

EPA Act 2005

Energy-Efficient Commercial Building Tax Deduction Program



CrescentStonco[®]
a GENLYTE company

EPAct 2005

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EPAcT 2005

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The Energy Policy Act of 2005, formally known as EPAcT 2005, provides building owners a tax deduction based on the installation of equipment that generates the efficient use of energy. The Energy Efficient Commercial Building Deduction provides owners the ability to deduct up to \$.60/sq. ft. off their federal taxes in the year the lighting systems are placed in service, as long as the lighting exceeds the energy code requirements called out in ASHRAE/IES Standard 90.1-2001.

Additional tax benefits can be achieved from energy efficient upgrades to the HVAC/hot water system along with the building itself, capped at \$1.80/square foot. The Commercial Building Deduction is part of Section 1331 of EPAcT 2005, which went into effect in January 1, 2006, and currently will continue through December 31, 2007.

COMMERCIAL BUILDINGS DEDUCTION:

Benefits from Lighting

- Building owners can reduce cost and improve their competitiveness/profitability through lighting upgrades.
- Lighting upgrades will create new demand for higher end products and large capital investment projects.
- Based on estimates from the Department of Energy, lighting represents 40% of the electrical consumption in commercial buildings, equal to HVAC but higher than all other equipment combined.
- Lighting is characterized as the easiest upgrade to an electrical system with paybacks generating a 45% ROI within 2.2 years.
- The Commercial Building Tax Deduction is just that...a direct dollar-for-dollar reduction in taxes paid to the government the year the system is put in place.

INTERIM LIGHTING RULES TO THE COMMERCIAL BUILDING DEDUCTION:

The Treasury Department has not yet finalized the regulations defining savings targets, however Interim Rules for Lighting are in effect. The tax deduction based on these rules is the lesser of the following two calculations:

- Complete cost of installing energy-efficient interior lighting,
or...
- \$.30/sq. ft. to \$.60/sq. ft. proportional to lighting power density (LPD) savings of 25%-40% below ASHRAE 90.1-2001 Standards.

Note: Lighting Power Density is calculated as watts/sq. ft.



POTENTIAL TAX SAVINGS SCALE

A sliding scale has been developed to help building owners calculate the potential tax savings.

% of LPD reduction beyond Standard 90.1-2001	25%	26%	27%	28%	29%	30%	31%	32%	33%	34%	35%	36%	37%	38%	39%	40%	>40%
Amount of Eligible Tax Deduction/ Sq. Ft.	\$0.30	\$0.32	\$0.34	\$0.36	\$0.38	\$0.40	\$0.42	\$0.44	\$0.46	\$0.48	\$0.50	\$0.52	\$0.54	\$0.56	\$0.58	\$0.60	\$0.60



Under the Commercial Building Deduction Interim Lighting Rules, "energy efficient interior lighting" is defined as follows:

- Classified as Interior Lighting
- Otherwise depreciable as a cost
- Installed in the U.S.
- Part of new construction and renovation within the scope of ASHRAE/IES 90.1-2001
- Certified to reduce LPD to 25%-40% less than the minimum ASHRAE standards, unless...
- Space in a warehouse, in which case the ASHRAE Standard must be exceeded by 50% to qualify for the tax deduction of \$.60/sq. ft.

Note: LPD standards have been determined based on the type of building and can be found in the ASHRAE Standard 90.1-2001.

IMPORTANT INFORMATION

Timeframes:

- Commercial Building Deduction applies to the cost incurred for energy upgrades from January 1, 2006 thru December 31, 2007.
- Interim lighting rules will apply until the Treasury Department issues the final rules.
- Extensions **will** be considered provided good examples of compliance are in place.

Building Types:

- Projects covered by the scope of the ASHRAE/IES Standard 90.1-2001 and Energy Standards for Buildings (except low-rise or residential buildings) of the American Society of Heating, Refrigeration and Air Conditioning Engineers as well as the Illuminating Engineering Society of North America (IESNA).
- Portions of buildings can qualify, however, the tax deduction will be applied to the selective square feet.

Private Ownership:

- If a building is privately owned, the owner will get the tax deduction.

