



Tax Incentives and Energy Credits

Millard E. Carr, PE, CEM, RB
energy@carnet.net



GovEnergy
www.govenergy.gov

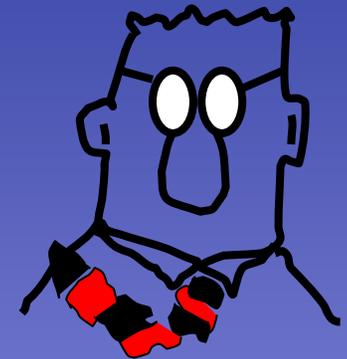
Energy Policy Act of 2005

Title XIII Tax Incentives



INTERESTING FACTS

My years in the Federal government	32.1
My years as a recovering bureaucrat	10.0
Hours in the day	24.0
Beers in a case (coincidence?)	24.0
TOTAL	90.1*



* I will try to be accurate and factual – but may not make sense –

so ASK QUESTIONS.



Tax Code Changes

- The changes made to the tax code in EPAct 2005 were made with the intent of supporting and accelerating the development and deployment of new/improved energy sources and energy efficiency and renewable energy technologies.
- The applicability of the tax law changes to specific projects will require the analysis of tax law experts.
- (This is the CMA clause for this presentation.)

Energy Policy Act of 2005

Public Law 109–58
109th Congress

An Act

Aug. 8, 2005
[H.R. 6]

To ensure jobs for our future with secure, affordable, and reliable energy.

Energy Policy Act
of 2005.
42 USC 15801
note.

*Be it enacted by the Senate and House of Representatives of
the United States of America in Congress assembled,*

SECTION 1. SHORT TITLE; TABLE OF CONTENTS.

(a) SHORT TITLE.—This Act may be cited as the “Energy Policy
Act of 2005”.

553 pages – in the compressed version

Touches virtually every aspect of energy use and production in the US

Authorization not appropriation

(New requirements – but no new resources.)

- www.thomas.loc.gov look for HR 6

Eighteen Titles

- TITLE I ENERGY EFFICIENCY
- TITLE II RENEWABLE ENERGY
- TITLE III OIL AND GAS
- TITLE IV COAL
- TITLE V INDIAN ENERGY
- TITLE VI NUCLEAR MATTERS
- TITLE VII VEHICLES AND FUELS
- TITLE VIII HYDROGEN
- TITLE IX RESEARCH AND DEVELOPMENT
- TITLE X DEPARTMENT OF ENERGY MANAGEMENT
- TITLE XI PERSONNEL AND TRAINING
- TITLE XII ELECTRICITY
- **TITLE XIII ENERGY POLICY TAX INCENTIVES**
- TITLE XIV MISCELLANEOUS
- TITLE XV ETHANOL AND MOTOR FUELS
- TITLE XVI CLIMATE CHANGE
- TITLE XVII INCENTIVES FOR INNOVATIVE TECHNOLOGIES
- TITLE XVIII STUDIES

TITLE XIII ENERGY POLICY TAX INCENTIVES

Subtitle A Electricity Infrastructure

Subtitle B Domestic Fuel Security

Subtitle C Conservation and Energy Efficiency Provisions

- **Sec 1331 Energy Efficient Commercial Buildings Deduction**
- **Sec 1332 New Energy Efficient Home Credit**
- **Sec 1333 Credit for Certain Non-Business Energy Property**
- **Sec 1334 Credit for Energy Efficient Appliances**
- **Sec 1335 Credit for Residential Energy Efficient Property**
- **Sec 1336 Credit for Installation of Qualified Fuel Cells and Stationary Micro- Turbine Power Plants**
- **Sec 1337 Business Solar Investment Tax Credit**

Subtitle D Alternative Motor Vehicles and Fuel Incentives

- **Sec 1341 Alternative Motor Vehicle Credit**
- **Sec 1342 Credit for Alternative Fuel Vehicle Refueling Property**

Subtitle E Additional Energy Tax Incentives

Subtitle F Revenue Raising Provisions



Section 1331 Energy Efficient Commercial Buildings Deduction

- Equal to the cost of *energy efficient commercial building property* placed in service or **\$1.80/square foot – which ever is less**
- **Cost includes labor, material, overhead, and financing**
- Property placed in service after December 31, 2005 and before December 31, 2007⁸
- Property includes *interior lighting* systems, *heating, cooling, ventilation, and hot water* systems, or **building envelope**
- Must reduce total annual energy and power costs with respect to the interior lighting systems, heating, cooling, ventilation, and hot water systems by **50 percent or more** in comparison to a reference building which meets the *minimum requirements of Standard 90.1–2001*
- Standard 90.1–2001 as in effect on April 2, 2003 (includes addenda adopted through that date—specifically excludes the lighting power changes)
- Essentially **requires energy simulation** to justify the deduction.

Section 1331 Energy Efficient Commercial Buildings Deduction ^{Cont.}

- **Partial Allowance**

- Secretary of Energy (DOE) to recommend % targets to the Secretary of Treasury (DOT) for subsystem credits for **interior lighting, HVAC & SWH, and envelope.**
- Up to **\$.60/square foot per subsystem.**

- **Calculating and Verifying the Deduction**

- DOE to recommend methods to DOT for qualifying computer software which provides
 - Data required by Treasury for tax filing purposes and
 - Documentation of the energy efficiency features of the building and its projected annual energy costs.
- Inspection and testing by qualified individuals shall be performed. Qualified individuals shall be recognized by an organizations certified by Treasury.
- Final IRS Guidance is not out yet – but interim is, as is DOE guidance.

Section 1331 Energy Efficient Commercial Buildings Deduction ^{Cont.}

- Allocation of the deduction for public buildings can go to the person principally responsible for designing the property. This could have a major impact on the interest of the A&E community in energy efficiency!
- Possible significant benefit to Federal buildings
- Tax Relief and Health Care Act of 2006 (Dec. 20, 2006) extended some of the deadlines one year (incl. 1331).
- “Caution – consider the cost of certification” ...
and the specific situation of the tax payer

IRS Commercial Buildings Deduction Notice 2006-52



Home | [Contact IRS](#) | [About IRS](#) | [Site Map](#) | [Español](#) | [Help](#)

 **Internal Revenue Service**
United States Department of the Treasury

Keyword/Search Terms
[Advanced Search](#) [Search Tips](#)

[INDIVIDUALS](#) | [BUSINESSES](#) | [CHARITIES & NON-PROFITS](#) | [GOVERNMENT ENTITIES](#) | [TAX PROFESSIONALS](#) | [RETIREMENT PLANS COMMUNITY](#) | [TAX EXEMPT BOND COMMUNITY](#)

News Essentials

- What's Hot
- [News Releases](#)
- [IRS - The Basics](#)
- [IRS Guidance](#)
- [Media Contacts](#)
- [Facts & Figures](#)
- [Problem Alerts](#)
- [Around the Nation](#)
- [e-News Subscriptions](#)

The Newsroom Topics

- [Electronic IRS Press Kit](#)
- [ETC Press Kit](#)
- [Tax Tips 2006](#)
- [Radio PSAs](#)
- [Fact Sheets](#)
- [Armed Forces](#)
- [Disaster Relief](#)
- [Tax Scams/Alerts](#)
- [More Topics...](#)

IRS Resources

- [Compliance & Enforcement](#)
- [Contact My Local Office](#)
- [e-file](#)
- [Forms and Publications](#)
- [Frequently Asked Questions](#)
- [News](#)
- [Taxpayer Advocacy](#)
- [Where To File](#)

IRS Unveils Procedure Enabling Commercial Property Owners to Qualify for Energy Efficiency Deduction

IR-2006-88, June 2, 2006

WASHINGTON — The Internal Revenue Service today issued an advance copy of a notice on how commercial building owners or leaseholders can qualify for the tax deduction for making their building energy efficient. The notice establishes a process to certify the required energy savings in order to claim the deduction.

The commercial building deduction, which was enacted in the Energy Policy Act of 2005, allows taxpayers to deduct the cost of energy-efficient property installed in commercial buildings.

The amount deductible may be as much as \$1.80 per square foot of building floor area for buildings that achieve a 50-percent energy savings target. The notice provides that buildings below the 50-percent threshold may, nevertheless, qualify for a deduction of up to 60 cents per square foot of building floor area if they meet a 16¼-percent energy savings target.

Before claiming the deduction, the taxpayer must obtain a certification that the required energy savings will be achieved. Today's notice prescribes the content of that certification and the qualifications that must be met by the person providing the certification.

The notice also announces that the Department of Energy will create and maintain a public list of software that must be used to calculate energy savings for purposes of providing the certification. It also provides a process that software developers must use if they desire to have their software included on that list.

Related Item:

- ◆ [Notice 2006-52](#), Deduction for Energy Efficient Commercial Buildings

[Subscribe to IRS Newswire](#)

www.irs.gov/newsroom/article/0,,id=158395,00.html

[Accessibility](#) | [FirstGov.gov](#) | [Freedom of Information Act](#) | [Important Links](#) | [IRS Privacy Policy](#) | [U.S. Treasury](#)



IRS Commercial Buildings Deduction Notice 2006-52

NOT-160920-05

Part III - Administrative, Procedural, and Miscellaneous

Deduction for Energy Efficient Commercial Buildings

Notice 2006-52

SECTION 1. PURPOSE

This notice sets forth interim guidance, pending the issuance of regulations, relating to the deduction for energy efficient commercial buildings under § 179D of the Internal Revenue Code. Specifically, this notice sets forth a process that allows a taxpayer who owns, or is a lessee of, a commercial building and installs property as part of the commercial building's interior lighting systems, heating, cooling, ventilation, and hot water systems, or building envelope to obtain a certification that the property satisfies the energy efficiency requirements of § 179D(c)(1) and (d). This notice also provides for a public list of software programs that must be used in calculating energy and power consumption for purposes of § 179D. The Internal Revenue Service and the Treasury Department expect that the rules set forth in this notice will be incorporated in regulations.

