EPA’s LEED™ Buildings: Successes and Stories

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U.S. EPA

EPA Green Building Work Group
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EPA’s Thoughts/Overview

• OARM sees LEED™ as:
  – A great framework for considering the environmental impacts of buildings.
  – An excellent marketing vehicle for the general public.
  – An excellent educational tool for building owners, designers, contractors, and managers.
  – A means, not an end.

• FMSD’s goal is reduced resource consumption and fewer environmental impacts.
Going Beyond LEED™

- LEED™ is not perfect.
- USGBC is working to improve LEED™ and is taking a thoughtful approach to researching issues, weighing options, and making decisions.
- EPA uses “LEED™ plus.” In our procurements and construction projects we include additional requirements that will result in better green buildings.
EPA Experience with LEED™-NC

- EPA has 8 buildings completed, in design phase, or under construction that are or will be LEED™ registered and certified buildings.
EPA Experience with LEED™-NC

Completed Projects:

• Chelmsford, Massachusetts. New England Regional Lab - LEED™ 1.0 Gold laboratory.
EPA Experience with LEED™-NC

Completed Projects:

• Kansas City Science and Technology Center. LEED™ Gold.
  – Most energy-efficient new lab at 260,000 to 280,000 BTU’s/GSF/Yr.
EPA Experience with LEED™-NC

• Kansas City Science and Technology Center.
  – Rain water recapture system.
  – Condensate capture system underway.
EPA Experience with LEED™-NC

Completed Projects:

• RTP, North Carolina. National Computer Center. 100,000 square feet.
EPA Experience with LEED™-NC

In the Works:

• RTP Early Learning Center.
  – LEED™ Silver childcare center under construction. 25,400 square feet.
  – Completion scheduled for Fall 2005.
EPA Experience with LEED™-NC

In the Works:

• Potomac Yard, Northern Virginia.
  – 422,000 SF. Due spring 2006. LEED™ Silver at a minimum, may be Gold.
  – Also required Energy Star Building Certification and 20% Better than ASHRAE.
Potomac Yard, Northern Virginia

James G. Davis Construction Corporation
Potomac Yard

April 11, 2005  Photo #10-4
From South Tower Looking North
EPA Experience with LEED™-NC

In the Works:

- Denver Regional Office.
  - 250,000 square feet. Build-to-Suit lease via GSA. Design competition. Completion in Fall 2006.
  - Should be our most energy-efficient office building. Air side economizer. Green roof.
EPA Experience with LEED™ NC

In the Works:

• New Boston Regional Office. 225,000 square feet. Occupancy 2008.
  – EPA is lead tenant in renovation of the 1930’s McCormick Post Office and Courthouse.
  – LEED™ Silver is goal; certification likely.
  – ENERGY STAR Building is goal.
EPA Experience with LEED™ NC

- New Boston Regional Office:
  - Green Roof will be outstanding.
  - Money for mechanical systems?
EPA Experience Pre-LEED™

Existing Buildings:

- Two major complexes that were “green” before LEED™ - RTP, NC New Main, and Headquarters Federal Triangle, Washington, DC.
EPA Experience Pre- LEED™

Existing Buildings:

• Kansas City Regional Office Building.
Lessons Learned

- Design competitions using LEED™ can produce great results under fixed budget conditions.
- LEED™ experienced team members will make the process go more smoothly.
- LEED™ point musical chairs.
- Gaming the energy model or the LEED™ system.
- Measure your success not only by your LEED™ certification but also by how your building actually performs.
Measures of Success

• LEED™ Gold Award.
• As well as performance:
  – Energy usage.
  – Water usage.
Contact Us

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