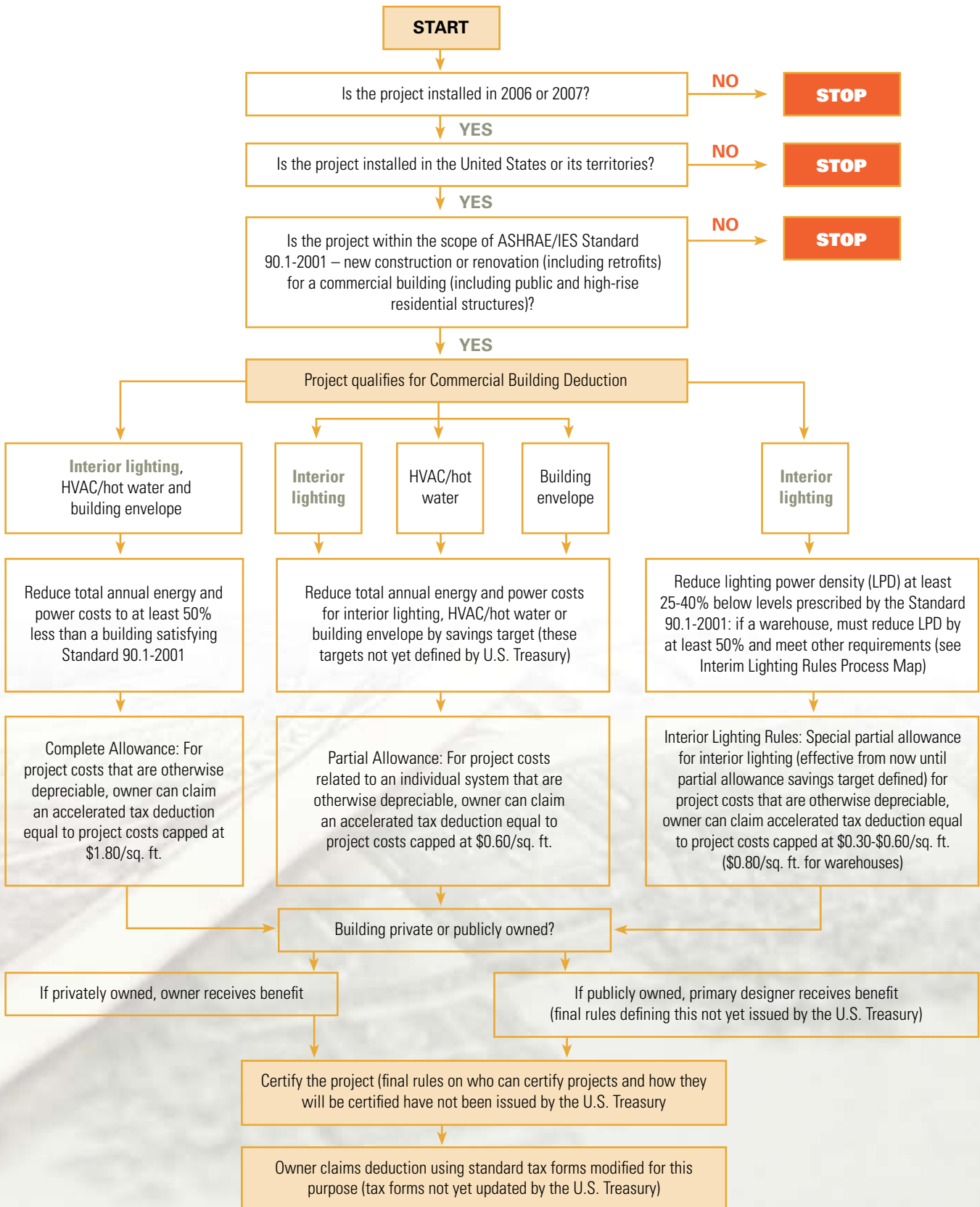
Public Ownership:

- If a building is publicly owned (federal, state, local government), then the primary designer of the lighting system can claim the deduction.

Note: As of March 15, 2006, the Treasury Department has not determined the rules for the exemption and federal tax forms have not been modified. Until this takes place, building owners and design firms should seek the advice of professional tax experts.

COMMERCIAL LIGHTING TAX DEDUCTION DECISION TREE

In an attempt to alleviate confusion related to how buildings and energy systems will qualify, NEMA has developed a decision tree to assist building owners.