SECTION 2. BACKGROUND

.01 In General. Section 1331 of the Energy Policy Act of 2005, Pub. L. No. 109-58, 119 Stat. 594 (2005), enacted § 179D of the Code, which provides a deduction with

1 of 24

IRS Commercial Buildings Deduction Notice 2006-52

Provides interim guidance for the process to obtain certification that the property satisfies the tax deduction requirements –

50% reduction in energy and power costs compared to a reference building that meets the minimum requirements of 90.1-2001 for interior lighting; heating, cooling, ventilation and hot water; and building envelope – using the methods of Appendix G of 90.1-2004

plus the requirements of 2005 CA Title 24 Non-residential Alternative Calculation Method (ACM) Approval Manual

NO. of occupants; sensible and latent loads, receptacle loads and HW loads from Table N2-4-9

Occupancy, HVAC, fans, infiltration, HW, lighting, and equipment schedules from Tables N2-4-9

Infiltration modeled following ACM 2.4.1.6

Luminaire power from ACM Appendix NB

(Ms. Jennifer C. Bernardini (202)622-3120)

IRS Commercial Buildings Deduction Notice 2006-52 DOE Guidance



Building Technologies Program: Tax Incentives for Energy-Efficient Buildings and Products - Mozilla Firefox

File Edit View Go Bookmarks Tools Help

http://www.eere.energy.gov/buildings/info/tax_credit_2006.html

Getting Started Latest Headlines From Internet Explorer

U.S. Department of Energy
Energy Efficiency and Renewable Energy *Bringing you a prosperous future where energy is clean, abundant, reliable, and affordable*

Building Technologies Program

About the Program | Program Areas | Information Resources | Financial Opportunities | Technologies | Deployment | Home

Information Resources

Building Toolbox

- Energy Savers
- Energy Solutions for Your Building
- Publications
- Software Tools
- Disaster Recovery & Building Reconstruction
- 2006 Tax Incentives**

Tax Incentives for Energy-Efficient Buildings and Products

On August 8, 2005, President Bush signed into the law the Energy Policy Act of 2005. The Energy Policy Act of 2005 provides a variety of tax incentives for homeowners, businesses, and manufacturers for purchase of energy efficient equipment and buildings, which will be available after January 1, 2006 and before December 31, 2007.

The Department of the Treasury has amended tax form 1040 to include a line for energy tax credits in the tax credit section and has issued regulations specifying what energy efficiency equipment and improvements for residential buildings qualify for tax credits. However, final IRS guidance on commercial buildings is still under development. These resources provide information on what is currently known about the new tax incentives and will be updated as more information becomes available.

Note: Every effort is made to provide accurate information on these tax incentives; however, a tax professional should be consulted on questions for specific situations.

[Energy Policy Act of 2005 Tax Incentives](#)
Provides an overview from the U.S. Department of Energy of what types of consumer and commercial products qualify for the new tax incentives, as well as building upgrades that are also eligible.

[ENERGY STAR®](#)
Information on federal tax credits for residential energy efficient products, homes, and buildings that save energy and money.

[Tax Incentives Assistance Project \(TIAP\)](#)
Gives consumers and businesses information they need to make use of the federal income tax incentives for energy efficient products and technologies passed by Congress as part of the Energy Policy Act of 2005.

[Alliance to Save Energy New Energy Efficiency Home and Vehicle Tax Credits](#)
Provides examples and answers questions about how consumers and businesses can obtain tax incentive for purchasing hybrid vehicles and energy-efficient products.

[Florida Solar Energy Center Tax Credits for Solar and Energy Efficiency](#)
Explains what the tax credits mean for a number of solar and energy efficiency measures including purchases of highly efficient new homes and improvements to existing homes.

[Residential Energy Services Network \(RESNET\) Residential Energy Efficiency Tax Credits](#)
Provides an overview of what the new tax incentive mean for new and existing homes and commercial buildings.

[The Interstate Renewable Energy Council Database of State Incentives for Renewable Energy](#)
A comprehensive source of information on state, local, utility, and selected federal incentives to promote renewable energy. Includes information for businesses and homeowners on the new tax incentive.

[Commercial Building Tax Deduction Coalition](#)
Provides an extensive list of frequently asked questions on how commercial buildings qualify for the tax incentive.

National Electrical Manufacturers Association Assessment of the Energy Policy Act of 2005 ([PDF 672 KB](#))
This assessment report highlights provisions of the Energy Policy Act of 2005 of interest to the electrical manufacturing industry.

[Printable Version](#)

More information...

For more information on consumer energy-efficient products and home improvements that qualify for the tax credit, contact the EERE Information Center at 1-877-EERE-INF (1-877-337-3463) or visit the EERE [Consumer Web site](#).

IRS guidelines and tax forms for residential buildings

- Existing residential retrofit measures
- New home construction and manufactured housing
- 1040 ES Revised Tax Form ([PDF 162 KB](#))

IRS guidelines and tax deduction for commercial buildings

[IRS Notice 2006-52](#), Deduction for Energy Efficient Commercial Buildings

Additional information on tax deductions for commercial buildings

DOE is currently reviewing software for calculating energy and power cost savings that meet the federal tax incentive requirements for commercial buildings. The [list of qualified software](#) is now available and will continue to be updated by DOE. In addition, DOE is developing a document that will provide guidelines for modeling and inspecting energy improvements that must be certified for tax



GovEnergy
www.govenergy.gov



August 6 2007

IRS Commercial Buildings Deduction Notice 2006-52 DOE Guidance – approved software



Building Technologies Program: Qualified Software - Mozilla Firefox

File Edit View Go Bookmarks Tools Help

http://www.eere.energy.gov/buildings/info/qualified_software/

Getting Started Latest Headlines From Internet Explorer

U.S. Department of Energy
Energy Efficiency and Renewable Energy *Bringing your programs faster where energy is clean, abundant, reliable, and affordable*

Building Technologies Program

About the Program Program Areas Information Resources Financial Opportunities Technologies Deployment Home

Information Resources

Qualified Software

Qualified Computer Software for Calculating Energy Savings for Purposes of the Energy-Efficient Commercial Building Tax Deduction under Internal Revenue Code §179D.

The following software meets the requirements contained in IRS Notice 2006-52 dated 2 June 2006.

Software name and version	Date DOE Received Complete Documentation
TRACE 700 version 6.0.2.1 version 6.1.0.0	15 June 2006 18 December 2006
EnergyPlus version 1.3.0.018 version 1.4.0.025	23 June 2006 1 November 2006
Hourly Analysis Program version 4.31	17 August 2006
VisualDOE version 4.1 build 2006	11 September 2006
EnergyGauge Summit version 3.1 build 2	31 January 2007

Updated: 2 March 2007

Printable Version

Webmaster | Security & Privacy | Building Technologies Program Home | EERE Home
U.S. Department of Energy
Content Last Updated: 09/02/2007

IRS Commercial Buildings Deduction Notice 2006-52 DOE Section 1331 Guidance



Building Technologies Program: Tax Incentives for Energy-Efficient Buildings and Products - Mozilla Firefox

File Edit View Go Bookmarks Tools Help

http://www.eere.energy.gov/buildings/info/tax_credit_2006.html

Getting Started Latest Headlines From Internet Explorer

Building Technologies Program: Tax Incentives for Energy-Efficient Buildings and Products

Tax Incentives for Energy-Efficient Buildings and Products
Tax incentives and credits are available for homeowners and businesses that purchase and install energy efficient equipment or make energy efficiency improvements to existing or new homes and buildings. These incentives are made possible by the Energy Policy Act of 2005, which was signed into law by President Bush on August 8, 2005. The Act provides a variety of tax credits for energy-efficiency improvements made after January 1, 2006 and before December 31, 2007.

The Department of the Treasury has amended tax form 1040 to include a line for energy tax credits and has issued regulations specifying what energy efficiency equipment and improvements for residential buildings qualify for tax credits. On February 21, 2006, the Internal Revenue Service released guidance on claiming tax credits for energy efficiency improvements to existing homes, new energy-efficient home construction, and new energy efficient manufactured housing. Final IRS guidance on commercial buildings is still under development.

The fact sheet, [Tax Credits for Residential Buildings \(PDF 633 KB\)](#), provides more information about the incentives for the homeowner and residential builder. The resources below provide additional information on what is currently known about the new tax incentives and will be updated as more information becomes available.
[Download Adobe Reader.](#)

Note: Every effort is made to provide accurate information on these tax incentives; however, a tax professional should be consulted on questions for specific situations.

Energy Policy Act of 2005 Tax Incentives
Provides an overview from the U.S. Department of Energy of what types of consumer and commercial products qualify for the new tax incentives, as well as building upgrades that are also eligible.

ENERGY STAR®
Information on federal tax credits for residential energy efficient products, homes, and buildings that save energy and money.

