LEED®

McNeil Healthcare, LLC
LEED Certification Process

LESSONS LEARNED

About USGBC

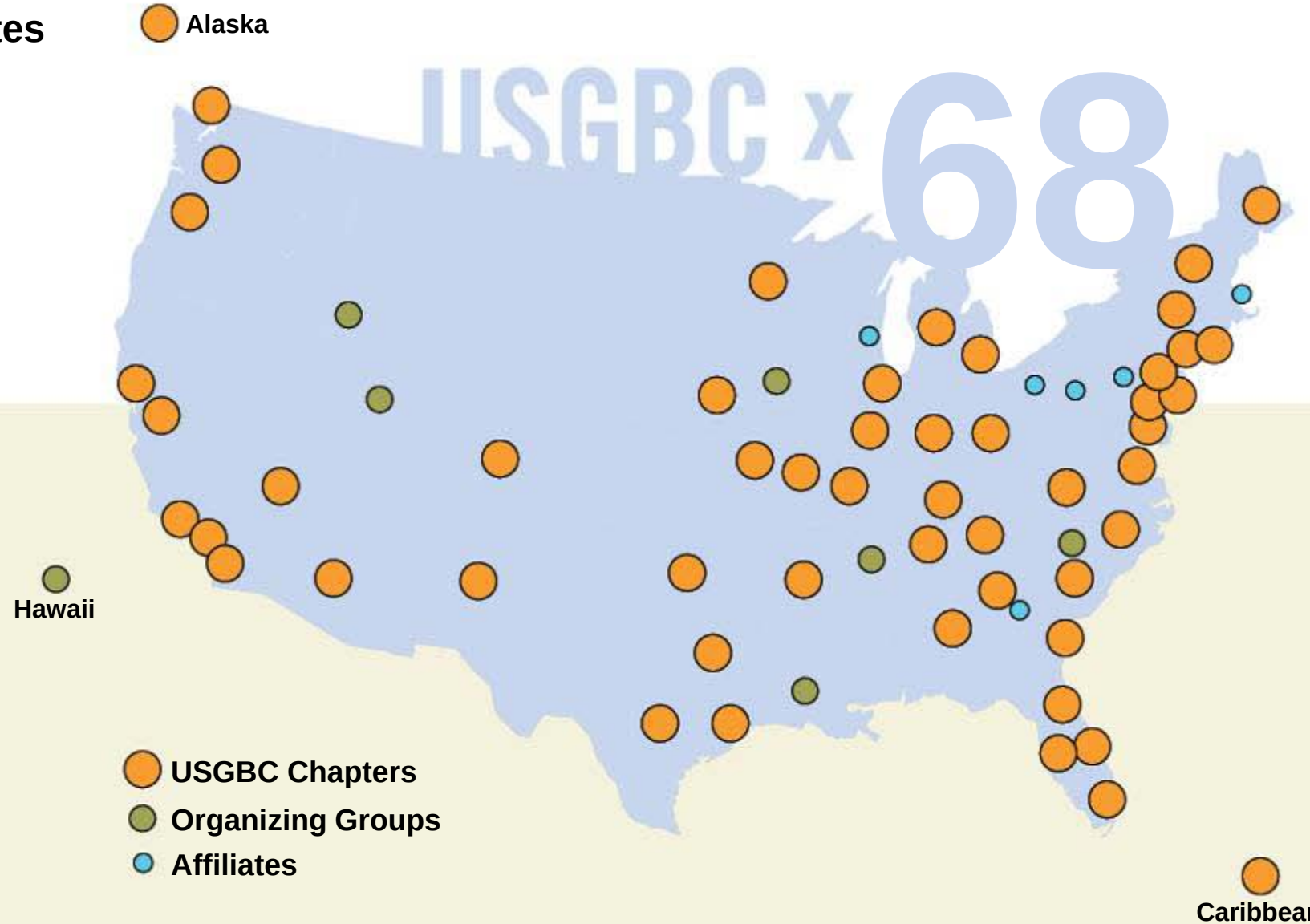
- Non-profit organization created in 1993 by a developer, an environmentalist lawyer and an executive from CARRIER Corp.
- Composed of leaders from every sector of the building industry
- Promote buildings that are environmentally responsible
- More than 11,000 members
- +68 regional chapters

