Got Green?

Business Incentives

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EPAct 2005 has since been modified by:
- The Emergency Economic Stabilization Act of 2008
EPAct 2005 Tax Incentives

- Tax deductions for highly efficient commercial buildings.
- Tax credit for residential builders.
- Tax credits for solar energy systems.
- Tax credits for fuel cell and microturbines used in a business.
- Tax credit for production of energy efficient appliances.
- Tax credit for non-business energy property.
Commercial Buildings

- Tax incentive for commercial buildings:
  - A tax deduction of up to $1.80 per square foot is available to owners or tenants (or designers, in the case of government-owned buildings) of new or existing commercial buildings that are constructed or reconstructed to save at least 50% of the heating, cooling, ventilation, water heating, and interior lighting energy cost.
Tax incentive for commercial buildings:

- Partial deductions of $.60 per square foot can be taken for improvements to one of three building systems that reduce total heating, cooling, ventilation, water heating and interior lighting energy cost by a certain percentage—the building envelope (10%), lighting (20%), or heating and cooling system (20%).
Tax incentive for commercial buildings:

- An interim system-specific goal for lighting is provided directly in the legislation and is valid until the IRS issues a final regulation. The interim lighting provision allows prorated deductions from 30 cents to 60 cents per square foot for lighting systems as described below.

- These deductions are available for buildings or systems placed in service from January 1, 2006, through December 31, 2013.
Tax Credit Certification

- Taxpayer must obtain certification with respect to the property.
- Certification must be provided by a qualified individual.
- Taxpayer is not required to attach certification to tax return, however.
- Income Tax Regulations require taxpayer to maintain books and records sufficient to establish the entitlement to any deduction claimed.
Guidance Document

http://www.eere.energy.gov/buildings/info/tax_incentives.html
Energy-Efficient Commercial Building Property

- In the case of privately owned buildings, the tax deduction is earned by the owner or person or entity that paid to have the building constructed or renovated.

- In the case of publicly owned (Federal, State, or local government or a political subdivision of one) buildings, the allows allocation of the deduction to the person primarily responsible for designing the property in lieu of the owner of such property. Such person will be treated as the taxpayer for purposes of this deduction.”
Publicly Owned Property

- Internal Revenue Bulletin (IRB) 2008-14 dated April 7, 2008, provides revised guidance.
- “A designer may include, for example, an architect, engineer, contractor, environmental consultant, or energy services provider who creates the technical specifications for a new building or an addition to an existing building that incorporates energy-efficient commercial building property.”
- The guidance also outlines the process that architects and others would have to follow to claim the deduction.
Interim Rule
Lighting Tax Incentives

- The Interim Rule applies to property not subject to the basic rule.
- The Interim Rules for Lighting Systems define the lighting system energy-savings target to be a lighting power density that is 25-40% lower than the minimum requirements in Table 9.3.1.1 (building area method) or Table 9.3.1.2 (space-by-space method) (not including additional interior lighting power allowances) of ASHRAE Standard 90.1-2001.
- For warehouses, the lighting power density must be 50% lower than ASHRAE Std 90.1-2001.
Interim Rule
Lighting Tax Incentives

- For interior lighting systems achieving a LPD reduction of 40%, then 100% of the deduction is given ($0.60/sf).

- If the 40% reduction is not met, the deduction is prorated as follows:
  - \[ \text{Ded/sf} = 0.60 \times (100 - (3 \frac{1}{3} \times (40 - R))) \]
    - Where \( R \) = percent of LPD reduction.
  - The minimum allowable is a 25% LPD reduction.
Besides demonstrating a reduction in lighting power density beyond ASHRAE Std 90.1-2001:

- All controls provisions in the Standard must be met.
- Bi-level switching must be installed in all occupancies except hotel and motel guest rooms, store rooms, restrooms and public lobbies.
- The application must meet the minimum requirements for calculated light levels as set forth in the 9th Edition of the IESNA *Lighting Handbook*.
- These rules do not apply to buildings meeting the requirements of the Permanent Rule.
Other Tax Incentives
Energy Efficient Home Credit

- IRS Notice 2006-27 provides guidance on the process which an eligible contractor may obtain energy efficient certification for a home.
- The dwelling can not be a manufactured home, though credits are also available for manufactured homes.
- The credit of $2000 is available to an eligible contractor who constructs a qualified energy efficient home.
- House must be sold before December 31, 2009.
Energy Efficient Home Credit

