



EPA's LEED™ Buildings: Successes and Stories



Bucky Green
Sustainable Facilities Practices Branch
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.
 - Our first LEED™-certified building. Opened October 2001; certified April 2003.



EPA Experience with LEED™-NC

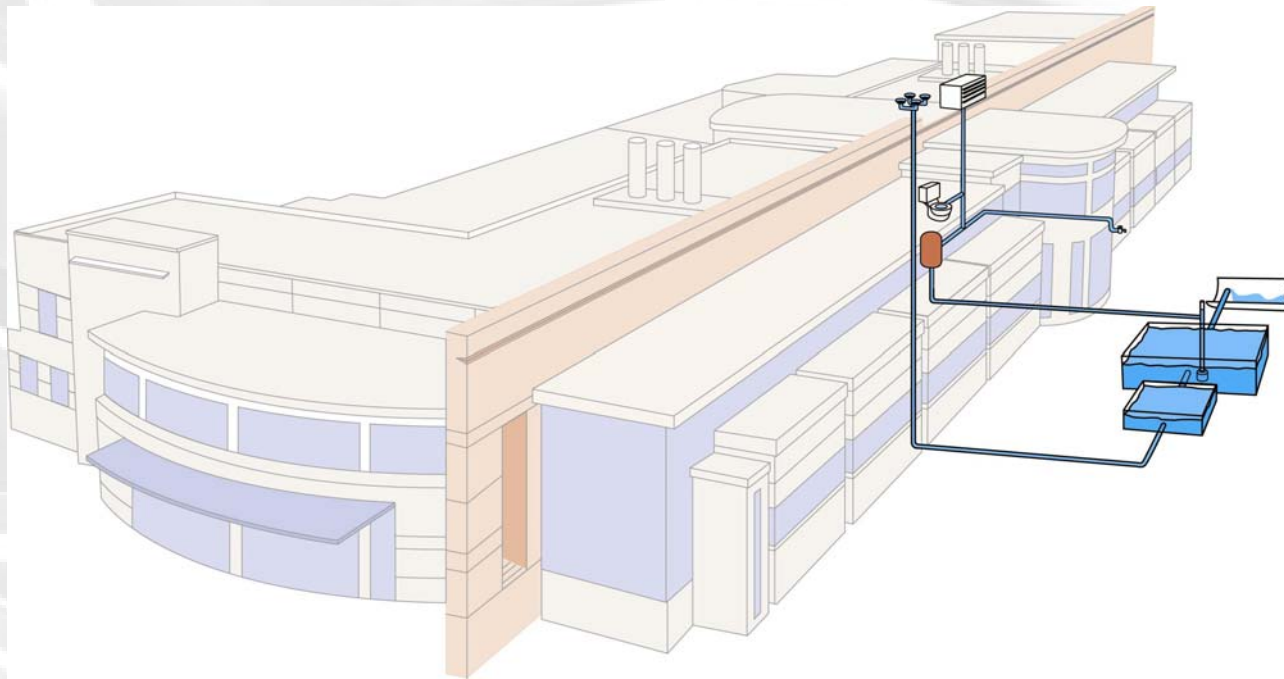
Completed Projects:

- Kansas City Science and Technology Center.
LEED™ Gold.
 - Opened May 2003; certified August 2003.
 - 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.
 - Opened January 2002; LEED™ Silver certified January 2005.



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

 bernstein associates
photographers

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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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