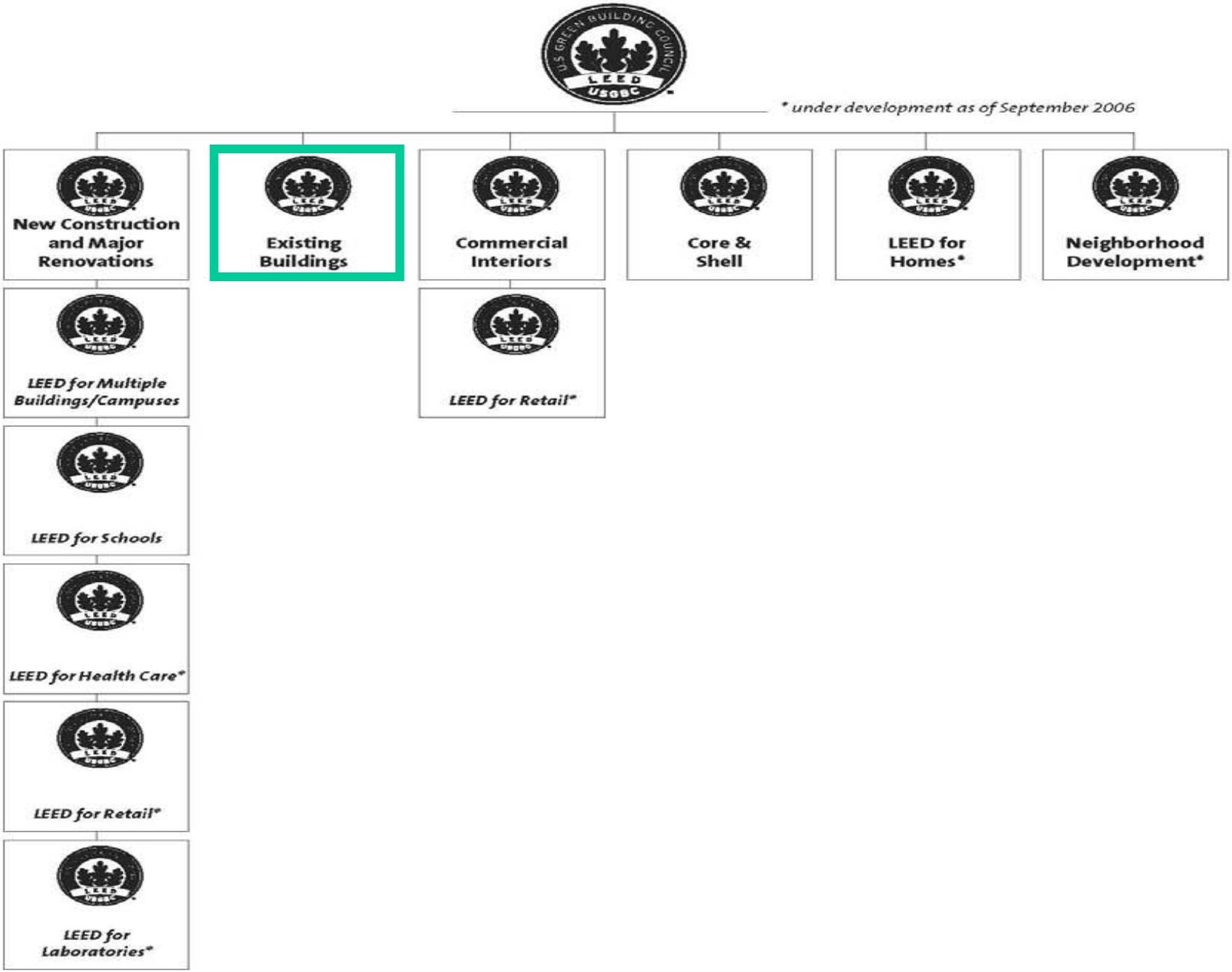
Core Purpose

The U.S. Green Building Council's core purpose is to transform the way buildings and communities are designed, built and operated, enabling an environmentally and Socially responsible, healthy, and prosperous environment that improves the quality of life.

