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Energy Efficient Commercial Building Tax Deduction (179D)

Presented by:
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AGENDA

- 179D
- Sec. 48
- Colorado Incentives
- Boulder County ClimateSmart™
- Q&A



ENERGY POLICY ACT of 2005

- Congress passed legislation in August of 2005 to encourage property owners to build energy efficient real estate properties to promote reduction in energy consumption. Service dates were from 1/1/06 through 12/31/08.
- The Emergency Economic Stabilization Act of 2008 (HR-1424), approved and signed on October 3, 2008, extends the benefits of the Energy Policy Act of 2005 through December 31, 2013.
- The ruling allows up to a \$1.80 per sq. ft. tax deduction for commercial property owners. Incentives were also allowed for contractors, site home builders and residential home owners.
- Legislation pending to (1) Increase deduction to \$3.00 per sq. ft.; (2) Include not-for-profit entities; and (3) Clarify the role of the government agent



The Commercial Energy Deduction is not...

- LEED certification
 - Deduction is available for *non* LEED certified buildings, although the tax savings can help offset cost of LEED certification
- Residential energy incentives
- Solar or geothermal credits
- It was extended by the ARRA
 - The deduction first came available January 1, 2006 and applies through December 31, 2013



What Qualifies?

- Qualifies
 - New construction, renovations or additions
 - Commercial and government buildings
 - Building is defined as an enclosed structure providing shelter to persons, animals or property
- Does not qualify
 - Single-family houses
 - Multi-family structure under 4 stories
 - Mobile or modular homes



Who Can Benefit?

- Owners or lessees
- Designer of government building
 - i.e. Architect, Engineer, Contractor or energy services provider
 - Designer is defined as the creator of the technical specifications for installation of energy efficient property



Energy Efficient Tax Deduction Certification Overview

- Certification of energy cost reduction
 - Must be facilitated by a third party licensed engineer or contractor
- Department of Energy-approved software
 - Most common packages approved
 - DOE 2.2, Trace 700, eQuest, EnergyPlus
- Field inspections required
- Written report to owner of projected energy cost reductions



How does the Energy Efficient Tax Deduction work?

- Building is compared to a reference building from 2001 (ASHRAE 90.1-2001)
- If the building reduces energy costs by 50%, as compared to reference building, it is defined as a “fully qualifying property”
- If building reduces energy costs at less than 50%, it can be classified as a “partially qualifying property”



Partial Qualification Details

- Interior Lighting Systems (\$0.30/sf to \$0.60/sf)
 - Typically based on Lighting Power Density reduction
 - Can range from 25% to 40%+
 - Compared to ASHRAE 90.1-2001
 - Additional lighting controls required
- HVAC & Domestic Hot Water (\$0.60/sf)
 - Typically based on energy model
 - Energy-efficient units not enough
 - Usually must do “something else” (controls)
- Building Envelope (\$0.60/sf)
 - Hardest component to qualify for
 - 10/20/20 vs. 16-2/3 / 16-2/3 / 16-2/3

Qualification Requirements Summary

Table 1 Summary of Tax Deductions

	Fully Qualifying Property	Partially Qualifying Property			
		Envelope	HVAC and SHW	Lighting	Interim Lighting Rule
Savings Requirements*	50% energy and power cost savings	16 $\frac{2}{3}$ % energy and power cost savings	16 $\frac{2}{3}$ % energy and power cost savings	16 $\frac{2}{3}$ % energy and power cost savings	25% lower LPD (50% for warehouses)
Tax Deduction	Cost of qualifying property up to \$1.80/ft ²	Cost of qualifying property up to \$0.60/ft ²	Cost of qualifying property up to \$0.60/ft ²	Cost of qualifying property up to \$0.60/ft ²	Cost of qualifying property up to \$0.60/ft ² times applicable percentage**

* Savings refer to the reduction in the energy and power costs of the combined energy for the interior lighting, HVAC, and SHW systems as compared to a reference building that meets the minimum requirements of Standard 90.1-2001.

** The tax deduction is prorated depending on the reduction in LPD. See IRS Notice 2006-52 for the definition of “applicable percentage.”



