

INFO FOR PRELIMINARY ENERGY EFFICIENCY ASSESSMENT

BASIC INFORMATION

Legal Name of Entity: _____
Name of Owner: _____ Phone # _____
Property Contact Person: _____ Phone # _____
Complete Property Address: _____
Building Usage (Office, Retail, etc.): _____
Building Square Footage (Amount under Roof): _____
Date Building Constructed: _____
Date Systems Retrofitted (Must be after 1/1/2006) _____
_____ Lighting: _____
_____ HVAC: _____
_____ Envelope: _____

DOCUMENT NEEDS (Prefer "Electronic" PDF Versions):

Given the documents below, we will prepare a **no cost, no obligation** preliminary assessment of your building(s) and its subsystems' energy efficiency plus recommended steps and their cost to take advantage of tax deductions allowed under the Energy Policy Act of 2005. This preliminary analysis will aid the property owner in evaluating our service in advance. **Please provide:**

For WHOLE BUILDING Review:

Rec'd

- Architectural Drawings (full set) _____
- Reflective Ceiling Plans _____
- Electrical Drawings _____
- Mechanical Drawings _____
- Shop Drawings of Glazing & Roofing Systems _____

Many buildings do not qualify for the "Whole Building" deduction due to its sizable energy use reduction requirement. However, subsystems can qualify for specific lesser deductions subject to lower reduction requirements. For a preliminary assessment of one (or more) subsystem(s) **please provide:**

For LIGHTING Review (Permanent Rule & Interim Rule):

Rec'd

- Architectural Floor Plans (Subset) _____
- Reflective Ceiling Plans _____
- Electrical Drawings _____
- Specifications _____

For HVAC Review:

Rec'd

- Architectural Floor Plans (Only each floor plan) _____
- Reflective Ceiling Plans _____
- Mechanical Drawings _____
- Specifications _____

For BUILDING ENVELOPE Review:

Rec'd

- Architectural Drawings (full set) _____
- Shop Drawings of Glazing & Roofing Systems _____

GENERAL QUESTIONS:

Please answer the following general questions on the building and its subsystems. If information is unknown, leave question unanswered.

ENERGY SAVINGS IMPROVEMENTS

LIGHTING:

- Has a lighting retrofit effort been accomplished? Yes or No
- Have occupancy sensors or time clocks been installed? Yes or No
- Has the switching control of lighting been altered? Yes or No

HVAC:

- Has any HVAC equipment been replaced or altered? Yes or No

If "yes", EXPLAIN _____

- Has a plate & frame exchanger or other free cooling device been installed? Yes or No
- Has any device been installed to treat outside air? Yes or No
- Have variable frequency drives been installed? Yes or No

BUILDING ENVELOPE:

- Has the roofing system been replaced or altered? Yes or No

If "yes", EXPLAIN _____

- Have skylights been removed or installed? Yes or No
- Have the window systems been altered or replaced? Yes or No

If "yes", EXPLAIN _____

- Has a vestibule or air lock been installed? Yes or No
- Has the building's HVAC controls been altered or replaced? Yes or No
- Has an energy management or building management system been installed? Yes or No

ENERGY RECOVERY SYSTEMS

- Is this a manufacturing facility? Yes or No
- If "yes", is there an energy recovery system that uses energy spent during manufacturing processes to provide energy to the building's infrastructure? (Example: Steam used to power equipment is recovered to heat water.) Yes or No

SITE CHECKLIST FOR LIGHTING TAX DEDUCTION

If **whole building** or **lighting subsystem** is to be assessed, answer the questions on this page. Leave unanswered those questions where the information is unknown.