Calculating Your Potential Deductions

IDENTIFY YOUR APPLICATION AND LIGHTING REQUIREMENTS

The first step is to determine the square footage of the application type (i.e. office, industrial or retail) in your geographic region. This will be required to establish the minimum LPD compliance with ASHRAE Standard 90.1-2001. You will also have to determine the type of high-efficiency fixture that will replace the current installation at the Genlyte Supply Division website.



Select energy-efficient lighting fixtures

Go to www.genlytesupplydivision.com to select energy efficient fixtures for your particular application. Choose either the Crescent (fluorescent) or Stonco (HID) division and the desired fixture style using either the Application or Type menus. Select the applicable fixture for a detailed product overview that includes features, downloadable specifications and access to the QuickEst™ Indoor Lighting Estimating Tool.

Calculate the quantity of fixtures required

To quickly estimate the quantity of fixtures for your application, refer to the **QuickEst™** Indoor Lighting Estimating Tool located on the product level page of the Genlyte Supply Division website. Choose the corresponding .ies in the pull-down menu and insert the necessary information as requested on the program screen.



Determine your compliance status

The D.O.E. has created COMcheck™, a simple tool that allows you to determine compliance with ASHRAE Standard 90.1-2001. Using this program, you will be able to determine the allowed lighting power calculation, actual lighting power calculation and the compliance calculation. You can access a web-based or downloadable version of COMcheck™ software at www.energycodes.gov.

Potential Tax Savings

Once you have determined the compliance calculation in COMcheck™, compare this figure against the sliding scale provided by the D.O.E. (located in this brochure). The percentage of LPD reduction beyond the Standard 90.1-2001 will give you the eligible tax deduction per square foot. Your potential tax savings is determined by multiplying the deduction per square foot by the total square feet of the application.

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Industrial Lighting



The High Bay Multi-Bay Series is for use in indoor applications having ceiling mounting heights above 15 feet. The series is available in various lamp sources with wattages ranging from 150w - 450w.



T-Bay - TS Series (TSN) is available in 2-, 3- and 4-light T5 lamping and outperforms conventional 400w MH technology for a fraction of the energy consumption. Benefits over HID include instant-on, a low profile and multi-level switching capability.



T-Bay - TS Series (TSW) is a six-lamp, high-efficiency fluorescent fixture using 54w T5HO and 32w T8 lamping. Benefits over HID include instant-on, a low profile and multi-level switching capability. T8 units provided with a 1.2 ballast factor electronic ballast.

Note: To view other energy-efficient products within the industrial lighting application, please visit www.genlytesupplydivision.com

Maximize Your Tax Deduction Through More Efficient Industrial Lighting

ASHRAE 90.1-2001 Allowed Lighting Power Calculation

Description	Storage, Industrial and Commercial
Construction	New
Floor Area	125,000 sq.'

Actual Lighting Power Calculator

Lamp Source	Linear fluorescent: 46" T5 54w / electronic
Lamps/fixture	4
No. of fixtures	180
Fixture Watts	239

Compliance Calculation

Total Allowed Watts	125,000
Total Actual Watts	43,020
Project Compliance	81,980
ASHRAE LPD Standard	1.0

Potential Tax Savings

% Greater Than Code	66%
Tax deduction per sq. ft.	\$0.60
Eligible Tax Deduction	\$75,000.00

Office Lighting



The GP2 Premium Grid troffer provides an ultra high efficiency with a minimum of 83%. It has a 3" shallow design with a one-piece ribbed unitized housing with interlocking corners that maintains structural integrity.



The 3" Deep Cell 2x4 Parabolic Troffer (D3) utilizes anodized aluminum parabolic louvers closely controlled for uniform low-brightness appearance and interlocked to avoid vibration.



The Recessed Direct/Indirect 2x4 Troffer (RDI) provides good efficiency by utilizing a high 95% reflective soft white paint finish. Soft white film on inside of mesh conceals lamp image providing balance between reflected and direct light.

Note: To view other energy-efficient products within the office lighting application, please visit www.genlytesupplydivision.com

Maximize Your Tax Deduction Through More Efficient Office Lighting

ASHRAE 90.1-2001 Allowed Lighting Power Calculation

Description	Office
Construction	New
Floor Area	16,800 sq. '

Actual Lighting Power Calculator

Lamp Source	Linear fluorescent: 48" T8 32w / electronic
Lamps/fixture	3
No. of fixtures	110
Fixture Watts	87

Compliance Calculation

Total Allowed Watts	21,840
Total Actual Watts	9,570
Project Compliance	12,270
ASHRAE LPD Standard	1.3

Potential Tax Savings

% Greater Than Code	56%
Tax deduction per sq. ft.	\$0.60
Eligible Tax Deduction	\$10,080.00

Retail Lighting



The High Bay Multi-Bay Series is for use in indoor applications with ceiling mounting heights above 15 feet. The series is available in various lamp sources with wattages ranging from 150w – 450w.