The Lighting Opportunity

- Lighting accounts for almost 40% of commercial electrical consumption
- 71 Billion square feet of commercial space nationwide.
- Less than 5% of eligible facilities have claimed EPACT credit
- New energy-efficient lighting can save building owners as much as 50% on their electric bills and payback in two years or less
- Any building with a lighting system 10 years or older is using old technology
- Every lighting renovation project should check to see how much of a deduction they can qualify for
- Some additional lighting controls required for qualification
 - For example, bi-level switching, manual controls, dimmers, occupancy sensors or photo sensors.

The HVAC Opportunity

Current HVAC design standards likely more stringent than ASHRAE 90.1-2001. For example, stakeholder response to DOE Advance Notice of Proposed Rulemaking for Commercial Unitary Air Conditioners and Heat Pumps. 69 FR 45460 (July 29, 2004) recommend minimum energy efficiency ratios (EERs) and coefficients of performance (COPs) for certain commercial unitary air conditioners and heat pumps, both split and package systems, respectively, as follows:

Air-Cooled Products

>65,000 - <135,000 Btu/h

>135,000 - <240,000 Btu/h

Efficiency Standards

AC: 11.2/11.0 EER vs. 10.3/10.1 EER (2001)

HP: 11.0/10.8 EER vs. 10.1/9.9 EER (2001)

AC: 11.0/10.8 EER vs. 9.7/9.5 EER (2001)

HP: 10.6/10.4 EER vs. 9.3/9.1 EER (2001)

The Building Envelope Challenge



- ASHRAE 90.1-2001 Reference Building compares favorably with current design standards
 - Roofs: R-19
 - Above Grade Walls: R-13 (framing) + R3.8 continuous
 - Windows: U(fixed) 0.57; SHGC 0.39
- Achieving energy cost reductions for the building envelope alone requires “something more”
- Meeting current building standards likely not enough for qualification



Certification Process

Screening Process


- Step 1: Confirm tax-paying status of building owner – type of entity and need for deductions
- Step 2: Compare Lighting Schedule to 2001 ASHRAE Standards. Are there efficiencies?
- Step 3: If yes in Step 1, compare 2001 ASHRAE mechanical standards with design of HVAC & Water Boiler System? Are there efficiencies?
- Step 4: If yes in Step 2, compare building envelope design to 2001 ASHRAE standards
- Step 5: Quantify expected tax benefits and certification costs before going any further



Certification Process

Certification Process

- Build appropriate energy model and confirm energy cost reductions
- Site Visit of property required by the IRS to be conducted by third party licensed engineer or contractor.
- Site visit confirms that design equipment actually installed on site.
- Documentation retained in taxpayer files for potential IRS review
- No supporting documentation required for return



Certification Letter Requirements

CERTIFICATION MUST:

- Include a statement regarding the energy efficiency of the building (interior lighting, HVAC and/or hot water system)
- Include a statement that the reduction has been determined under the Rules of Notice 2006-52
- Include address of the building
- Include a statement that field inspections have been performed verifying the energy-saving assets
- Include a statement that approved software has used for calculations
- Include a list of qualifying assets and projected annual energy costs
- Statement must be made by qualified individual
 - Not related to individual
 - Properly licensed engineer
 - Must provide a written statement of qualification to taxpayer
 - Must include the qualified individual's name, address and phone number



Accounting Details for 179D

- Certification Letter required for Owner
- Assignment Letter required from Public Entity
- 2006, 2007, 2008 must amend tax returns
- 2009 can file if still on extension
- Owners reduce basis in building by deduction amount
- Designers can take benefit as a deduction in income
- Benefit available to owners and designers through 2013

Example of Energy Efficient Tax Deduction Benefit

Building specifications	117,000 square foot office building \$26,000,000 total cost Built new in 2010
Energy efficient assets	HVAC system Specialty lighting
Energy efficient financial incentives	HVAC - \$.60/sf Lighting - \$.495/sf
Additional tax deduction	\$128,115 additional tax deduction
Current year tax savings	\$51,000 current year tax savings

