LEED® CERTIFICATION OVERVIEW

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What is your position in the Industry?

1. Pharmaceutical Engineer
2. Facilities Manager/Owner
3. Quality Control
4. Industry Partner
5. I’m here for the drinks
What does “LEED” stand for?

1. Leaders for Excellent Economical Diversification
2. Leaders for Excellence in Environmental Design
3. Leadership in Energy and Environmental Design
4. Let’s Eat Every Dessert

Your Current knowledge of LEED Certification

1. Beginner (I’ve just heard about LEED)
2. Intermediate (I’ve been involved in a LEED project)
3. Expert (I should be doing this presentation)
4. I just realized I’m at the wrong event
What do you want to learn today?

1. General Information for LEED certifying a project
2. How will Obama’s economic stimulus package impact me?
3. How to land a plane safely into the Hudson River

Today’s Agenda

- General LEED Overview
- The Certification Process
  a) Early Steps
  b) Execution
  c) Tools
  d) Innovation and Design Credits
  e) Challenges
Good News in dire financial times!

- 75% of commercial real estate executives say the credit crunch will not discourage them from building green
- 83% of them say they would be extremely or very likely to seek LEED certification for buildings planned in the next 3 years
- 80%+ commercial building owners have allocated funds to green initiatives this year

Source: USGBC news release January 13, 2009
LEED address the complete lifecycle of buildings:

- **HOMES**
- **NEIGHBORHOOD DEVELOPMENT** (IN PILOT)
- **COMMERCIAL INTERIORS**
- **CORE & SHELL**
- **NEW CONSTRUCTION**
- **SCHOOLS, HEALTHCARE, RETAIL**

LEED Rating Systems

- Commercial Interiors (Tenant Improvements)
- Core and Shell (Core and Shell construction)
- New Construction (New construction and major renovation of commercial and institutional)
- Existing Building: Operations and Maintenance (Measures operations, improvements and maintenance)
- School, Healthcare, Retail (Specific to design and construction of each building type)
- Homes (Residential)
- Neighborhood Redevelopment (Smart growth, urbanism)
USGBC has four levels of LEED:

Commercial LEED Certified Projects (cumulative)

* As of November 2008
The Certification Process

- Early Steps
- Execution
- Tools
- Innovation and Design Credits
- Challenges
Early Steps...

- Decision to build or renovate/site characteristics/boundary
- Identify LEED rating system
- Create Project Team and assign responsibilities
- Define Scope: What level of LEED is feasible?

Early Steps...

- Strategies; Integrated Design; Analysis; Charettes
- Schedule and Budget
- Know Prerequisites of LEED (i.e., Fundamental commissioning, Minimum energy performance, CFC reduction in HVAC, Storage and collection of recyclables, Minimum IAQ performance, ETS control)
Execution

- Registration
- Resources
- Credit Submittals
- Review Process

Registration

- Who should do it? Project Administrator
- When to do it? Early because registration date determines requirement
- Why it’s important? Signifies intent to certify
- What it involves:
  - Registration fee: Flat
  - Review Fees: Based on project size
  - Detailed fee info: www.usgbc.org/leed
  - Add’l fee considerations: Appeal, CIR’s, etc.
LEED Resources

Reference Guides  Rating Systems  Case Studies

Web site: www.usgbc.org  LEED-Online  CIRs
Credit Interpretation Rulings (CIR's)

- Questions regarding how to achieve specific LEED credit
- Answered on project-by-project basis – ruling is clear, concise and precedent-setting
- Organized by LEED credit and date

Environmental Categories

- Energy and Atmosphere
- Materials and Resources
- Sustainable Site
- Innovation and Design
- Water Efficiency
- Indoor Environmental Quality
Credit Submittals (LEED CI)

- Sustainable Sites (Site Selection, Alternative transport)
- Water Efficiency (Water use reduction)
- Energy and Atmosphere (Optimize energy performance)
- Materials and Resources (Recycled content, resource reuse, regional material)
- Indoor Environmental Quality (Low emitting material, daylighting, increased ventilation)
- Innovation and Design Process

Documentation for Submittals

- Understand what documentation is needed for each credit (Div1 materials, photos, contractor materials, etc.)
- Understand how one credit may relate to another (LEED online 2009 v3 will assist with this)
- Understand how general documentation (floor plans, site plans, narratives, etc.) relate to credits
Two-Phase Review Process
- Design application and review
- Construction application and review
  - Pro: Early feedback

Single-Phase Review Process
- Application and review
  - Pro: Less time

Tools
- LEED On-line
- LEED templates
LEED-Online: Getting started

Assign LEED-online roles:

- Project administrator ( Registers the project, views/uploads/modifies documentation, submits application)

- Project team members ( views/uploads/modifies assigned credits)
**LEED for Commercial Interiors v2.0**

**Registered Project Checklist**

### Water Efficiency

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**Materials & Resources**

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**Notes:**

- Checklists may vary by project type and climate zone.
- Requirements and credits may change over time.
- Additional information and resources can be found on the LEED website.

**1/26/2009**
Innovations Points

- Innovation performance not covered by LEED
- Team must create intent, requirements, etc.
- Exceptional performance above existing LEED requirements
- Rule of Thumb: double credit requirements/next incremental percentage
- Only 4 Innovation points available (plus LEED-AP)
Innovation and Design Credit

Water Efficiency 1-2 pts
Water Use Reduction: 20% - 1 point, 30% - 2 points

Intent:
Maximize water efficiency within buildings to reduce the burden on municipal water supply and wastewater systems.
LEED online 2009 v3 enhancements

- Point scale change – credits remain intact
- Eliminates some narrative
- Licensed professional exemptions
- Streamlining – automated cross pollination to avoid inconsistencies (i.e., gross square footage and FTE’s auto populated)

Challenges and Tips

- It can be difficult to obtain information for submittals
- Starting early is a good thing
- Realize the time involved in documentation
- Reinforce LEED requirements throughout design and construction
- Utilize an integrated partnership approach
- Commitment from the top
Thank you!

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