LOCAL ENERGY CODE REQUIREMENTS

LIGHTING CONTROL

- Buildings larger than 5000 square feet:
Is interior lighting controlled with automatic control device to shut off building lighting in all spaces? Yes or No
Note: Can be accomplished with a time clock to sweep off all interior lighting circuits or an occupancy sensor.
- **Exception:** Is this a 24-hour facility or a patient care facility? Yes or No

SPACE CONTROL

- Is general lighting within all spaces enclosed by ceiling-height partitions independently controlled by either a switch or occupancy sensor? Yes or No
- If controlled by a switch, is the switch on a time clock? Yes or No
 - **Exceptions:**
 - Classrooms (not including shop classrooms, laboratory classrooms, and preschool through 12th grade)
 - Conference/Meeting Rooms
 - Lunch and Break Rooms
- Area less than 10,000 square feet? Yes or No
If "yes", are controls provided for a max of 2,500 sq. ft. per control devices? Yes or No
- Area greater than 10,000 square feet? Yes or No
If "yes", are controls provided for a max of 10,000 sq. ft. per control devices? Yes or No
- Do the control devices allow an override of time clocks for a max of 4 hours? Yes or No

EPAct of 2005 REQUIREMENTS

- Is Bi-level switching provided in all interior areas of the building? Yes or No
Note: Dimmable lighting qualifies as bi-level switching.
 - **Exceptions:**
 - Hotel and Motel guest rooms
 - Store rooms
 - Restrooms
 - Public Lobbies
- Does lighting seem adequate for tasks performed in all interior spaces? Yes or No
- Is space over lit or under lit? Over lit or Under lit

GENERAL ITEMS

- How many incandescent lighting fixtures are used for general lighting? _____
Note: There usually should be a limited number of incandescent lighting fixtures used.
 - **Exceptions:**
Display/accent lighting switched separately from general lighting in the space does not count towards the allowed wattage.
Therefore these types of fixtures could have incandescent lamps.

PERMANENT RULE NOTES

- Deduction can qualify on any energy cost reductions from modeling the lighting systems.(?)
- This can come from any number of reductions.
 - **Lower Wattage (similar to interim rule requirements)**
 - **Dimmer or Bi-level controls**
 - Daylighting controls
 - Occupancy Sensors

SITE CHECKLIST FOR HVAC TAX DEDUCTION

If **whole building** or **HVAC subsystem** is to be assessed, answer the following 13 questions. Leave unanswered those questions where the information is unknown.

CO-GENERATION SYSTEMS?

- Utilizing steam generated by process equipment? Yes or No
- Waste heat used to preheat domestic water? Yes or No

ON-SITE POWER GENERATION SYSTEMS?

- Photovoltaic panels? Yes or No
- Solar thermal water heating? Yes or No

ENERGY RECOVERY SYSTEMS OR ECONOMIZER SYSTEMS USED?

- Recovery wheels used to pre-treat ventilation air? Yes or No
- Waterside economizers (heat exchangers) on chilled water systems? Yes or No
- Airside economizers (dampers) on air handling units? Yes or No

HIGH EFFICIENCY AIR-COOLED DX SYSTEMS?

- 16+ SEER units for split-systems? Yes or No
- 13+ SEER units for roof top units? Yes or No
- Heat pumps for split-systems or packaged units? Yes or No

CHILLER SYSTEMS HIGH EFFICIENCY?

- Using very cold supply water (below 44 degrees F)? Yes or No
- Using below .55 kw/ton? Yes or No
- Cooling towers have VSD's? Yes or No

SITE CHECKLIST FOR BUILDING ENVELOPE TAX DEDUCTION

If **whole building** or **building envelope** subsystem is to be assessed, answer the following 13 questions. Leave unanswered those questions where the information is unknown.

Walls have good insulation?

- Better than R-15 for continuous insulation? Yes or No
- Better than R-30 for insulation in framing? Yes or No

Note: Higher R values needed in cold climates.

Roofs have good insulation?

- Better than R-10 for continuous insulation? Yes or No
- Better than R-15 for insulation in framing? Yes or No

Note: Higher R values needed in cold climates.

Is glazing high performance?

- U-values lower than 0.5? (double pane) Yes or No
- SHGC values lower than 0.4? (low-e or reflective) Yes or No

Skylights?

Yes or No

Quality of skylights

- Plastic? Yes or No
- Double pane glass? Yes or No

Specialty systems/Other distinguishing features

- Significant overhangs over glazing? Yes or No
- Exterior fins or other shading devices? Yes or No
- Light shelves to deliver daylight into space? Yes or No
- Is building oriented with long south face? Yes or No