Example of Energy Efficient Tax Deduction Benefit

Building specifications	255,650 square foot high school Renovated in 2006/2007
Energy efficient assets	Lighting System
Energy efficient financial incentives	Lighting - \$.60/sf
Additional tax deduction	\$153,390 additional tax deduction
Current year tax savings	\$61,000 tax savings



Federal Tax Credits

Sec. 48

- Business energy investment tax credit expanded in October 2008
 - 30% tax credits based on cost of
 - Solar energy equipment
 - Small wind turbines
 - Under 100 KW
 - Fuel cells
 - Must be business property – not residential
 - Eligible for 5 year depreciable life
 - Bonus depreciation applies in 2008 and 2009



Federal Tax Credits

Sec. 48

- Assume \$100,000 solar system acquired in 2009
 - Assuming
 - 30% energy credit
 - Bonus depreciation
 - 5 year life
 - 40% combined tax bracket
 - Result - tax savings of \$46,800 in 2009
- Tax savings for purchase in 2010 would be \$35,600 (no bonus depreciation – yet)
- Above does not include grants or local incentives



Federal Tax Credits

Sec. 48

- 10% Tax Credit
 - Geothermal systems
 - Microturbine power plants – local example
 - Combined heat & power systems
 - Natural gas turbine-driven generator
 - Generates electricity
 - Exhaust heat captured for hot water or space heating



Federal Tax Credits

Sec. 48

- ARRA (2009) changed provisions
 - Repealed prior limitations on equipment subsidies
 - Allows taxpayers to choose between a grant or the business investment tax credit
- Sec. 48 credits generally expire after 2016 unless extended



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Business Energy ITC (Sec. 48)

Solar Equipment Example

- Business energy investment tax credit expanded in October 2008
 - Provides a 30% tax credit for solar, fuel cells & wind
 - Provides a 10% tax credit for geothermal, microturbines and combined heat and power (CHP)
 - Credits available for systems placed in service by year-end 2016
 - Energy property is depreciated over 5 years and is eligible for 50% bonus depreciation in 2009
- ARRA (2009) also changed provisions
 - Repealed prior limitations on equipment subsidies
 - Allows taxpayers to choose between a grant or the business investment tax credit

Colorado Incentives

- Sales & Use Tax Exemption
 - For qualified solar thermal systems
 - Expires 6-30-2017
 - For components of systems used to produce electricity from renewable sources
 - Wind turbines

Colorado Incentives

- Property Tax Assessment Exclusion
 - For renewable energy facilities
 - Wind after 1-1-06
 - Solar after 1-1-09
 - Excess value of renewable facility over comparable nonrenewable facility
 - » Producing over 2 megawatts of electricity

Colorado Incentives

- Biofuels Research Grants
 - \$150,000 to \$250,000
 - 6-5-06 to 7-1-13
 - Eligibility
 - Early-stage bioscience companies
 - Fewer than 20 employees
 - Offices of technology transfer
 - Arranges for sale or licensing of project to commercial enterprise

Colorado Incentives

- Bioscience Discovery Evaluation Grant Program
 - \$150,000 to \$250,000
 - 8-31-09 to 7-1-13
 - Eligibility
 - Qualified early-stage company
 - Technology licensed from qualified research institution
 - Fewer than 20 employees
 - Total grants and investor funds under \$5MM
 - Required to have matching funds from other grants or third-party investors

Colorado Incentives

- Colorado Carbon Fund
 - Long-term contract (up to 15 years) to purchase emission reductions for selected projects
 - Reduce emissions through
 - Methane reduction
 - Switch to renewable energy sources
 - Energy efficiency improvements
 - First come first served – no expiration at present time

Boulder County Incentives

- ClimateSmart™ Loan program
 - \$3,000 to \$210,000 per property
 - Energy efficiency property
 - Commissioning
 - Building envelope
 - HVAC, hot water
 - Lighting
 - Renewable energy property
 - Solar hot water
 - Solar photovoltaic
 - Small Wind
 - Biomass
 - Geothermal

Boulder County Incentives

- Loan program
 - Loan funds generated through bond sale
 - 5 to 10 year loan terms
 - Repaid through special assessment on property
 - Lender consent required
 - Rebate incentives available to all loan funded projects
 - Up to 70% of project cost capped at \$10,000
 - Up to \$2.45 per watt on solar photovoltaic systems
 - Outside Xcel's service territory