Tax Incentives Assistance Project (TIAP)
Gives consumers and businesses information they need to make use of the federal income tax incentives for energy efficient products and technologies passed by Congress as part of the Energy Policy Act of 2005.

Alliance to Save Energy New Energy Efficiency Home and Vehicle Tax Credits
Provides examples and answers questions about how consumers and businesses can obtain tax incentive for purchasing hybrid vehicles and energy-efficient products.

Florida Solar Energy Center Tax Credits for Solar and Energy Efficiency
Explains what the tax credits mean for a number of solar and energy efficiency measures including purchases of highly efficient new homes and improvements to existing homes.

Residential Energy Services Network (RESNET) Residential Energy Efficiency Tax Credits
Provides an overview of what the new tax incentive mean for new and existing homes and commercial buildings.

The Interstate Renewable Energy Council Database of State Incentives for Renewable Energy
A comprehensive source of information on state, local, utility, and selected federal incentives to promote renewable energy. Includes information for businesses and homeowners on the new tax incentive.

Commercial Building Tax Deduction Coalition
Provides an extensive list of frequently asked questions on how commercial buildings qualify for the tax incentive.

National Electrical Manufacturers Association Assessment of the Energy Policy Act of 2005 (PDF 672 KB)
This assessment report highlights provisions of the Energy Policy Act of 2005 of interest to the electrical manufacturing industry. [Download Adobe Reader.](#)

[Printable Version](#)

EERE Information Center

More information...
For more information on consumer energy-efficient products and home improvements that qualify for the tax credit, contact the EERE Information Center at 1-877-EERE-INF (1-877-337-3463) or visit the EERE [Consumer](#) Web site.

IRS guidelines and tax forms for residential buildings

- Existing residential retrofit measures
- New home construction and manufactured housing
- 1040 ES Revised Tax Form (PDF 162 KB) [Download Adobe Reader](#)

IRS guidelines and tax deduction for commercial buildings

[IRS Notice 2006-52](#), Deduction for Energy Efficient Commercial Buildings

Additional information on tax deductions for commercial buildings

DOE is currently reviewing software for calculating energy and power cost savings that meet the federal tax incentive requirements for commercial buildings. The list of [qualified software](#) is now available and will continue to be updated by DOE. In February 2007, DOE published Energy Savings Modeling and Inspection Guidelines for Commercial Building Federal Tax Deductions (PDF 1.9 MB) that provides guidelines for modeling and inspecting energy improvements that must be certified for tax deductions to be claimed. [Download Adobe Reader.](#)



IRS Commercial Buildings Deduction Notice 2006-52 DOE Section 1331 Guidance



 **NREL** National Renewable Energy Laboratory
Innovation for Our Energy Future

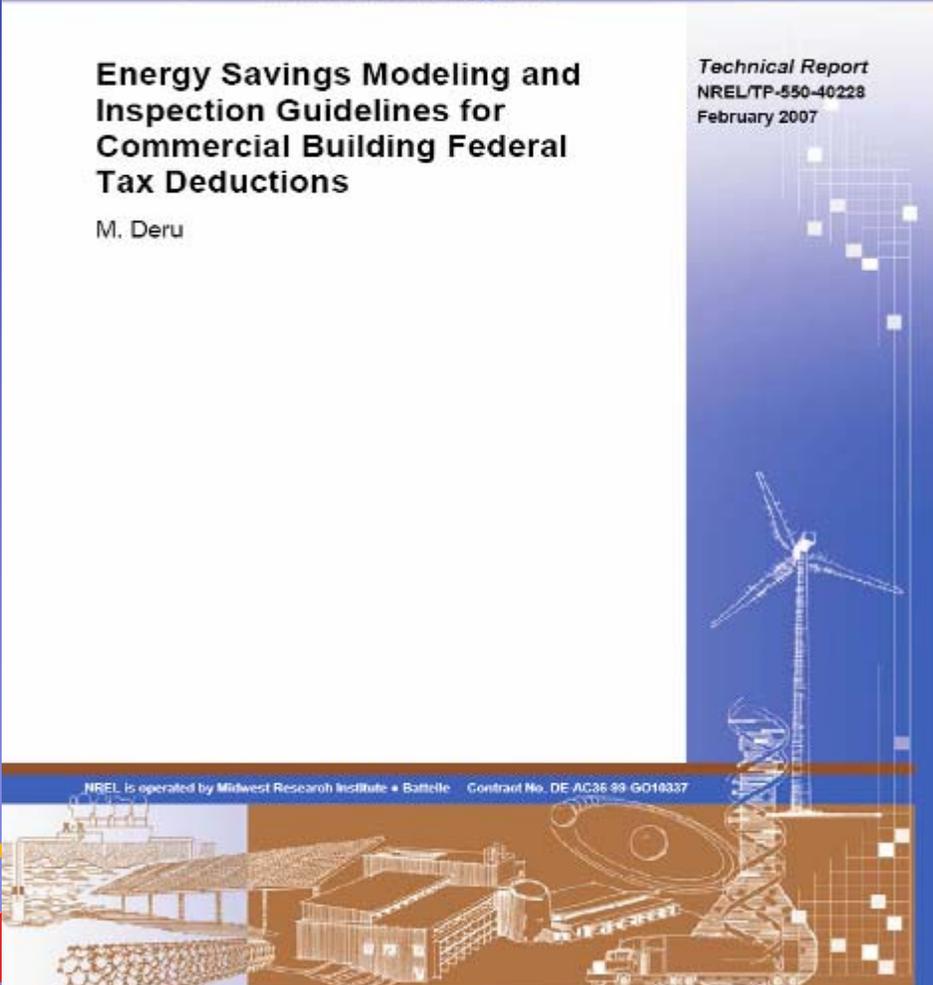
A national laboratory of the U.S. Department of Energy
Office of Energy Efficiency & Renewable Energy

Energy Savings Modeling and Inspection Guidelines for Commercial Building Federal Tax Deductions

M. Deru

Technical Report
NREL/TP-550-40228
February 2007

NREL is operated by Midwest Research Institute • Battelle Contract No. DE-AC36-99-GO18337



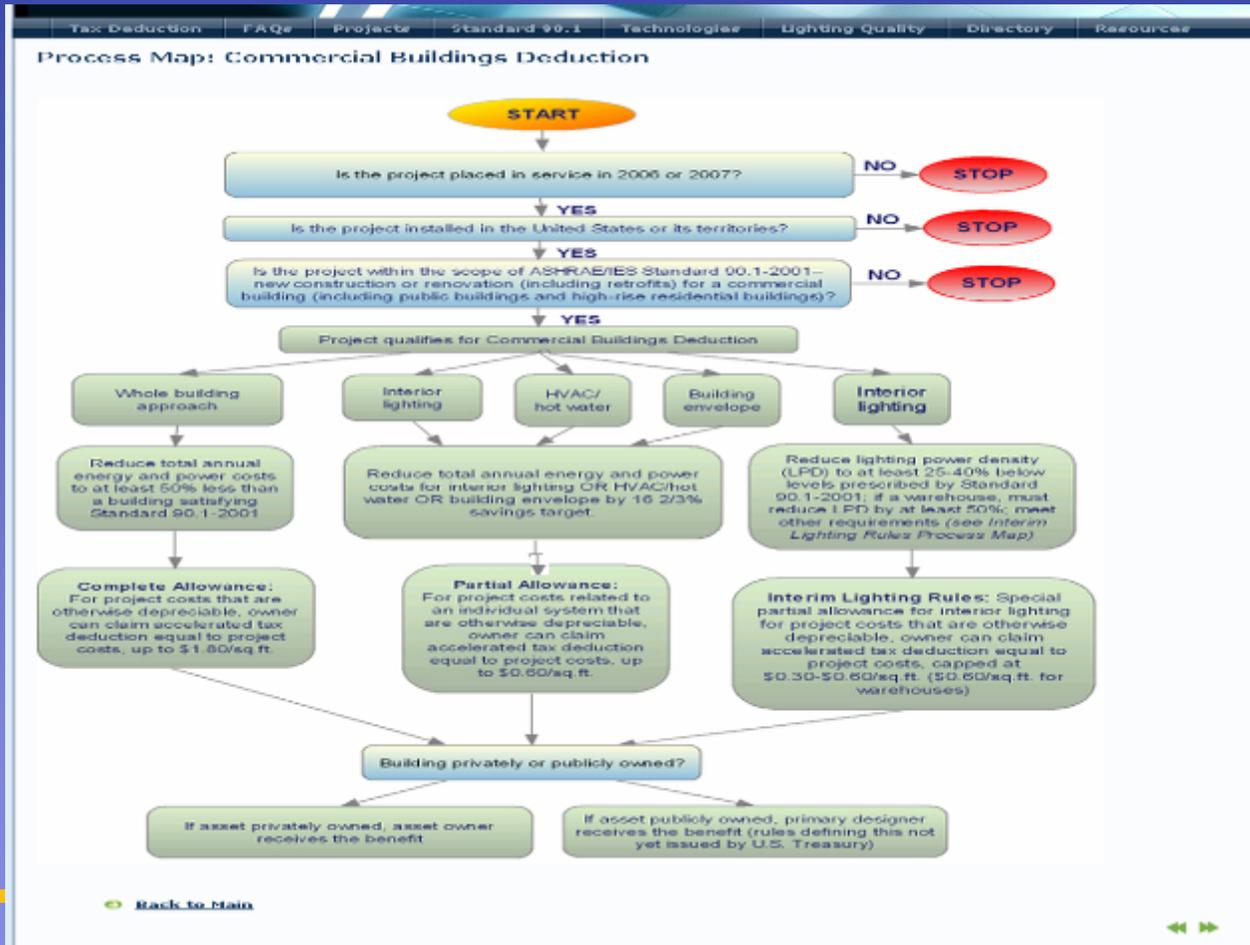
IRS Commercial Buildings Deduction Notice 2006-52 DOE Section 1331 Guidance



