

# LEED 2012 & Green Power

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# What I will cover

1. What is LEED
2. Background on LEED 2012
3. Changes that affect Green Power & Carbon Offsets
4. Where we are in the process

# What is LEED?

- LEED, which stands for **L**eadership in **E**nergy & **E**nvironmental **D**esign is the premier green building program developed by the US Green Building Council. There are different rating systems for new construction, renovations, interiors, core & shell, operations and homes. People earn one of four ratings based upon a 100 point scale.

# Our Role

- As already outlined, one can earn credit (LEED Points) for purchasing green power. Depending upon the system, you can presently earn up to 6 points.
- It is also clear that LEED is a major gateway into many organizations and the first time they consider a green power purchase

# LEED 2009

- The LEED Standard currently has 5 areas:
  - Sites
  - Water
  - Energy & Atmosphere – **Green Power Credit**
  - Materials & Resources
  - Indoor Environmental Quality

# LEED 2012

- LEED 2012 will have 8 areas:
  - Sites
  - Water
  - Energy & Atmosphere – **Green Power still here**
  - Materials & Resources
  - Indoor Environmental Quality
  - Location & Transportation
  - Performance
  - Integrated Practices

# Effect of the changes

LEED is based on 100 points. Since there are more areas, there will be less points for each area based upon a weightings exercise that LEED follows to achieve the various goals they have set.

**The Impact for Green Power & Carbon Offsets is that under LEED 2012 you will earn less points, mostly likely you will be able to earn up to 2 points, but no final decision has been made.**

# 2012 Proposed Changes

- LEED 2012 proposes to look at all direct energy use meaning Electricity, Natural Gas, Oil and propane.
- A Project would then total up the use, determine the impact and offset with RECs and or carbon offsets, depending upon source following WRI carbon accounting protocols.

# Proposed Changes LEED 2012

- Must engage for a 5 year period
- For RECs, they have to be from a facility that has an on line date of 1/1/2005 or latter
- Must mitigate 50% for 1 point or 100% for 2 points
- Green-e Energy or Climate or equivalent
- Offsets need to be from US sources for US buildings. International projects must use CDM quality offsets.

# Example - Mixed Fuels

- A project has the following estimated annual uses:
  - Electricity - 1,000,000 kWh
  - Natural Gas – 10,000 Therms
  - Oil – 500 Gallons

# Calculations

- $1,000,000 \text{ kWh} \times 5 \text{ years} = 5,000,000$  or 1,000 RECs a year for 5 years OR  $5,000 \text{ MW} \times 1384 \text{ lbs}^*$  of carbon for 6,920,000 lbs (3,138 Mtco<sub>2e</sub>)
- $10,000 \text{ therms} \times 5 \text{ years} = 50,000 \text{ Therms} \times .005 \text{ Mtco}_2\text{e}^* = 250 \text{ Mtco}_2\text{e}$
- $500 \text{ gallons fuel oil} \times 5 = 2,500 \text{ gallons} \times 22.5 \text{ lbs}^* = 56,250 \text{ lbs} ( 26 \text{ Mtco}_2\text{e})$
- Total = 3,414 Mtco<sub>2e</sub> or 5,000 RECs + 276 Mtco<sub>2e</sub>
- \*NOTE – Impact Numbers NOT YET DETERMINED

# Mitigation Calculations

- To earn 1 point, a project must offset 50%,\*\* so they could meet it doing either of these:
  - Purchase 1,707 mtco2e approved offsets OR
  - Purchase 2,720 RECs ( $1,707 \text{ mtco2e} \times 2,205 \text{ lbs} = 3,763,935 \text{ lbs} / 1384 \text{ lbs per REC} = 2,720$ ) Under standard Green Power Industry rules, if a project wished to say they were green powered, they would have to buy 544 RECS per year and could claim they were offsetting 54% of there power use
  - \*\*NOTE: It is believed carbon impact will be the base line metric, but it is not finalized

# For 2 points

- Options would be as follows:
  - Purchase 3,414 mtco<sub>2e</sub> of approved offsets OR
  - Purchase 5,000 RECs and 276 mtco<sub>2e</sub> of approved offsets. Again, under standard Green Power industry rules, to claim a 100% Green Power offset, REC purchase would need to be 1,000 RECs for 5 years

# The LEED 2012 Process

- Presently LEED 2012 has been out twice for Public comment and based upon those comments adjustments have been considered.
- The EA TAG is expected to approve final changes in early December.
- There is now discussion under way – though no final decision is made to try and streamline the process.

# LEED 2012 Process Cont.

- The LEED Sterling Committee will need to act though as well as the Board of Directors. The goal still remains to have this approved by the members prior to Green Build 2012.

# Voting on changes

- Balloting on LEED 2012 is anticipated to be late summer or early fall 2012 to be ready for Green Build 2012 in San Francisco
- To vote on the changes to LEED 2012 you must be a member of the USGBC and also register to vote.