- The home must be certified to reduce heating, cooling, and energy consumption by 50% below a comparable dwelling unit meeting standards of section 404 of the 2004 IECC supplement.
- The envelope of the home must also reduce heating and cooling energy consumption by 10% compared to the comparable home.
- If the amount of homes built by the same builder exceed 85 per year or are built in subdivisions with the same floor plan and use the same subcontractors, not all the homes need to be inspected by the eligible certifier.
Energy Efficient Home Credit

- The contractor must obtain certification for a home from an eligible certifier before claiming the energy efficient home credit.
- The contractor is not required to file the certification with the return.
- The contractor should maintain records sufficient to establish entitlement to any credit claimed.
Manufactured Housing Tax Credits

- IRS Notice 2006-28 provides guidance on the process which an eligible contractor may obtain energy efficient certification for a manufactured home.

- For qualified new energy efficient manufactured homes, the amount of the credit is $1000 or $2000 depending on the energy savings that are achieved.

- Certification requirements are the same as the energy efficient home credit

- To qualify for the $2000 credit, the home must be certified to reduce heating, cooling, and energy consumption by 50% below a comparable dwelling unit meeting standards of section 404 of the 2004 IECC supplement.
Manufactured Housing Tax Credits

- To qualify for the $2000 credit the home must also have an envelope that reduces heating and cooling energy consumption by 10% compared to the comparable home.

- To qualify for the $1000 credit the home must either:
  - Be certified to reduce heating and cooling energy consumption by 30% and have a building envelope that reduces energy consumption by 10% compared to a comparable manufactured home meeting standards of section 404 of the 2004 IECC supplement, or
  - Meet the current requirements established by the Administrator of the Environmental Protection Agency under the ENERGY STAR Labeled Homes Program in effect on the date construction is substantially completed.
On-Site Renewables

- A 30% tax credit is available to businesses that purchase on-site renewable energy systems through the calendar years 2006-2016 with no cap after 2008.
- Small wind of 100kW or less.
- Geothermal Heat Pumps meeting EnergyStar specifications (business only get 10%).
Business installation of qualified fuel cells plants and stationary microturbines.

Fuel cells (2008-2016):
- At least 0.5 kW capacity.
- Electric-only generation efficiency > 30%.
- Tax credit is 30% up to $3,000 per kW of capacity.
- Fuel cell plant includes stack assembly and balance of plant to convert fuel into electricity by electrochemical means.
Fuel Cell Costs

- Fuel cells are currently a costly investment; the current average cost is $3,000-$5,000/kW.
- At this price, most usage is only viable in certain niche markets where electricity prices are very high and natural gas prices are very low.
- With advances in recent research, the prices of fuel cells are expected to drop by 50 percent or more in the future (not happening yet).
Microturbines In EPAct

- Microturbines (2008-2016):
  - Stationary plant with nameplate capacity less than 2,000 kW for business application.
  - Electric-only efficiency not less than 26%.
  - Tax credit is 10% up to $200 per kW of capacity.
  - Microturbine plant includes gas turbine engine, a combustor, a recuperator or regenerator, a generator or alternator, and associated balance of plant components to convert fuel into electricity and thermal energy.
Microturbine Costs

- Capital costs range from $700 to $1,100/kW.
- These costs include all hardware, associated manuals, software, and initial training.
- If heat recovery is added to the system an additional $75-$350/kW should be included into cost estimations.
- Costs for installation vary significantly by location but will generally add 30-50% to the total installed costs.
- Future costs for microturbine systems are estimated at $650/kW.
Other Important Tax Information
Time Limits and Ownership

- Legal title and control of the equipment by the taxpayer must be taken place during the above window.
- The property must be in the United States.
- Equipment must be new, unless extensively rehabbed or as part of a larger system (80/20 limit applies).
A company's "tax incentive basis" is the portion of its investment in eligible property upon which the commercial tax incentive can be claimed.

For eligible property, the “tax incentive basis” is the amount that is multiplied by appropriate incentive to determine the value of the tax incentive. In the simplest case, this is the amount the company paid to purchase and install for the eligible property.
Sales tax and interest paid on debt to acquire qualified assets are normally deductible as a business expense.