Contents

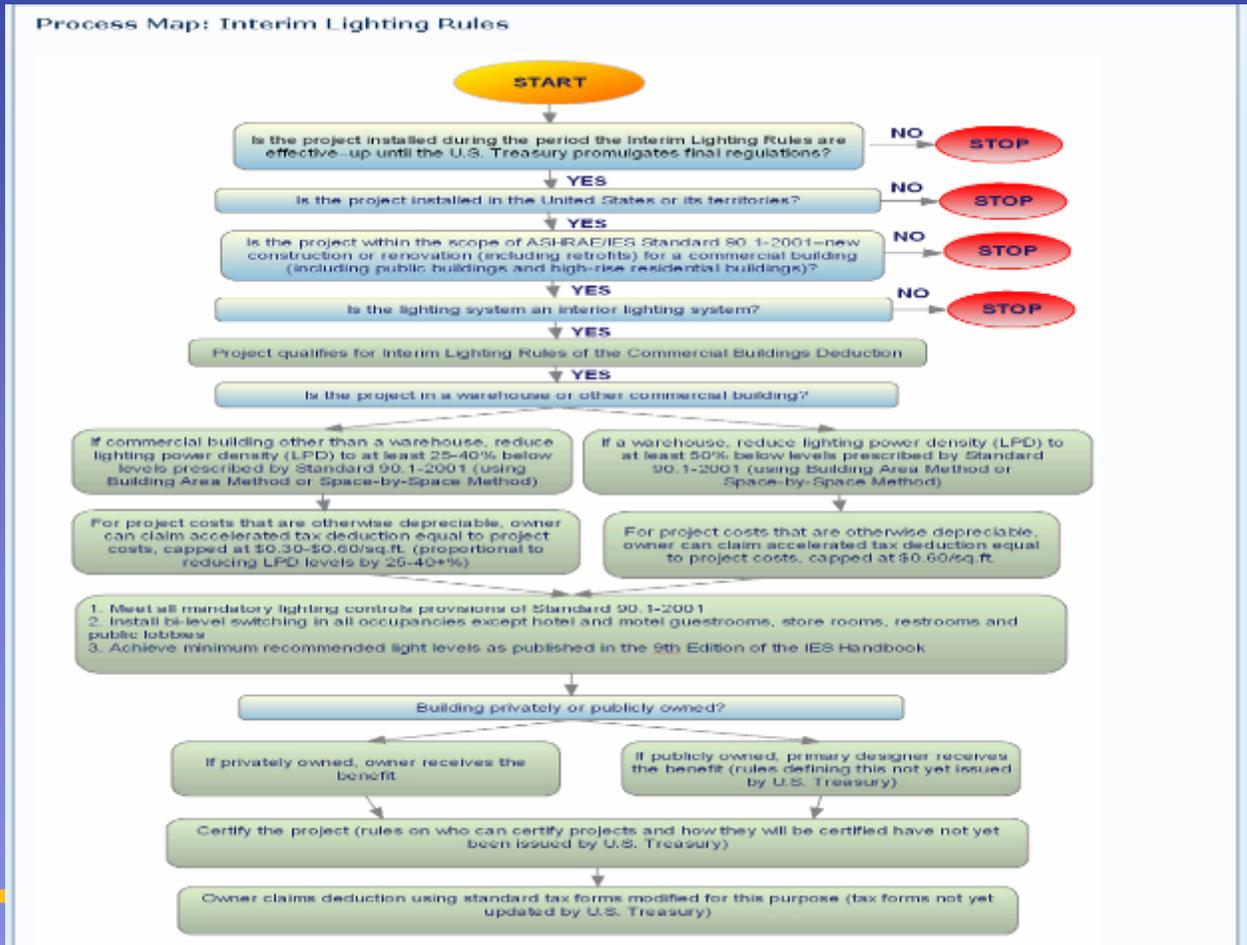
Acknowledgments.....	iii
1 Introduction.....	1
2 Guidelines for the Interim Lighting Rule.....	1
3 Energy Modeling Guidelines.....	2
3.1 Calculating the Energy and Power Cost Savings.....	3
3.2 Software Requirements.....	4
3.3 Weather Data.....	4
3.4 Building Model Parameters.....	5
3.5 Internal Loads and Schedules.....	6
3.6 Use of Standard 90.1-2004 Appendix G.....	7
3.7 Model Documentation.....	9
4 Inspection Guidelines.....	10
5 References.....	11
Appendix A – Lighting System Compliance Form.....	12
Appendix B – 2005 California Nonresidential ACM Approval Manual Infiltration Modeling Rules.....	14
Appendix C – 2005 California Nonresidential ACM Approval Manual Internal Loads and Schedules.....	15
Appendix D – 2005 California Nonresidential ACM Approval Manual Illuminance Categories and Luminaire Power.....	25

IRS Commercial Buildings Deduction Notice 2006-52 DOE Section 1331 Guidance



IRS Commercial Buildings Deduction Notice 2006-52 DOE Section 1331 Guidance

Process Map: Interim Lighting Rules





IRS Commercial Buildings Deduction Notice 2006-52 DOE Section 1331 Guidance

- Partial Qualification:
- Lighting –
 - A least a 25% reduction in power density (50% in warehouses)
 - controls that comply with 90.1-2001
 - bi-level switching – except for hotels
 - meet minimum lighting levels of the IESNA Handbook 9th Edition
- If greater than a 40% power density reduction – the deduction can be 100%
- If less than 40%, but greater than 25% - the deduction is determined by a formula

% of LPD reduction beyond Standard 90.1-2001	25%	26%	27%	28%	29%	30%	31%	32%	33%
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
% of LPD reduction beyond Standard 90.1-2001	34%	35%	36%	37%	38%	39%	40%	>40%	
Amount of Eligible Tax Deduction/ sq.ft.	\$0.48	\$0.50	\$0.52	\$0.54	\$0.56	\$0.58	\$0.60	\$0.60	



IRS Commercial Buildings Deduction Notice 2006-52 DOE Section 1331 Guidance

- All mandatory controls provisions in Standard 90.1-2001 must be met (for lighting retrofits, be sure to read carefully the "lighting alterations" sections in 90.1), and ...
- Bi-level switching must be installed in all occupancies except hotel and motel guest rooms, store rooms, restrooms and public lobbies, and ...
- The minimum recommended calculated light levels as established in the 9th Edition of the IES Lighting Handbook must be achieved.

found in the Illuminating Engineering Society of North America Lighting Handbook, Performance and Application, Ninth Edition, 2000."

Building Area Method	Lighting Power Densities (W/sq.ft.)
2001	
Automotive Facility	1.5
Convention Center	1.4
Court House	1.4
Dining: Bar Lounge/Leisure	1.5
Dining: Cafeteria/Fast Food	1.8
Dining: Family	1.9
Dormitory	1.5
Exercise Center	1.4
Gymnasium	1.7
Healthcare Clinic	1.6
Hospital	1.6
Hotel	1.7
Library	1.5
Manufacturing Facility	2.2
Motel	2.0
Motion Picture Theater	1.6
Multi-Family	1.0
Museum	1.6
Office	1.3
Parking Garage	0.3
Penitentiary	1.2
Performing Arts Theatre	1.5
Police/Fire Station	1.3
Post Office	1.6
Religious Building	2.2
Retail	1.9
School/University	1.5
Sports Arena	1.5
Town Hall	1.4
Transportation	1.2
Warehouse	1.2
Workshop	1.7

IRS Commercial Buildings Deduction Notice 2006-52

DOE Section 1331 Guidance

Partial Lighting Qualification



					Tax Deduction	
		ASHRAE/IES 90.1-1999 and 90.1-2001	Interim Lighting Rules			
Office	School/ University	Retail	Warehouse	LPD	Non- Warehouse	Warehouse
LPD (W/sq.ft.)	LPD (W/sq.ft.)	LPD (W/sq.ft.)	LPD (W/sq.ft.)	Reduction	\$/sq.ft.	\$/sq.ft.
1.3	1.5	1.9	1.2	0%	\$0.00	\$0.00
0.975	1.125	1.425	0.900	25%	\$0.30	\$0.00
0.910	1.050	1.330	0.840	30%	\$0.40	\$0.00
0.845	0.975	1.235	0.780	35%	\$0.50	\$0.00
0.780	0.900	1.140	0.720	40%	\$0.60	\$0.00
0.715	0.825	1.045	0.660	45%	\$0.60	\$0.00
0.650	0.750	0.950	0.600	50%	\$0.60	\$0.60

IRS Commercial Buildings Deduction Notice 2006-52 Deduction Qualification

To qualify for the section 179D deduction –

Taxpayer must obtain and retain a certification from a “Qualified Individual”

“Qualified Individual” definition –

is not related to the taxpayer

is a licensed professional engineer or contractor in the buildings jurisdiction

has represented in writing that he/she has the requisite qualifications”

that includes:

- Identity of the qualified individual doing the certification
- Building address
- Certification statement of reduction – 50%, 16 2/3%, etc.
- Reduction has been determined under Notice 2006-52 rules
- Statement that field inspections of the building confirms that the building met the design plans and specifications and that the inspections have been done in accordance with the Modeling and Inspection Guidelines proscribed by the National Renewable Energy Laboratory (to the IRS June 30)
- Building owner has received an explanation of the improvements
- Qualified software has been used with an identification of the software
www.eere.energy.gov/buildings/info/tax_credit_2006.html ←
- List of components, and each projected energy savings
- Declaration that the information is true, correct, and complete

Section 1332 Credit for Construction of New Energy Efficient Homes



General business related credit for eligible contractors

Any new energy efficient home acquired after December 31, 2005 and before December 31, 2007

\$2,000 for single family dwellings or manufactured homes which have:

Annual heating and cooling energy consumption **at least 50 percent below** Chapter 4 of the **2003 IECC** (including supplements in effect on the date of this Act),

Heating and cooling equipment efficiencies which are at least equal to the minimum allowed under NAECA (DOE Stds.), and

Building envelope component improvements account for at least 1/5 of such 50 percent.