Summary of Financial Incentives

- **Income Tax Deductions**
 - Federal Income Tax
 - State Income Tax
- **Income Tax Credits**
 - Federal Income Tax
 - State Income Tax
- **Grants**
 - Renewable Energy Grants
 - Energy Efficiency Conservation Block Grants
 - Renewable Energy & Energy Efficiency: State, Local, Private & Utility Grants
- **Property Taxes**
 - Property Tax Assessment
 - Property Tax Exemptions
- **Sales Taxes**
 - Exemptions for renewable energy investments
 - Refunds for renewable energy investments
- **Utility Rebates**
 - Energy Efficient Investments
 - Renewable Energy Investments

(www.dsireusa.org lists incentives by state)



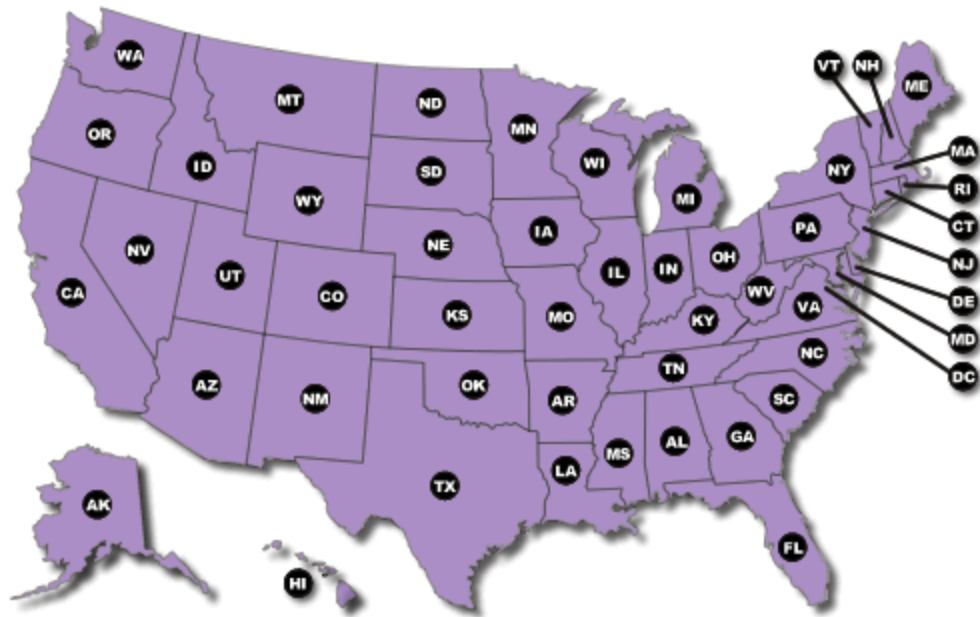
State Incentives Can Be Equal or Greater Than Federal Incentives

Federal Benefits Not Exclusive

- Important to know that energy incentives are coming online everyday.
- In addition to federal incentives, many states have tax and credit benefits, as well.
- Also, utility companies have incentives related to energy assets.
- Important to look at all incentives: Federal, State, Local Government and Utility Companies

Alternative Incentives

- Local utility rebates
- State tax rebates
- Loan programs
- Energy Policy Act



Visit www.dsireusa.org for a clickable map and a listing of all federal and state incentives for energy retrofits



About Clifton Gunderson

- One of the nation's largest certified public accounting and consulting firms
- Emphasis on providing strategic consulting services, which includes identifying any applicable tax incentives for renewable energy and energy efficient investments
- Accounting and engineering resources that provide energy cost modeling in conjunction with applicable financial incentives
- Ability to provide nationwide Energy Efficient Commercial Building Tax Deduction (Section 179D) Certifications
- Rocky Mountain offices in Broomfield, Greenwood Village & Colorado Springs
- Dedicated Construction, Real Estate and Architecture & Engineering focus
- 20 + years experience in strategic tax project experience, which includes Cost Segregation, Fixed Asset Depreciation Analysis, etc.
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Questions?

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The Clifton Gunderson Team