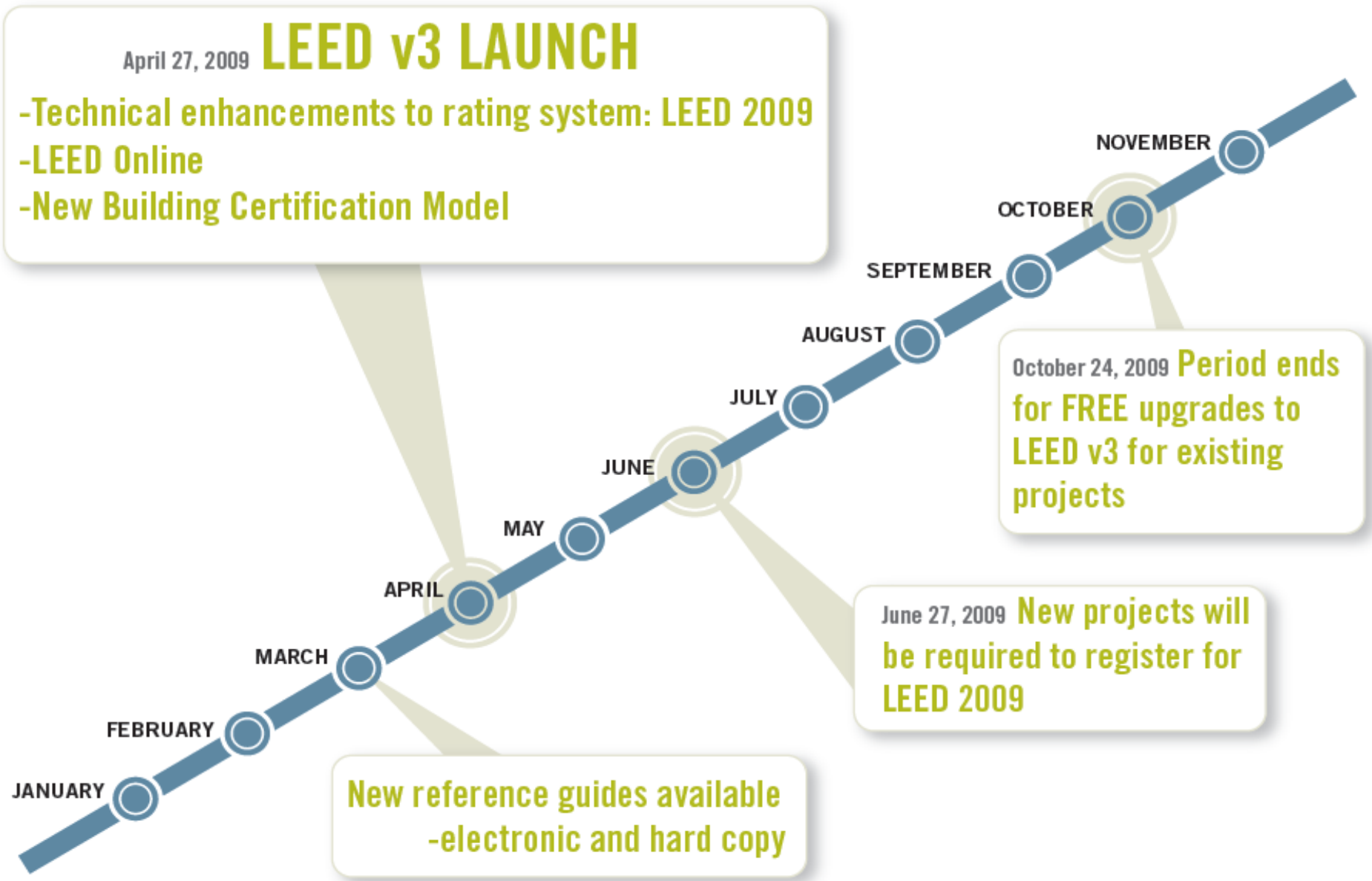
USGBC Chapters, Organizing Groups, & Affiliates