Section 1332 Credit for Construction of New Energy Efficient Homes



\$1,000 for manufactured homes which:

Conform to the Federal Manufactured Home Construction and Safety Standards,

Have *annual heating and cooling energy consumption at least 30 percent below* Chapter 4 of the 2003 IECC (including supplements in effect on the date of this Act), and

Building envelope component improvements account for at least 1/3 of such 30 percent or meets the requirements of the Energy Star Labeled Homes program.

Products covered include building envelope components such as insulation and windows and HVAC equipment such as main circulating fans, boilers, furnaces, air-conditioning units, heat pumps, and hot water heaters.

Certification methods to be recommended by Energy to Treasury will specify procedures and methods for calculating energy and cost savings.



Section 1332 Credit for Construction of New Energy Efficient Homes

Internal Revenue Service
United States Department of the Treasury

[Home](#) | [Contact IRS](#) | [About IRS](#) | [Site Map](#) | [Español](#) | [Help](#)

Keyword/Search Terms
[Advanced Search](#) [Search Tips](#)

- INDIVIDUALS
- BUSINESSES
- CHARITIES & NON-PROFITS
- GOVERNMENT ENTITIES
- TAX PROFESSIONALS
- RETIREMENT PLANS COMMUNITY
- TAX EXEMPT BOND COMMUNITY

News Essentials

- [What's Hot](#)
- [News Releases](#)
- [IRS - The Basics](#)
- [IRS Guidance](#)
- [Media Contacts](#)
- [Facts & Figures](#)
- [Problem Alerts](#)
- [Around the Nation](#)
- [e-News Subscriptions](#)

The Newsroom Topics

- [Electronic IRS Press Kit](#)
- [Tax Tips 2006](#)
- [Radio PSAs](#)
- [Fact Sheets](#)
- [Asstet Forex](#)
- [Disaster Relief](#)
- [Seams / Consumer Alerts](#)
- [Tax Shelters](#)
- [More Topics...](#)

IRS Resources

Treasury and IRS Provide Guidance on Energy Credit To Home Builders

IR-2006-32, Feb 21, 2006

Washington — The Internal Revenue Service today provided guidance regarding the energy efficient homes credit available under the Energy Policy Act of 2005. Under the new provision, an eligible contractor who constructs a qualified new energy efficient home may qualify for a credit of up to \$2,000. The credit is available for all new homes, including manufactured homes constructed in accordance with the Federal Manufactured Homes Construction and Safety Standards.

The home qualifies for the credit if:

- It is located in the United States;
- Its construction is substantially completed after August 8, 2005;
- It meets the statutory energy saving requirements, and
- It is acquired from the eligible contractor after December 31, 2005, and before January 1, 2008, for use as a residence.

In general, to meet the energy saving requirements, a home must be certified to provide

Non-manufactured homes

www.irs.gov/pub/irs-drop/n-06-27.pdf

Manufactured homes

www.irs.gov/pub/irs-drop/n-06-28.pdf

Section 1333 Credit for Certain Non-business Energy Property



Allows individuals to take various amounts of tax credits for energy efficient improvements to their homes including:

Energy efficient building envelope components which exceeds requirements of 2000 IECC

Boilers, furnaces, air-conditioners, heat pumps, or water heaters

For homeowners – but may apply to privatized Federal housing.

Section 1333 Credit for Certain Non-business Energy Property



Internal Revenue Service
United States Department of the Treasury

Home | Contact IRS | About IRS | Site Map | Estate | Help

News Essentials

IR-2008-34, Feb. 21, 2008

Washington — The Treasury Department and the IRS today have issued guidance [under 2006 law](#) on the conditions that homeowners must follow when they claim credits for purchases that make their homes more efficient.

During 2006, individuals can make energy-efficient purchases that will provide tax benefits when filing out their tax returns next year. The credits will also be available for purchases in 2007. Manufacturers offering energy-efficient items such as insulation or storm windows can assure their customers that their energy-efficient items will qualify for the credit if certain energy efficiency requirements are met.

A recent law change provides a tax credit to improve the energy efficiency of existing homes. The law provides a 10 percent credit for buying qualified energy efficiency improvements. To qualify, a component must meet or exceed the criteria established by the 2006 International Energy Conservation Code (including supplements) and must be installed in the taxpayer's main home in the United States.

The following items are eligible:

- Insulation systems that reduce heat loss/gain
- Exterior windows (including skylights)
- Exterior doors
- Metal roofs (meeting applicable Energy Star requirements)

In addition, the law provides a credit for costs relating to residential energy property expenses. To qualify as residential energy property, the property must meet all location requirements prescribed by the Secretary of the Treasury and must be installed in the taxpayer's main home in the United States.

The following items are eligible:

- \$50 for each advanced main air circulating fan
- \$150 for each qualified natural gas, propane, or oil furnace or hot water heater
- \$300 for each ton of qualified energy efficient property

The maximum credit for all taxable years is \$500 — no more than \$200 of the credit can be attributable to expenses for windows.

Additionally, the new law makes a credit available to those who add qualified solar panels, solar water heating equipment, or a fuel cell power plant to their homes in the United States. In general, a qualified fuel cell power plant converts a fuel into electricity using electrochemical means, has an electricity-only generation efficiency of more than 30 percent and generates at least 0.5 kilowatts of electricity.

Taxpayers are allowed one credit equal to 30 percent of the qualified investment in a solar panel up to a maximum credit of \$2,000, and another equal-valued credit for investing in a solar water heating system. No part of either system can be used to heat a pool or hot tub.

Additionally, taxpayers are also allowed a 30 percent tax credit for the purchase of qualified

IRS Resources

- Compliance & Enforcement
- Contact My Local Office
- eFile
- Forms and Publications
- Frequently Asked Questions
- News
- Taxpayer Advocacy
- Where To File

www.irs.gov/pub/irs-drop/n-0626.pdf

GovEnergy
www.govenergy.gov



August 6 2007

Section 1334 Credit for Energy Efficient Appliances



Provides tax incentives for manufacturers to produce appliance that exceed Energy Star requirements

Dishwashers

Clothes washers

Refrigerators

Section 1335 Credit for Residential Energy Efficient Property

(Could be described as renewable/innovative energy credits for individuals)

Residential tax credit for qualified energy efficient equipment in service 12/31/05 – 12/31/07

30 percent of the qualified photovoltaic property expenditures made by the taxpayer during such year,

30 percent of the qualified solar water heating property expenditures made by the taxpayer during such year, and

30 percent of the qualified fuel cell property expenditures made by the taxpayer during such year.

(b) Limitations-

MAXIMUM CREDIT- The credit allowed under subsection (a) for any taxable year shall not exceed--

(A) \$2,000 with respect to any qualified photovoltaic property expenditures,

(B) \$2,000 with respect to any qualified solar water heating property expenditures, and

(C) \$500 with respect to each half kilowatt of capacity of qualified fuel cell property

Can include labor costs and other appropriate solar panel support costs – but not for pools or hot tubs!

For primary residences – but may apply to privatized Federal housing???

Section 1336 Credit for Business Installation of Qualified Fuel Cells and Stationary Micro-turbine Power Plants

\$500 per ½ kW for fuel cells greater than ½ kW with an electricity production efficiency of at least 30%

\$200 per kW for micro-turbines under 2,000 kW, with an electricity production efficiency of at least 26%

For private sector – but could apply to Federal facilities if private sector owns the equipment

Section 1337 Business Solar Investment Tax Credit



Energy to Heat Swimming Changed tax credit for “qualified equipment” in service 12/31/05 – 1/1/08

Adds Hybrid Solar Lighting Systems-

“Subparagraph (A) of section 48(a)(3) is amended by striking `or' at the end of clause (i), by re-designating clause (ii) as clause (iii), and by inserting after clause (i) the following new clause:
` (ii) equipment which uses solar energy to illuminate the inside of a structure using fiber-optic distributed sunlight...”

Changes previous definition of solar process heat –

“Limitation on Use of Solar Pools- Clause (i) of section 48(a)(3)(A) is amended by inserting `excepting property used to generate energy for the purposes of heating a swimming pool,' after `solar process heat,'.

Section 1337 Business Solar Investment Tax Credit Cont.