However, an election can be made under section 266 of the tax code to fold them into the tax incentive basis. In that case these expenditures would have to be deducted over time through depreciation, but they would enter into calculation of the commercial tax credit.
Effect of Other Incentives

- State rebates, buy downs, grants, or other incentives do not decrease the amount eligible for the federal investment tax credit if the company is required to pay federal income tax on the incentive.

- Most other incentives represent income on which federal income taxes are paid and therefore do not decrease the basis for the federal investment tax credit.

- Some other incentives are not taxable and for these the tax credit basis must be reduced prior to calculating the commercial tax credit amount.
Effect of Other Incentives

Incentives that do not reduce the tax basis:

- Taxable state or nonprofit grants, rebates, or buy downs.
- Credits against state and local income tax.
- Taxable utility rebates for credits.
- State performance-based incentives.
- Sale of renewable energy credits (RECs).
- Loan guarantees.
- Grants from NGOs funded from non-governmental sources.
Other Issues

- Tax credits can be taken on IRS forms 1120, 1120-C, 990-T, or 1040 Schedule C depending on entity claiming tax credit.
- Companies that pay the alternative minimum tax (AMT) may not be able to use the energy tax incentives – the credits may be deferred to another tax year where they can be used (forward 20 years).
- Special Assessment for Solar Energy Systems – Property tax exception for Illinois
Under Section 1603 of the American Recovery and Reinvestment Tax Act of 2009 (Section 1603), the United States Department of the Treasury makes payments to eligible persons who place in service specified energy property and apply for such payments.

Eligible property includes only property used in a trade or business or held for the production of income.

By receiving payments for property under section 1603, applicants are electing to forego tax.

For property placed in service in 2009 or 2010, applications must be submitted after the property has been placed in service and before October 1, 2011.
## Credit Termination Dates

<table>
<thead>
<tr>
<th>Specified Energy Property</th>
<th>Credit Termination Date</th>
<th>Applicable Percentage of Eligible Cost Basis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Large Wind</td>
<td>Jan 1, 2013</td>
<td>30%</td>
</tr>
<tr>
<td>Closed-Loop Biomass Facility</td>
<td>Jan 1, 2014</td>
<td>30%</td>
</tr>
<tr>
<td>Open-loop Biomass Facility</td>
<td>Jan 1, 2014</td>
<td>30%</td>
</tr>
<tr>
<td>Geothermal under IRC sec. 45</td>
<td>Jan 1, 2014</td>
<td>30%</td>
</tr>
<tr>
<td>Landfill Gas Facility</td>
<td>Jan 1, 2014</td>
<td>30%</td>
</tr>
<tr>
<td>Trash Facility</td>
<td>Jan 1, 2014</td>
<td>30%</td>
</tr>
<tr>
<td>Qualified Hydropower Facility</td>
<td>Jan 1, 2014</td>
<td>30%</td>
</tr>
<tr>
<td>Marine &amp; Hydrokinetic</td>
<td>Jan 1, 2014</td>
<td>30%</td>
</tr>
<tr>
<td>Solar</td>
<td>Jan 1, 2017</td>
<td>30%</td>
</tr>
<tr>
<td>Geothermal under IRC sec. 48</td>
<td>Jan 1, 2017</td>
<td>10%*</td>
</tr>
<tr>
<td>Fuel Cells</td>
<td>Jan 1, 2017</td>
<td>30%**</td>
</tr>
<tr>
<td>Microturbines</td>
<td>Jan 1, 2017</td>
<td>10%***</td>
</tr>
<tr>
<td>Combined Heat &amp; Power</td>
<td>Jan 1, 2017</td>
<td>10%</td>
</tr>
<tr>
<td>Small Wind</td>
<td>Jan 1, 2017</td>
<td>30%</td>
</tr>
<tr>
<td>Geothermal Heat Pumps</td>
<td>Jan 1, 2017</td>
<td>10%</td>
</tr>
</tbody>
</table>
Sources of Information

- www.efficientbuildings.org
- www.irs.gov
- www.ashrae.org
- http://www能量taxincentives.org/
- http://www.lightingtaxdeduction.org/
- www.dsireusa.org
- www.mwalliance.org
- http://www.treasury.gov/recovery
- www.illinoisenergy.org
Illinois Smart Energy Design Assistance Center

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