As of 04/06



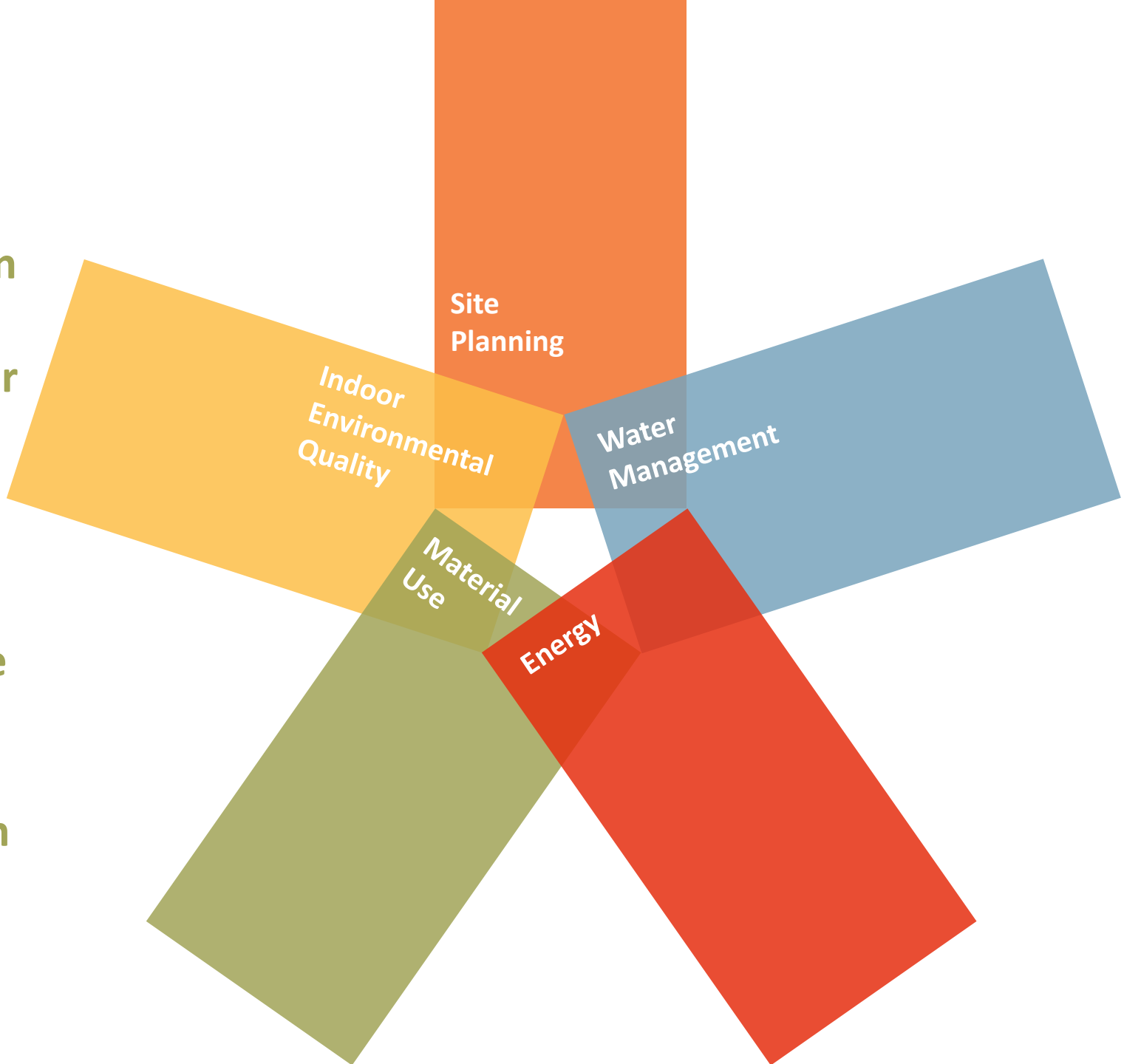

* under development as of September 2006
New Construction and Major Renovations
Existing Buildings
Commercial Interiors
Core & Shell
LEED for Homes*
Neighborhood Development*
LEED for Multiple Buildings/Campuses
LEED for Schools
LEED for Health Care*
LEED for Retail*
LEED for Laboratories*
LEED for Retail*

LEED v3 ROLLOUT



What is green building?

Design and construction practices that meet or exceed specified standards, resolving much of the negative impact of buildings on their inhabitants



LEED SYSTEM CREDITS DISTRIBUTION

Sustainable Site

- **Erosion and Sedimentation Control**
- Age of Building Green site and building exterior management
- High development density building and area
- **Alternative Transportation**
- Reduce Site Disturbance
- **Storm water Management**
- Heat island reduction
- Light Pollution Reduction

Water efficiency

- Minimum Water Efficiency
- Discharge Water Compliance
- **Water Efficient Landscaping**
- Innovative Wastewater Technologies
- **Water Use Reduction**

Energy & atmosphere

- **Existing Building Commissioning**
- Minimum Energy Performance
- Ozone Protection
- Additional Ozone protection
- Performance measurement
- Optimize Energy Performance
- On-site and Off-site renewable energy
- Building Operations and Maintenance
- Documenting Sustainable Building Cost Impact

Materials & resources

- **Source Reduction and Waste** Management
- Toxic Material Source Reduction
- **Construction, Demolition and Renovation**
- Optimize Use of Alternative materials
- Optimize Use of IAQ Compliance Products
- **Sustainable cleaning products and materials**
- **Occupant Recycling**
- Additional Toxic Material reduction

Indoor Env. Quality

- Outside Air Introduction and Exhaust System
- **Environmental Tobacco Smoke Control**
- Asbestos Removal or Encapsulation
- **PCB Removal**
- Outdoor Air Delivery Monitoring
- Increase Ventilation
- Construction IAQ Management Plan
- **Documenting Productivity Impact**
- Indoor Chemical and Pollutant source control
- Controllability of System
- Thermal Comfort
- Day lighting and Views
- Contemporary IAQ Practice
- **Green Cleaning**

Credit Categories & Distribution

12 POINTS Sustainable Sites (SS)

10 POINTS Water Efficiency (WE)

30 POINTS Energy & Atmosphere (EA)

14 POINTS Materials & Resources (MR)

19 POINTS Indoor Environmental Quality (EQ)

7 POINTS Innovation in Operations (IO)

What is the LEED System?