Business Credit vs. Residential Renewable Energy Tax Credit

Business Credit:

<u>Old Incentive</u>	<u>New Incentive</u>	<u>Credit window</u>	<u>Cap</u>	<u>Eligible technologies</u>
10%	30%	1/1/06 -12/31/08 At 30%; reverts to permanent 10% thereafter	no cap	PV, CSP, solar hybrid lighting, solar domestic lighting water heating (excluding pool heating)

Residential Credit:

<u>Old Incentive</u>	<u>New Incentive</u>	<u>Credit window</u>	<u>Cap</u>	<u>Eligible technologies</u>
None	30%	1/1/06 -12/31/08	\$2,000 per system for	PV, Solar domestic water heating each solar (excluding pool technology heating)

www.seia.org/getpdf.php?iid=21

Section 1341 Alternative Motor Vehicle Credit



Provides big deductions for owner/taxpayer for fuel cell and hybrid motor vehicles that exceed 2002 mileage standards – extremely complex

- “(A) \$8,000 (\$4,000 in the case of a vehicle placed in service after December 31, 2009), if such vehicle has a gross vehicle weight rating of not more than 8,500 pounds,
- “(B) \$10,000, if such vehicle has a gross vehicle weight rating of more than 8,500 pounds but not more than 14,000 pounds,
- “(C) \$20,000, if such vehicle has a gross vehicle weight rating of more than 14,000 pounds but not more than 26,000 pounds, and
- “(D) \$40,000, if such vehicle has a gross vehicle weight rating of more than 26,000 pounds.

INCREASE FOR FUEL EFFICIENCY-

- “(A) IN GENERAL- The amount determined under paragraph (1)(A) with respect to a new qualified fuel cell motor vehicle which is a passenger automobile or light truck shall be increased by--
- “(i) \$1,000, if such vehicle achieves at least 150 percent but less than 175 percent of the 2002 model year city fuel economy,
- “(ii) \$1,500, if such vehicle achieves at least 175 percent but less than 200 percent of the 2002 model year city fuel economy,
- “(iii) \$2,000, if such vehicle achieves at least 200 percent but less than 225 percent of the 2002 model year city fuel economy, Etc.

2002 MODEL YEAR CITY FUEL ECONOMY- For purposes of subparagraph (A), the 2002 model year city fuel economy with respect to a vehicle shall be determined in accordance with the following tables:

- “(i) In the case of a passenger automobile:

The 2002 model year city

fuel economy is:

1,500 or 1,750 lbs

45.2 mpg

2,000 lbs

39.6 mpg

2,250 lbs

35.2 mpg

... etc.”

This goes on for 13 dense pages

Section 1341 Alternative Motor Vehicle Credit cont.

AFVs (dedicated only) – 2006 – 2010*

Some mixed-fuel vehicles allowed (not FFVs)

LD: \$2.5 – \$4K; MD/HD: \$5 – \$32K

HEVs – 2006 - 2009*

Subject to early phase-out

LD: \$400 – 3.4K; MD/HD: \$1.5K – \$12K

FCVs – 2006 - 2014*

\$8 - \$40K (additional \$1 - \$4K for efficiency for LDVs)

Lean burn engine vehicles – 2006 – 2010*

Subject to early phase-out

LD: \$400 – \$3.4K

* Tax credit available to seller if discloses credit value to tax-exempt purchaser

Section 1342 Credit for Alternative Motor Vehicle Refueling Property



Provides a tax credit worth 30% of cost of alternative fuel vehicle refueling property

Fuels that qualify:

E85, CNG, LNG, LPG, hydrogen, and bio-diesel mixtures (B20 or higher)

Maximum credits:

\$30,000 for business property

\$1,000 for homes or residential property

Tax exempt entities

Provides that seller of equipment can take credit if he/she discloses the value of the credit

Period of applicability:

Hydrogen: 2006 - 2014

All other alternative fuels: 2006 - 2009

(Could significantly increase the potential for AFV stations on Federal property)

On-line Tax Incentives Clarification Sites



Building Technologies Program: Tax Incentives for Energy-Efficient Buildings and Products - Mozilla Firefox

File Edit View Go Bookmarks Tools Help

http://www.eere.energy.gov/buildings/info/tax_incentives.html

Getting Started Latest Headlines From Internet Explorer

U.S. Department of Energy
Energy Efficiency and Renewable Energy *Bringing you a prosperous future where energy is clean, abundant, reliable, and affordable*

Building Technologies Program

About the Program Program Areas Information Resources Financial Opportunities Technologies Deployment Home

Information Resources

Building Toolbox

- Energy Savers
- Energy Solutions for Your Building
- Publications
- Software Tools
- Disaster Recovery & Building Reconstruction
- Tax Incentives**

Tax Incentives for Energy-Efficient Buildings and Products

Tax incentives are available for homeowners and businesses that purchase and install energy efficient equipment or make energy efficiency improvements to existing or new homes and buildings. These incentives are made possible by the Energy Policy Act of 2005 (EPACT), which was signed into law by President Bush on August 8, 2005. EPACT provides tax credits for energy-efficiency improvements in residential buildings made after December 31, 2005 and before December 31, 2007. In 2007, the Act was extended for commercial building tax deductions for energy-efficiency improvements installed after December 31, 2005 and before January 1, 2009.

The U.S. Department of Energy has an overview Web site, [Energy Policy Act of 2005 Tax Incentives](#), which summarizes all of the Act's incentives, including consumer and commercial products that qualify for the new tax incentives and building upgrades that are eligible.

Note: Every effort is made here to provide accurate information on these tax incentives; however, a tax professional should be consulted on questions for specific situations.

Tax Incentives for Residential Buildings

Some of the following documents are available as Adobe Acrobat PDFs. [Download Adobe Reader](#).

For homeowners, rental property owners, and home builders, the tax incentives provided by EPACT are in the form of tax credits. The tax credits are available for the purchase and installation of specific energy-efficient products, such as windows, insulation, doors, roofs, and heating and cooling equipment, and the construction of new energy-efficient homes. The fact sheet, [Tax Credits for Residential Buildings \(PDF 633 KB\)](#), provides more information about the incentives for the homeowner and residential builder.

In addition, you can visit the Web site [Residential Energy Services Network \(RESNET\) Residential Energy Efficiency Tax Credits](#) for an overview of the new tax incentives, or the resources below for IRS guidelines and tax forms.

- Existing residential retrofit measures
- New home construction and manufactured housing
- 1040 ES Revised Tax Form ([PDF 162 KB](#))

Tax Incentives for Commercial Buildings

EPACT offers businesses tax deductions for costs of improving the energy efficiency of commercial buildings. Buildings must be within the scope of [ASHRAE Standard 90.1-2001](#) including addenda 90.1a-2003, 90.1b-2002, 90.1c-2002, 90.1d-2002, and 90.1k-2002 (in effect as of April 2, 2003) and within the control of the building designer. Retrofit of existing buildings is also eligible for the tax deduction.

For a more detailed summary, visit this IRS news announcement about the notice or read the complete IRS Notice 2006-52, Deduction for Energy Efficient Commercial Buildings ([PDF 97 KB](#)).

Guidelines for modeling and inspecting energy improvements that must be certified for tax deductions to be claimed can be found in a recent NREL publication, *Energy Savings Modeling and Inspection Guidelines for Commercial Building Federal Tax Deductions* ([PDF 1.9 MB](#)). In addition, DOE has a list of [qualified software](#) for calculating energy and power cost savings that meet the federal tax incentive requirements for commercial buildings.

[Printable Version](#)

Webmaster | Security & Privacy | Building Technologies Program Home | EERE Home
U.S. Department of Energy
Content Last Updated: 05/30/2007

Search Help More Search Options

EERE Information Center

More information...

To learn more about consumer energy-efficient products and home improvements that qualify for tax incentives, contact the EERE Information Center at 1-877-EERE-INF (1-877-337-3463) or visit the EERE [Consumer](#) Web site.

On-line Tax Incentives Clarification Sites

Article #1570 - COMcheck and the Commercial Building Tax Deduction for Energy-Efficient Lighting - Mozilla Firefox

File Edit View Go Bookmarks Tools Help

http://resourcecenter.pnl.gov/cocon/morf/ResourceCenter/article/1570

Building Energy Codes
RESOURCE CENTER

SEARCH [All Fields] FCR SEARCH BROWSE Select a Topic... GO

Home About the Resource Center Ask a Question Advanced Search Help

Article #1570 -
COMcheck and the Commercial Building Tax Deduction for Energy-Efficient Lighting

The Energy Policy Act of 2005 provides a tax deduction for lighting and other energy systems that reduce energy use below prescribed levels. The primary tax provision is based on certified whole building energy reduction, but there is an interim rule designed specifically for lighting installations that is based on a simpler prescriptive calculation basis. This article provides answers to frequently asked questions about the interim lighting rule including how COMcheck™ can be applied as part of the process in receiving this deduction.

What are the requirements for applying the interim lighting rule?

The interim tax deduction applies to lighting property placed in service between December 31, 2005, and January 1, 2008, that meets the following requirements:

1. Achieve a reduction in lighting power density of at least 25 percent (50 percent in the case of a warehouse) of the minimum requirements in Table 9.3.1.1 or Table 9.3.1.2 (not including additional interior lighting power allowances of Standard 90.1-2001).
2. Have controls and circuiting (wiring) that comply fully with the mandatory and prescriptive requirements of ASHRAE/IESNA 90.1-2001 (Lighting Section 9).
3. Include provision for on-level switching in all occupancies except hotel and motel guest rooms, store rooms, restrooms, and public lobbies.
4. Meet the minimum requirements for calculating lighting levels as set forth in the IESNA Lighting Handbook, Performance and Application, Ninth Edition, 2000.

