

LEED Through the Years*



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*As reported in Environmental Building News

A Gleam in the Eye



- Gottfried forms ASTM committee to create voluntary rating system a la BREEAM in UK
 - September 1992
- USGBC forms in San Francisco
 - July 1993
- USGBC votes to create rating system (G-P leads background research)
 - May 1994



The Stealth Years

- DOE funds USGBC to create LEED Reference Guide
 - October 1997
- DOE funds LEED Pilot program
 - October 1998
- Ambrose predicts self-assessment won't work
 - February 1999



Getting Underway

- First 12 LEED buildings announced
 - April 2000
- LEED for New Construction v.2.0 launched
 - Pilot retroactively renamed LEED 1.0
 - Various other LEED versions underway
 - June 2000
- LEED Reference Guide released
 - April 2001



LEED in a Family Way

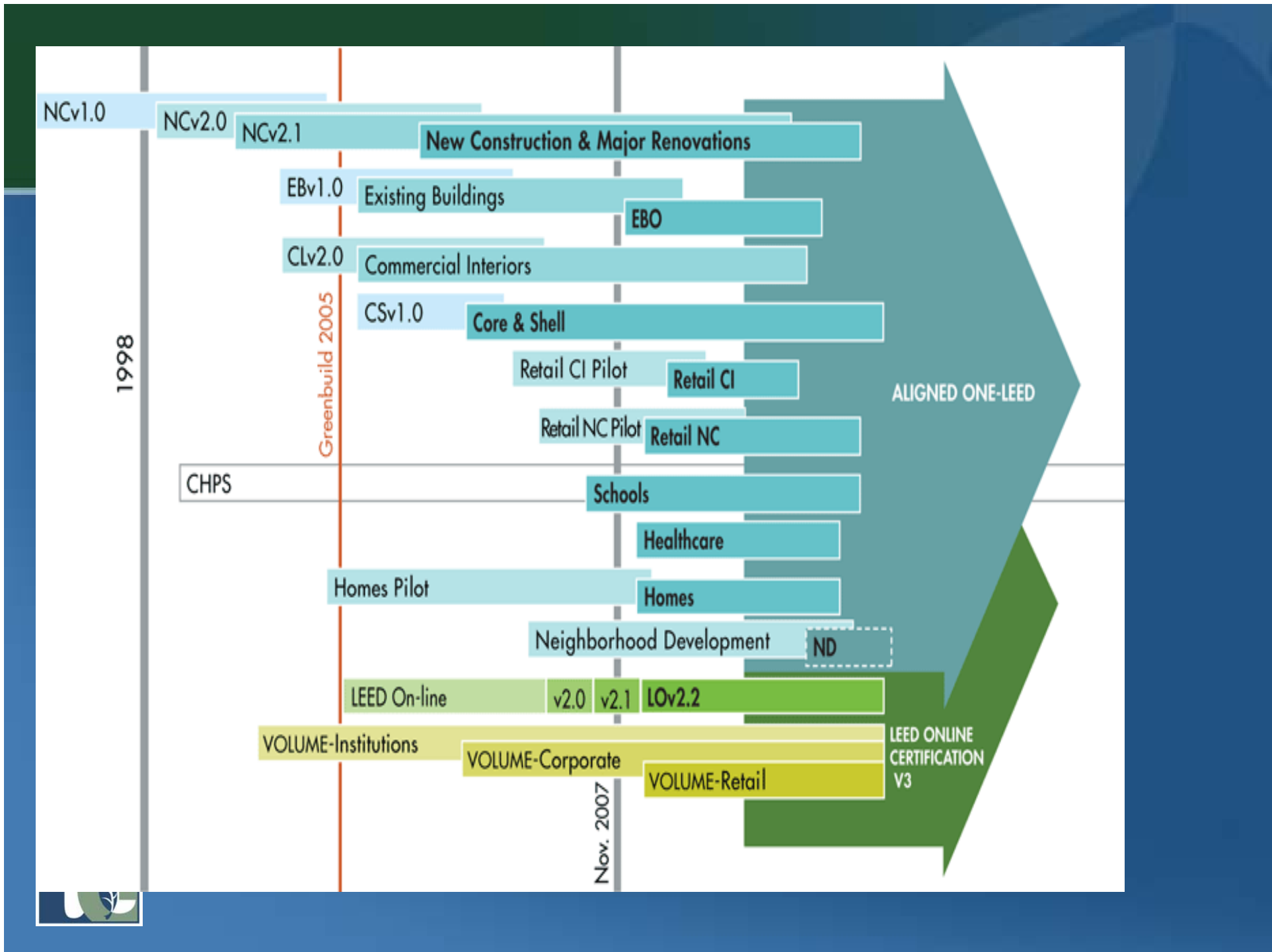
- LEED for Existing Buildings pilot
 - Confusing name locked in
 - LEED for Commercial Interiors pilot soon thereafter
 - February 2002
- LEED EB, CI launched
 - November 2004