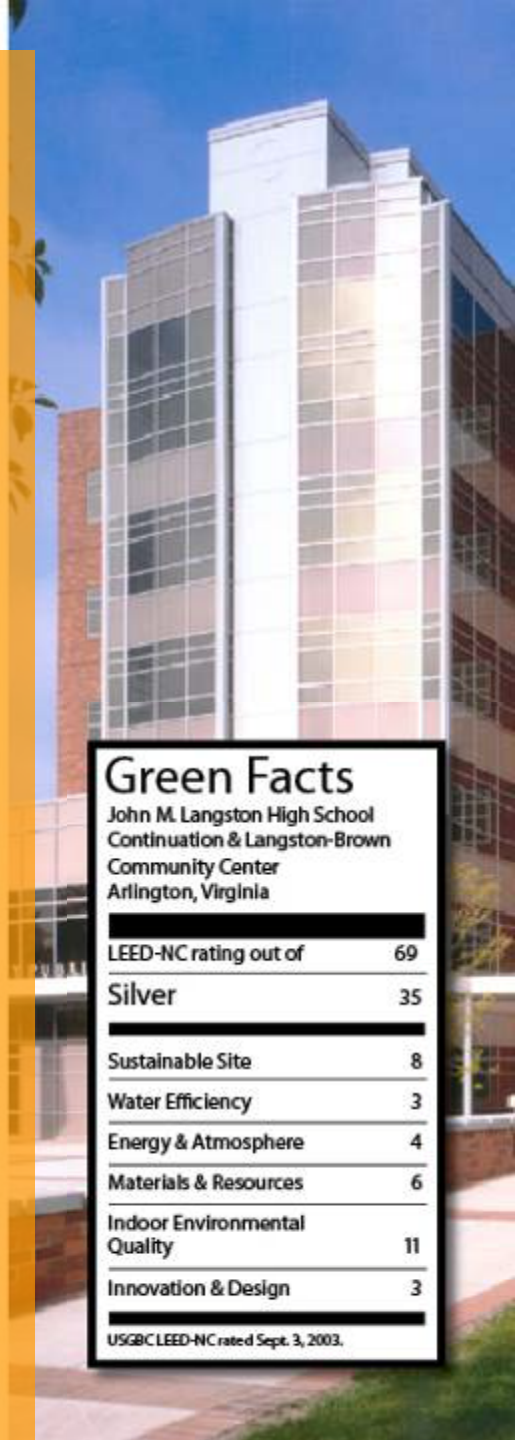
LEADERSHIP in ENERGY and ENVIRONMENTAL DESIGN

A leading-edge system for certifying **DESIGN, CONSTRUCTION, & OPERATIONS** of the greenest buildings in the world

Scores are tallied for different aspects of efficiency and design in appropriate categories.

For instance, LEED assesses in detail:

1. Site Planning
2. Water Management
3. Energy Management
4. Material Use
5. Indoor Environmental Air Quality
6. Innovation & Design Process



Green Facts

McNeil Healthcare, LLC
PO Box 2009
Las Piedras P.R.

LEED-EB Certified	39
Sustainable Site	7
Water efficiency	3
Energy & Atmosphere	9
Materials & Resources	6
Indoor Environmental Quality	10
Innovation Design	4

USGBC LEED-EB rated Sept. 11, 2009

McNeil Healthcare, LLC

Johnson & Johnson Family

Las Piedras, P.R.