CF Bay Series - Compact fluorescent fixture ideal for HID replacement. Available in a variety of lamping arrangements including 2-, 4-, 6- and 8-lamp configurations.



T-Bay Lyte Series - TL Series (TSN) is available in 2-, 3- and 4-light T5HO lamping up to 54w. Reversible reflector allows for uplighting or direct illumination. Outperforms conventional 400 watt MH technology for a fraction of the energy consumption.

Note: To view other energy-efficient products within the retail lighting application, please visit www.genlytesupplydivision.com

Maximize Your Tax Deduction Through More Efficient Retail Lighting

ASHRAE 90.1-2001 Allowed Lighting Power Calculation

Description	Retail Sales, Wholesale Showroom
Construction	New
Floor Area	12,000 sq. '

Actual Lighting Power Calculator

Lamp Source	Linear fluorescent: 48" T8 32w (Super T8) / electronic
Lamps/fixture	6
No. of fixtures	80
Fixture Watts	232

Compliance Calculation

Total Allowed Watts	25,200
Total Actual Watts	18,560
Project Compliance	6,640
ASHRAE LPD Standard	2.1

Potential Tax Savings

% Greater Than Code	26%
Tax deduction per sq. ft.	\$0.30
Eligible Tax Deduction	\$3,600.00

Crescent/Stonco: Efficiency through Engineering

COMMITTED TO ENERGY CONSERVATION

Crescent and Stonco, the supply division of Genlyte, are totally dedicated to this country's concern for energy efficiency. We manufacture a wide selection of energy efficient lighting fixtures for office, warehouse, manufacturing and retail applications to meet the stringent requirements of the Energy Policy Act of 2005 signed into law on August 8, 2005 by President Bush.



IMPROVING YOUR BOTTOM LINE

In addition to helping meet your EPA Act 2005 tax goals, energy efficient lighting fixtures from Crescent/Stonco can increase productivity and improve product quality by providing a friendlier working environment. Better light quality also increases safety and employee satisfaction, further adding to your profitability.

KNOWLEDGEABLE PROFESSIONALS AND SUPERIOR LIGHTING FIXTURES

The professional staff at Crescent/Stonco can provide energy-saving lighting solutions for your new or existing building project. We can assist you in project planning and fixture selection from our wide array of innovative luminaires. Contact your Crescent/Stonco representative for assistance in determining the potential cost savings for your next lighting project. Also visit our comprehensive website at www.genlytesupplydivision.com.



The Interim Rule for the one-time tax deduction does have restrictions as noted in Section 179D of EPACT 2005 that must be taken into consideration. You can only use the Interim Rule if your reduction in lighting power density is greater than 40% of the minimum requirements of Standard 90.1-2001, or if the reduction is less than 40 (50% for warehouse) and if you comply with the controls and circuiting of Standard 90.1-2001. The compliance includes automatic lighting shutoff, switch or occupancy sensors, photosensor or astronomical time switch, tandem wired-ballasts for fluorescent fixtures with 1 or 3 lamps. Additional restrictions include bilevel switching in all occupancies except hotel and motel guest rooms, store rooms, restrooms and public lobbies. You must meet the minimum requirements for calculated lighting levels as set forth in the Illuminating Engineering Society of North America Lighting Handbook.

Other Energy-Efficient Crescent/Stonco Luminaires

T-BAY LYTE 6-LIGHT

- 32 watt T8
- 48% energy savings over conventional 400 watt MH



T-BAY 4-LIGHT

- 54 watt T5HO
- 47% energy savings over conventional 400 watt MH



GLOWBAY

- 320 watt Pulse Start Metal Halide
- 20% savings over conventional 400 watt MH



CF BAY

- 42 watt Compact Fluorescent
- 16% energy savings over conventional 400 watt MH

For additional information, contact Crescent/Stonco

800-334-2212 • Visit us on the web at www.genlytesupplydivision.com

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