convention and the Mutual Agreement Procedures set out in double tax treaties, may be used to help avoid or remedy this double taxation.

But the Mutual Agreement Procedures—at least in the form expected in most double tax treaties—are no guarantee that double taxation problems will be resolved. The European Arbitration Convention, in principle, does provide such a guarantee, but it appears that some member states, such as France and Spain, often levy a serious penalty after a transfer pricing adjustment. Such serious penalties would preclude the affected taxpayer's access to the European Arbitration Convention, resulting in substantially greater difficulties in resolving double tax issues.

A further difficulty arises when HQBS charges are incurred by