Is whole building energy modeling necessary to get the interim lighting deduction?

No. The interim lighting rule is based on a percentage reduction in lighting power densities (LPD) below specified levels. Whole building energy modeling is not applicable to the interim rule.

Can the tax deduction be applied to lighting retrofits?

Yes. However, only the cost of any newly installed lighting will be eligible for tax deduction.

How can COMcheck help determine the potential tax deduction for my project?

The U.S. Department of Energy's (DOE's) COMcheck software can be used to calculate the percentage reduction in your project's Lighting Power Density (LPD) compared to Standard 90.1-2001 that forms the basis for the dollar value of the tax deduction. COMcheck can also be used to document compliance with the controls and wiring requirements of 90.1-2001.

What version of COMcheck do I need to perform the calculations?

Any version of COMcheck that includes compliance with ASHRAE/IESNA 90.1-2001 (version 2.5 and above) will provide the necessary calculations. You can download the latest version of the software from www.energycodes.gov

How do I use COMcheck to calculate the project's LPD reduction for a potential lighting tax deduction?

1. After starting the software, go to the Code menu on the taskbar and select "90.1 (2001) Standard".
2. Select the Project tab.
 1. Select the type of project from the options under Project Type.
 2. For new construction, select "New Construction"
 3. For an addition, select "Addition"
3. Select "Whole building" or "Area Category (space-by-space)" under building use. Either path can be used for the tax deduction.
4. Select type of building or space categories from the popup list and enter the applicable square footage(s).
5. Select the Lighting tab and define all the components of the final lighting system as it will be after project completion.
 1. Press the button for the appropriate type of lighting: Linear Fluorescent, Compact Fluorescent, HID, or Incandescent

Print-friendly Format
Convert to PDF

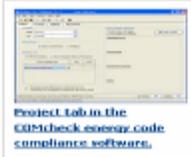
RELATED ARTICLES

- #1529 - Energy Policy Act 2005 and Tax Credits
- Real Life Examples of Homes Qualifying for Federal Tax Credit for Energy Efficient Homes
- #1580 - COMcheck Web-based Lighting Questions - Lighting
- Getting to Effx - EPCOT 2005 Tax Incentive Symbols
- Incandescent Lighting

More Articles »



COMcheck loading screen.



Protect Lab in the COMcheck energy code compliance software.

On-line Tax Incentives Clarification Sites



The Association of Energy Engineers, AEE, Home Page - Mozilla Firefox

File Edit View Go Bookmarks Tools Help

http://www.aeecenter.org/

Getting Started Latest Headlines From Internet Explorer

- Home
- Membership
- Certification
- Shows
- Buyers Guide
- Books
- Seminars
- Jobs
- Chapters
- Divisions
- Online Journals
- Msg. Board & Chat
- Advertising
- Corporate Members
- Links
- News
- Industry Newsletters
- Insight Newsletter
- AEE Foundation
- Staff/Officers



Association of Energy Engineers®

Tax Incentive Provision of the Energy Policy Act 2005

H.R.6 of the Energy Policy Act of 2005
Deduction for Energy Efficient Commercial Buildings
H.R.6 Conference Report (PDF)

[Highlights of the Energy Policy Act](#)

COALITION WEBSITES:

 <p>www.efficientbuildings.org</p>	<p>About CBTD</p> <p>Overview and Frequently Asked Questions</p> <p>Coalition Members</p> <p>Related Links and Rules</p>
 <p>www.energytaxincentives.org Tax Incentives Assistance Project</p>	<p>About TIAP</p> <p>Overview</p> <p>TIAP Commercial Subcommittees Recommendations (PDF)</p>
 <p>Lighting provisions of the Commercial Building Tax Deduction</p>	<p>Learn about the lighting aspects of EPAct 2005's Commercial Buildings Reduction</p> <p>Qualifying for the Commercial Building Reduction on our next project.</p>

On-line Tax Incentives Clarification Sites



The screenshot shows a Mozilla Firefox browser window displaying the homepage of The Association of Energy Engineers (AEE). The browser's address bar shows the URL <http://www.aeecenter.org/>. The page features a navigation menu on the left with categories such as Home, Membership, Certification, Shows, Buyers Guide, Books, Seminars, Jobs, Chapters, Divisions, Online Journals, Msg. Board & Chat, Advertising, Corporate Members, Links, News, Industry Newsletters, Insight Newsletter, AEE Foundation, and Staff/Officers.

The main content area is titled "Commercial Lighting Tax Deduction" and includes a sub-header "The Energy Efficient Commercial Buildings Deduction EPAct 2005's new incentive for lighting and building efficiency". Below this, there is a paragraph explaining the deduction and its implementation. Three buttons are visible: "How does it work?", "Okay, but what about ...?", and "How does this apply to my project?". A red arrow points to the "How does it work?" button.

How does it work?
Learn about the lighting aspects of EPAct 2005's Commercial Buildings Deduction. [More..](#)

Okay, but what about ...?
See the answers for popular questions about the Commercial Buildings Deduction, and ask one yourself. [More..](#)

How does this apply to my project?
See examples on how you can qualify for the Commercial Buildings Deduction on our next project. [More..](#)

Contact Us | Partners | EfficientBuildings.org | Disclaimer
©2006 NEMA | All Rights Reserved | [About NEMA](#)

On-line Tax Incentives Clarification Sites



The Association of Energy Engineers, AEE, Home Page - Mozilla Firefox

File Edit View Go Bookmarks Tools Help

http://www.aeecenter.org/

Getting Started Latest Headlines From Internet Explorer

- Home
- Membership
- Certification
- Shows
- Buyers Guide
- Books
- Seminars
- Jobs
- Chapters
- Divisions
- Online Journals
- Msg. Board & Chat
- Advertising
- Corporate Members
- Links
- News
- Industry Newsletters
- Insight Newsletter
- AEE Foundation
- Staff/Officers

Commercial Lighting Tax Deduction

Tax Deduction FAQs Projects Standard 90.1 Technologies Lighting Quality Directory Resources

Guide to the Energy Efficient Commercial Buildings Deduction

- [Introduction](#)
- [Commercial Buildings Deduction: Benefits](#)
- [Commercial Buildings Deduction: Benefits \(continued\)](#)
- [Commentary: The Bottom Line](#)
- [Commercial Building Deduction](#)
- [The Commercial Building Deduction \(All Systems\)](#)
- [The Commercial Building Deduction \(Individual Systems\)](#)
- [The Commercial Building Deduction \(Interim Lighting Rules\)](#)
- [Interim Lighting Rules \(continued\)](#)
- [Process Map: Commercial Building Deduction](#)
- [Process Map: Interim Lighting Rules](#)
- [Interim Lighting Rules: Notes on Controls](#)
- [Interim Lighting Rules: Notes on Standard 90.1](#)
- [Effective Time-frame](#)
- [Building Types Covered](#)
- [Who Gets the Deduction](#)
- [Project Certification](#)
- [How the Deduction is Claimed](#)
- [Lighting Commentary: Unfinished Regulations](#)
- [Lighting Commentary: No Free Ride](#)
- [Lighting Commentary: Adjustment of Perspective](#)

NEW [Internal Revenue Bulletin 2006-26, June 26, 2006](#) - Formal notice of the June 2 guidance (corrects error of the lighting sliding scale provision).

Appendix

- [EPA's 2005 \(Public Law 109-50\) \(1.49 mb\)](#)
- [Section 1323: Energy Efficient Commercial Buildings Tax Deduction \(56 kb\)](#)
- [Internal Revenue Bulletin 2006-26, June 26, 2006](#)
NEMA comments on IRB
- [Guidance on Energy Policy Act Commercial Building's Tax Deduction Certification Letters \(86 kb\)](#)

EfficientBuildings.org

Contact Us | Partners | EfficientBuildings.org | Disclaimer
©2006 NEMA | All Rights Reserved | About NEMA



On-line Tax Incentives Clarification Sites



The Association of Energy Engineers, AEE, Home Page - Mozilla Firefox

File Edit View Go Bookmarks Tools Help

http://www.aeecenter.org/

Getting Started Latest Headlines From Internet Explorer

Home
Membership
Certification
Shows
Buyers Guide
Books
Seminars
Jobs
Chapters
Divisions
Online Journals
Mag. Board & Chat
Advertising
Corporate Members
Links
News
Industry Newsletters
Insight Newsletter
AEE Foundation
Staff/Officers

Commercial Lighting Tax Deduction

Tax Deduction | FAQs | Projects | Standard 90.1 | Technologies | Lighting Quality | Directory | Resources

The Energy Efficient Commercial Buildings Deduction

EPA's 2005's new incentive for lighting and building efficiency

The Energy Policy Act of 2005 created the Energy Efficient Commercial Buildings Deduction, which allows building owners to deduct the entire cost of a lighting or building upgrade in the year the equipment is placed in service, subject to a cap. This website, developed by the Lighting Systems Division of the National Electrical Manufacturers Association (NEMA) in cooperation with the Commercial Building Tax Deduction Coalition, provides education about the lighting aspects of the Deduction and resources to help with its implementation. It was created as the first of a series of lighting education initiatives by the lighting industry addressing lighting quality and efficiency.