Manufacturing Facility

LEED-EB Certified

Levels of LEED Ratings

Platinum 68-92 points

Gold 51-67 points

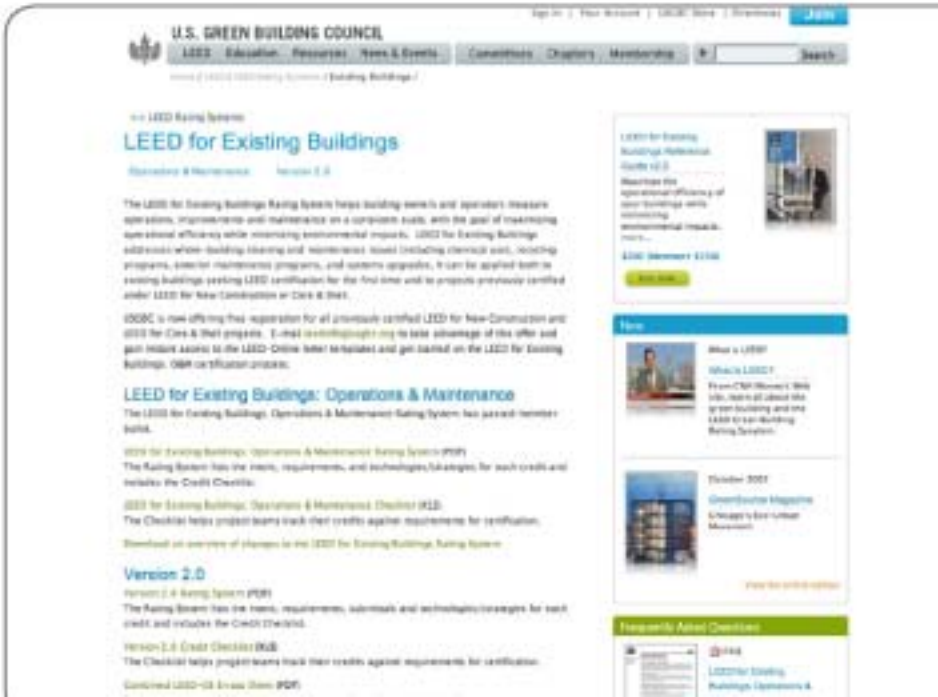
Silver 43-50 points

Certified 34-42 points

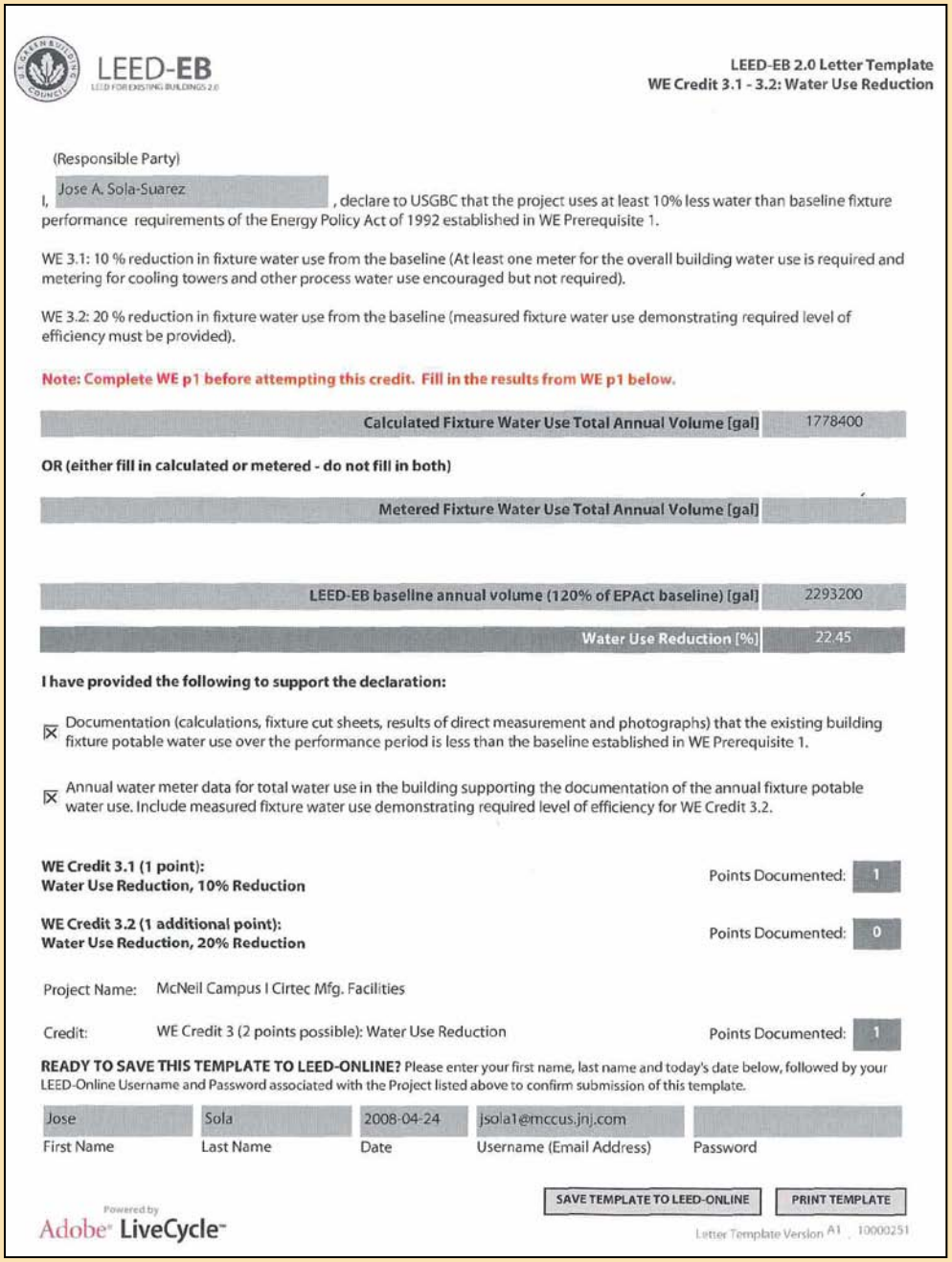
Green Buildings worldwide are certified with a voluntary, consensus-based rating system. USGBC has four levels of LEED.