Imperialism and Technology

- LEED licensed to Canada
 - September 2003
- LEED Online
 - LEED enters the dot-com era
 - December 2005





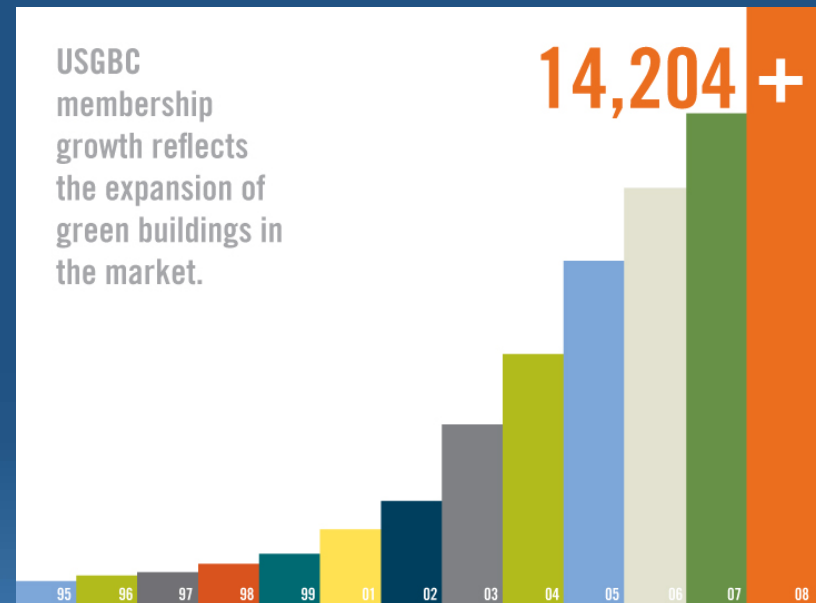
Recurring Events in LEED's History

- LEED-Homes development initiated
- LEED systems coordinated
- LEED certification streamlined



USGBC membership growth reflects the expansion of green buildings in the market.

14,204 +



LEED Gets Serious?

- Credits, points weighted for environmental impacts
- Uniform 100-point scale
- Life-cycle assessment option for earning materials points
- Exploring regionalization
 - December 2008



Panel: To LEED or Follow?

- Chris Benedict, RA
- Bruce Coldham, AIA
- Christopher Schaffner, PE, LEED AP



ARCHITECTURE VITA

Information that an Architect should know about their “green” building:

Enclosure

Air Barrier

What is the strategy?

List the materials and components that compose the air barrier

List how the joints between each of these materials and building components are sealed

Liquid water management

What is the strategy?

What composes the drainage plane?

List all places where flashing will be installed and what materials will be used

Describe how interior and exterior corners will be flashed

Describe any unusual flashing situations

Water vapor management

What is the strategy?

How will the wall dry once it is wet?

How is condensation managed and/or prevented?

Heat transfer management

What is the strategy?

What materials will be used?

Where are potential thermal bridges and how are they handled or avoided?

Prepare a sheet showing a plan and a section of the building. Key in construction details to the plan and section that show all of the materials and components of the envelope and how they are sealed to each other.

Mechanical systems

Describe and calculate the energy and water loads for the building

Describe what energy sources will be used to meet these loads

Show a room by room heat loss calculation

If including AC in the project, show a room by room heat gain calculation

Describe all aspects of the building design and site planning that reduce the loads

Describe the heating strategy for the building, including controls to be used

Describe the cooling strategy for the building, including controls to be used

Describe the ventilation strategy for the building, and proposed negative, positive or balanced pressures

Describe the controls to be used, the ventilation rates at all areas and what runs continuously or intermittently

Describe what components of the systems above are insulated

Describe how the domestic hot water is made and how 118 degree water will be reliably delivered to all faucets

Show wiring diagrams for the heating, hot water and ventilation systems and controls

Electrical

Make chart:

List ALL items that consume electricity in the project ie, lights, pumps, fans, elevator components, ignitions, controls, compaction machines, etc.

Verify that each item has the lowest electrical use to perform its function

Show which light fixtures have motion detectors

Show which light fixtures have daylight sensors and where the sensors are placed

Show which light fixtures have photo cells and where the cells are placed