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Energy Efficiency Incentives in an Era of Political Uncertainty

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Course Description

As a new Administration and Congress arrives in Washington, D.C., so does great uncertainty in the future of federal incentives and financing for energy efficiency. This session provides an update and key information regarding how you can still leverage current incentives as well as expired programs. It also explores the outlook for the rest of the year in light of these political changes.

Learning Objectives

At the end of the this course, participants will be able to:

1. Understand how the 179D, 3-year look-back period can be used to finance energy efficiency projects even though the statute is expired.

2. Understand how 45L Energy Efficiency Tax Credit can be leveraged for multi-family buildings.

3. Understand special classification for energy efficient property including the additional benefits of Bonus Depreciation.

4. Understand how the Low Income Housing Tax Credit (LIHTC) Utility Allowance can enable energy efficiency upgrades.

Political Landscape

Discussion on Tax and Energy Policy Outlook

- Congress and Energy Efficiency
- Likelihood of Tax Reform
- Tax Extenders
- Energy Efficiency Programs

Currently
Expired EE Incentives

Leveraging Currently Expired EE Programs

1. §179D - Energy Efficient Commercial Building Deduction
    a. Government Sector Projects
    b. Private Sector Projects

2. §45L - New Energy Efficient Home Credit

What is §179D?

Section 179D is tax incentive available for the reduction of energy and power costs in commercial buildings. This tax provision was enacted under the 2005 Energy Policy Act (EPACT) and allows for a tax deduction of up to $1.80 per square foot. Buildings can partially qualify for $0.60 for HVAC, $0.60 for building envelope, and $0.30-0.60 for Lighting systems.

Qualifying Requirements:

Section 179D requires for the building to meet or exceed a 50% savings in energy and power costs when compared to a theoretical ASHRAE 90.1-2001/2007 baseline building. (The deduction is capped at the costs of the capitalized improvements).

Partially Qualifying Requirements; $0.60/SF for each qualifying category

- HVAC systems meeting 15% savings
- Lighting systems meeting 25% savings
- Building Envelope systems meeting 10% savings

The IRS requires that the taxpayer shall maintain a 3rd party certification in their records to establish the entitlement to, and amount of, the deduction claimed.

§179D for Designers/Contractors of Government Buildings

Governments are non-taxable entities and are unable to benefit from the section 179D tax incentive. Because of this, the IRS established guidance in 2008 allowing governments to allocate the deduction to the parties involved in the design of the energy efficient systems. In addition to the certification, the taxpayers receiving an allocated deduction must retain an “Allocation Letter” in their records.

Allocation Letter Requirements:

The IRS provided guidance for the Allocation of the deduction to designers/contractors. The primary points addressed in the allocation are:

- Verifying the parties involvement in the project
- Cost of property installed
- The year the property was placed into service
- The amount of the 179D deduction being allocated

§179D for Commercial Buildings

For building owners who have built new or renovated since 2006, a 179D Deduction will accelerate the depreciation of typically 39 year recovery assets to year one. This accelerated depreciation can be highly beneficial to building owners by providing tax savings and increasing cash flow.

Increasing EE Projects ROI

When building owners analyze the returns for investing in an energy efficient project, including the Net Present Value(NPV) created by a §179D Deduction can greatly improve the ROI and Payback Period.

The NPV Calculation will determine the financial benefit in depreciating a typically 39 year asset in year one rather than in a straight-line (or 1/39th per year) for the next 39 years.

§179D Retroactive Opportunities

Government Sector Projects

The designers/contractors of government owned buildings are able to take the 179D deduction for all “open tax years” (generally 3 years from date of filing). For property placed into service in previous years, the taxpayers are required to amend their returns.

Date of Filing is considered to be “filed” on the due date of the return if it was filed on or before its due date. If filed after the due date (under an extension) the Date of Filing would be the day it was actually submitted.

Commercial Building Owners

For Commercial Building Owners, the section 179D deduction may be claimed for new construction or improvements placed into service between January 1, 2006, and December 31, 2016. Form 3115, Change in Accounting Method, may be used to retroactively take the deduction in current year tax filings and avoid amending previous year returns.

§45L New Energy Efficient Home Credit

The 45L Tax Credit is a $2,000 tax CREDIT available for the construction of new or renovated dwelling units. The incentive is particularly beneficial to Multifamily Apartment or Condo Buildings of 3 stories or less which could receive upto $2,000 per unit. Assisted living facilities and student housing may also be eligible.

The Credit is available to the contractor or developer who owned the units in the year they were leased or sold and the units must be projected to save at least 50% of heating and cooling energy compared to the requirements of the 2006 International Energy Conservation Code (IECC).

Credit Filing Requirements:

The taxpayer must complete Form 8908 and obtain a certification from a 3rd party Certifier. The certifier conducts computer modeling and on-site testing and prepares a certification package. The IRS requires that the taxpayer shall maintain the certification in their records to establish the entitlement to, and amount of, the credit claimed.