How does it work? Learn about the lighting aspects of EPA's 2005's Commercial Buildings Deduction. More...	Okay, but what about ...? See the answers for popular questions about the Commercial Buildings Deduction, and ask one yourself. More...	How does this apply to my project? See examples on how you can qualify for the Commercial Buildings Deduction on our next project. More...
--	---	--

Contact Us | Partners | EfficientBuildings.org | Disclaimer
©2006 NEMA | All Rights Reserved | About NEMA

Done

Start | I... | V... | D... | P... | S... | T... | W... | W... | T... | G... | D... | 15:23

On-line Tax Incentives Clarification Sites

- Can portions of buildings be retrofitted and still qualify for a deduction—for example, the common area versus tenant spaces, or a portion of the common area?

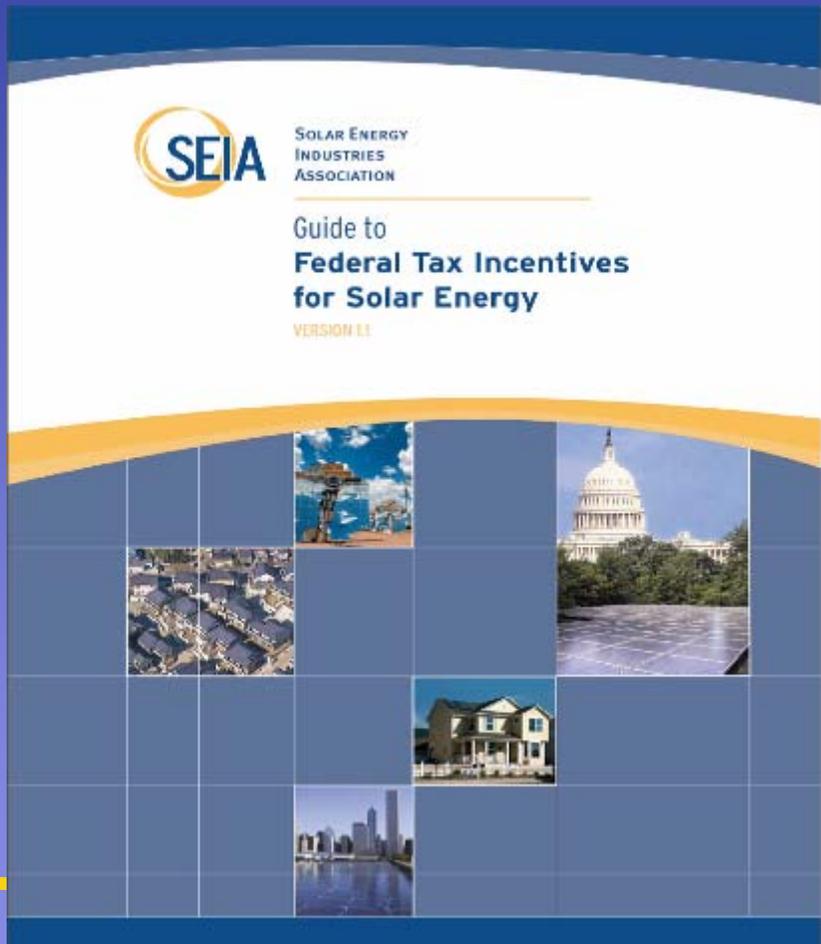
Lighting and Controls

- Are exit signs included in the program; and if so, can they be retrofits versus new signs?
- Are screw-in compact fluorescent lamps included, and if so, is there any requirement for permanence?
- Can task lighting be included in a retrofit that contributes to earning the Commercial Buildings Deduction?
- If a building already has bi-level switching, can its cost be claimed for the purposes of the tax deduction?
- The warehouse requirement of 50% savings appears strict. What technology candidates can be used to achieve the deduction? What was the thinking behind setting a 50% goal instead of a 25-40% goal?
- Is there a criterion for what type of lighting systems would qualify for the partial tax deduction? For example, in a manufacturing facility, would task lighting upgrades qualify if the lighting power density is reduced by enough to obtain the deduction? Or is the deduction for ceiling lighting system upgrades?
- Do lighting controls like occupancy sensors contribute to the lighting power density savings needed to qualify for the Commercial Buildings Deduction?
- The requirement for bi-level switching is not in ASHRAE/IES 90.1. What was the thinking behind including it in most building space types? What typical savings can be achieved through bi-level switching? Or was the thinking more of requiring a basic infrastructure so that advanced controls are more attractive for installation and can be used to generate higher savings?
- Where is bi-level switching required?
- I have seen several different definitions of bi-level switching, for example in California and New York rules. What is the definition?
- Dimming is not listed in the mandatory controls provisions of ASHRAE/IES Standard 90.1-2001. Can dimming contribute to the lighting power density savings needed to qualify for the Commercial Buildings Deduction?

ASHRAE/IES Standard 90.1-2001

- What is Standard 90.1?
- Is it the case that per ASHRAE/IES 90.1 the maximum possible wattage for the fixture will be applied?
- ASHRAE/IES Standard 90.1-2001 allows tradeoffs between building types and space types depending on method, and it also allows additional interior lighting power allowances if using the Space-by-Space Method. Are these still the case when applying Standard 90.1-2001 to the Commercial Buildings Deduction?
- If a building is used as both a warehouse and manufacturing facility, ASHRAE/IES 90.1 appears to allow the building area method to be used separately for the warehouse portion and the manufacturing facility portion. Is it then the case that the tax deduction would be calculated separately for both areas of the building if the building area method is used—50% savings and \$0.60/sq.ft. for the warehouse, and 25-40% savings and \$0.30-\$0.60/sq.ft. for the manufacturing facility?
- I have heard that Standard 90.1-2001 was amended to adopt the lighting power densities in Standard 90.1-2004, which are stricter. How is this addressed by the Commercial Buildings Deduction?
- If a building were designed to a newer building standard, wouldn't it already satisfy the conditions for the tax deduction?

On-line Tax Incentives Clarification Sites from the Solar Energy Industries Assoc. site



Go to www.seia.org/manualdownload.php

and sign up for a manual

On-line Tax Incentives Clarification Sites from the Solar Energy Industries Assoc. site

TABLE OF CONTENTS

Section 1. Commercial Solar Tax Credit in Detail

1. Eligible Property

1.1 Types of Eligible Property	1
1.1 (a) Photovoltaics and Concentrating Solar Power Plants	1
1.1 (b) Solar Thermal Systems	1
1.1 (c) Solar Lighting	2
1.1 (d) Passive Solar Systems	2
1.2 Age of Eligible Property	2
1.3 Use of Eligible Property	2
1.4 OEM and Integrated Equipment	3

2. Placed in Service

2.1 General Requirements	3
2.2 New Businesses	4
2.3 Power Plants	4
2.4 "Daily operation" as a condition for meeting the requirement	4

3. Tax Credit Basis

3.1 Normally Deductible Expenses	5
----------------------------------	---

4. Effect of Rebates, Buydowns, Grants and Other Incentives

4.1 Incentives That Do Reduce the Tax Credit Basis	6
4.2 Incentives That Do Not Reduce the Tax Credit Basis	6
4.3 Subsidized Loans and Financing	9
4.3 (a) Calculation Method	9
4.3 (b) Tax-Exempt Financing	9
4.3 (c) Subsidized Energy Financing	9
4.3 (d) Subsidized Energy Financing and Depreciation	10
4.4 At-Risk Limitations on Financing	10

On-line Tax Incentives Clarification Sites from the Solar Energy Industries Assoc. site

5. Project Timing Issues	
5.1 Transition Issues for Projects Starting Before 2006 or Ending After 2007	11
5.1 (a) Self-Constructed Projects	11
5.1 (b) Acquired Projects	12
5.2 Progress Expenditures	12
6. Project Ownership Considerations	
6.1 Sale-Leasebacks	13
6.2 Allocation of Commercial Solar Tax Credits Among Partners	14
6.3 Regulated Utilities	14
6.4 Model Homes	14
7. Applying the Credit to Taxes	
7.1 Alternative Minimum Taxes and Floor	14
7.2 Carryback and Carryforward of Credits	15
8. Recapture of Credit Taken in Prior Years	
8.1 General Recapture Rules	15
8.2 Recapture Rules for Nonrecourse Financed Projects	16
8.3 Recapture Rules for Partnerships	16
9. Impacts of Credits on Depreciation Calculations	
10. Claiming the Credit and IRS Forms	
11. Commercial Solar Tax Credit Examples	
	18

Renewable Energy Project Economics Example – from John Archibald

- Commercially owned solar properties
- Get 30% 1st year investment tax credit against cost of “solar property”
 - Collectors, thermal storage, fans, pumps, inverters, batteries, etc.
 - Solar siding, solar roofing, solar roof screens
- Get 5 year accelerated depreciation
 - 70% depreciated in 3 years vs.
 - 8 % per year depreciated for conventional building material like
 - non-solar siding, roofs and roof screens
- Lowers cost of government solar projects with alternate financing, ESPC and some UESC

A 9.8 year simple payback solar heating project goes to 4.5 years with the tax credit and accelerated depreciation, and to 2.4 years using \$16.50/MBtu natural gas vice \$8.50/MBtu gas in the initial estimate.



Would you like to know more about this session?

- Millard E. Carr, PE, CEM, RB
- Sain Engineering Associates, Inc.
- 65 Pierce Court Fredericksburg, VA 22406
- energy@carnet.net
- Don't forget to fill out and drop off your session evaluations.

Enjoy the Conference!



GovEnergy
www.govenergy.gov



New Orleans

August 5-8