Getting Started: Tools

- Rating systems
- Reference guide
- Project checklist
- Credit Interpretation Requests (CIRs)
- LEED Online
- Educational workshops
- Project case studies
- www.usgbc.org



CREDIT TEMPLATE



LEED-EB
LEED FOR EXISTING BUILDINGS 2.0

LEED-EB 2.0 Letter Template
WE Credit 3.1 - 3.2: Water Use Reduction

(Responsible Party)

I, Jose A. Sola-Suarez, declare to USGBC that the project uses at least 10% less water than baseline fixture performance requirements of the Energy Policy Act of 1992 established in WE Prerequisite 1.

WE 3.1: 10 % reduction in fixture water use from the baseline (At least one meter for the overall building water use is required and metering for cooling towers and other process water use encouraged but not required).

WE 3.2: 20 % reduction in fixture water use from the baseline (measured fixture water use demonstrating required level of efficiency must be provided).

Note: Complete WE p1 before attempting this credit. Fill in the results from WE p1 below.

Calculated Fixture Water Use Total Annual Volume [gal]	1778400

OR (either fill in calculated or metered - do not fill in both)

Metered Fixture Water Use Total Annual Volume [gal]	

LEED-EB baseline annual volume (120% of EPAct baseline) [gal]	2293200
Water Use Reduction [%]	22.45

I have provided the following to support the declaration:

☒ Documentation (calculations, fixture cut sheets, results of direct measurement and photographs) that the existing building fixture potable water use over the performance period is less than the baseline established in WE Prerequisite 1.

☒ Annual water meter data for total water use in the building supporting the documentation of the annual fixture potable water use. Include measured fixture water use demonstrating required level of efficiency for WE Credit 3.2.

WE Credit 3.1 (1 point):
Water Use Reduction, 10% Reduction
Points Documented: 1

WE Credit 3.2 (1 additional point):
Water Use Reduction, 20% Reduction
Points Documented: 0

Project Name: McNeil Campus I Cirtec Mfg. Facilities

Credit: WE Credit 3 (2 points possible): Water Use Reduction
Points Documented: 1

READY TO SAVE THIS TEMPLATE TO LEED-ONLINE? Please enter your first name, last name and today's date below, followed by your LEED-Online Username and Password associated with the Project listed above to confirm submission of this template.

Jose	Sola	2008-04-24	jsola1@mccus.jnj.com	
First Name	Last Name	Date	Username (Email Address)	Password

SAVE TEMPLATE TO LEED-ONLINE PRINT TEMPLATE

Powered by Adobe® LiveCycle™

Letter Template Version A1 10000251

CREDIT REQUIREMENTS

Stormwater Management

Rate and Quantity Reduction

SS | WE | EA | MR | EQ | IU

Credits 5.1–5.2

1–2 Points

Intent

Limit disruption and pollution of natural water flows by managing stormwater runoff.

Requirements

Have a stormwater management plan in place over the performance period that is designed to mitigate runoff from the site. Mitigated stormwater is the volume of precipitation falling on the site that does not become runoff by leaving the site via means of uncontrolled surface streams, rivers, drains, or sewers. This mitigation can be accomplished through a variety of measures including perviousness of site, stormwater management practices (structural and non structural), capture of rainwater for reuse or other measures.