§45L Retroactive Opportunities

For Residential Dwelling units who meet the energy saving requirements, the $2,000 tax credit may be claimed for all units which were leased or sold within all “open tax years” (generally 3 years from date of filing). For those eligible units, the tax return must me amended in order to claim the credit.

Date of Filing is considered to be “filed” on the due date of the return if it was filed on or before its due date. If filed after the due date (under an extension) the Date of Filing would be the day it was actually submitted.

Currently Active Provisions for Energy Efficiency Projects

1. §168 - MACRS Classification for Energy Efficient Property
    a. 5 Year Recovery
    b. Bonus Depreciation

2. Low Income Housing Tax Credit (LIHTC) Utility Allowance

§168 Eligible Property

- Solar Water Heater
- Solar Space Heater
- Geothermal Electric
- Solar Thermal Electric
- Solar Thermal Process Heat
- Solar Photovoltaics
- Wind (All)
- Biomass
- Geothermal Heat Pumps
- Municipal Solid Waste
- Combined Heat & Power
- Fuel Cells using Non-Renewable Fuels
- Fuel Cells using Renewable Fuels
- Landfill Gas
- Tidal
- Wave
- Ocean Thermal
- Geothermal Direct-Use
- Anaerobic Digestion
- Microturbines

§168 MACRS Classification for EE Property

§168 of the US Tax Code allows for a 5 year classification for certain Renewable and Energy Efficient property (permanent in tax code). This provision is in place to help promote investment in Renewable and EE property by allowing the cost to be recovered in 5 years. Without this provision, most of these systems would be recovered over 15 or 39 years.

Like a §179D Deduction, the value in this accelerated depreciation is in the improvement of the projects ROI and Payback Periods from the time value of the additional cash flow.

Sample Payback with MACRS 5 year Recovery:

Solar Hot Water System = $300,000
Estimated Annual savings = $60,000
Simple Payback = 5 Years

NPV(39 yr, w/10% DR) = $63,544
Estimated Annual Savings + NPV/5 = $72,709
Payback = 4.126

The MACRS 5 Year Classification theoretically helped reduce the Payback by nearly 11 Months.

§168 MACRS Classification and Bonus Depreciation

In addition to the §168 special 5 year classification, the property is also eligible for bonus depreciation, currently through the end of 2019.

Bonus Depreciation allows for any property with a recovery period of 20 years or less to deduct 50% of the cost in the current year (40% in 2018, 30% in 2019). It is because of the §168 classification that this property eligible for the deduction.

Sample Payback with MACRS 5 year Recovery and Bonus Depreciation:

Solar Hot Water System = $300,000
Estimated Annual savings = $60,000
Simple Payback = 5 Years

NPV(39 yr, w/10% DR) = $69,487
Estimated Annual Savings + NPV/5 = $73,897
Payback = 4.059

The MACRS 5 Year Classification theoretically helped reduce the Payback by nearly 12 Months.

Low Income Housing Tax Credit
Utility Allowance

What is the Utility Allowance?

The utility allowance (UA) is a dollar amount provided to residents to help them pay their utility bills. UAs combine the costs, in dollar amounts, of allowable utilities paid by residents in dwelling units managed by an owner.

All LIHTC Properties currently have a UA. This allowance is generally determined from a HUD Utility Schedule Model. This schedule is based on national surveys of energy consumption, it includes correction factor for the age of the property, property construction type, fuel end uses, and basic HVAC characteristics.

Energy Efficient Improvement Opportunities:

When LIHTC Property Owners make energy efficient improvements to their buildings, it creates an opportunity for a UA adjustment. This adjustment will in turn reduce the UA resulting in an increase in income for every unit owned in the building.

Low Income Housing Tax Credit Utility Allowance Methodology

Energy Consumption Model

In lieu of the HUD Utility Schedule Model, an EE improvement should prompt the use of the Energy Consumption Model (3rd party required). This model call for a theoretical analysis which is specific to the equipment installed on the buildings. This method will result in more accurate utility costs allowing for an adjustment in the UA increasing revenue for the owners while promoting energy efficiency.

Actual Consumption Data:

This method uses Statistical Analysis of the tenant's actual utility consumption using historical billing data. Although it results in modest adjustments to the UA, it is often considered difficult to process tenant waivers and actual tenant utilities.

Low Income Housing Tax Credit
Utility Allowance Case Study

Building Improvements

The owner of a 250 Unit LIHTC apartment building replaced Hot Water Boilers and Pumps, added pump VFD's, controls and installed new 16 SEER A/C systems.

Improvement Costs:

Total Cost: $650,000
Cost Per Unit: $2,600

Energy Consumption Model UA Adjustment:

Owner Previously used HUD Schedule.
Energy Consumption UA Adjustment: $40/Unit

UA Financial Analysis:

Revenue Increase/Month = $40 x 250 Units = $10,000
Annual Revenue Increase = $120,000
Payback from UA decrease = 5.4 Years

This concludes The American Institute of Architects
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