- ❑ SS Credit 5.1: Have measures in place on the site that mitigate at least 25% of the annual stormwater falling on the site. (1 point)
- ❑ SS Credit 5.2: Have measures in place on the site that mitigate at least 50% of the annual stormwater falling on the site. (1 point)

Submittals – Initial Certification

- ❑ Document Stormwater Runoff Mitigation.
  - Provide a narrative description and calculations showing the impact of the implemented stormwater management plan and the annual stormwater falling on the site mitigation percentage provided.
  - Provide records and results of quarterly inspections over the performance period to determine if the stormwater management plan on the site is being maintained and functions properly.

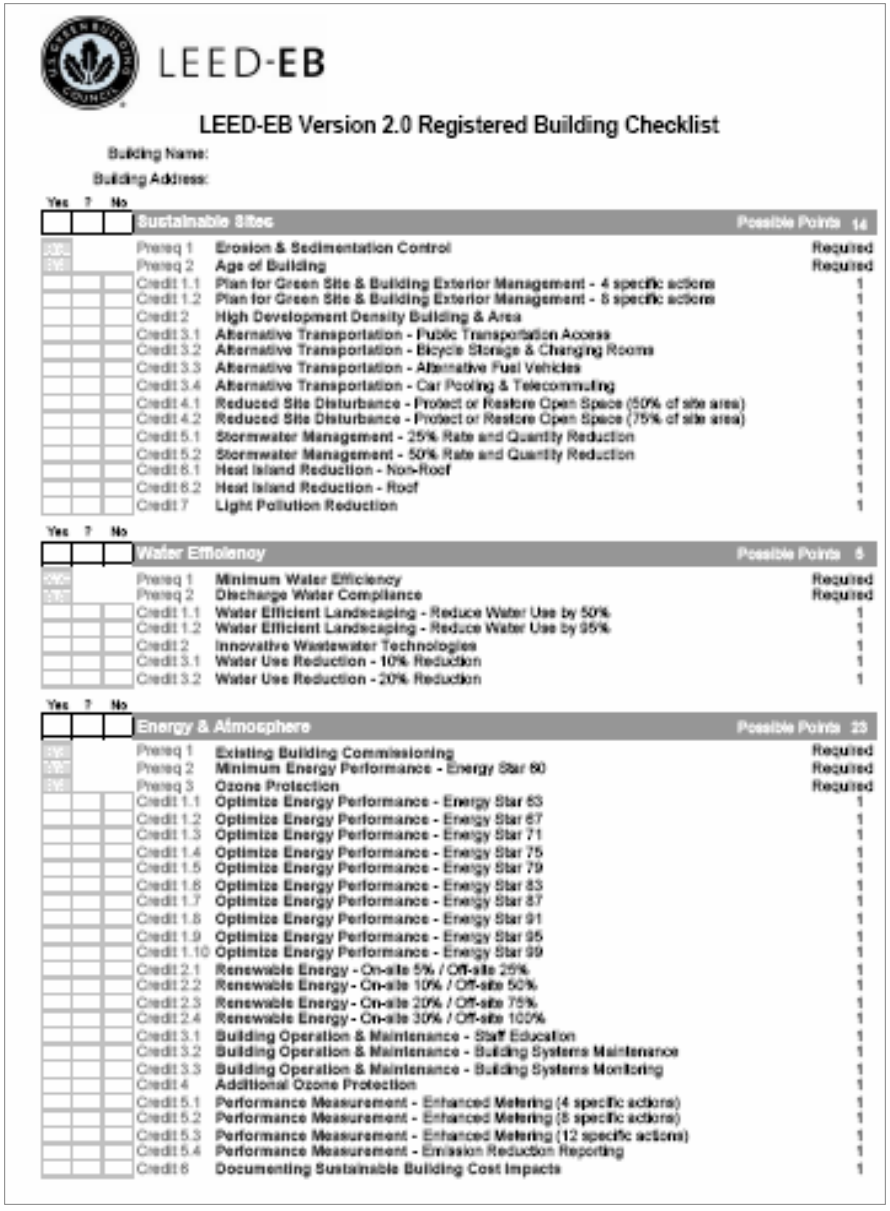
Submittals – Recertification

Provide an update of previous filings:

- ❑ If there has been no change to the stormwater management plan since previous LEED for Existing Buildings filing, provide statement that there has been no change.
- ❑ If there has been a change to the stormwater management plan since previous LEED for Existing Buildings filing, provide updated information.

Minimum Program Requirements

- Full occupancy for at least 12 continuous months
- Applies to whole buildings
- Federal, state and local environmental law/regulation compliance



LEED-EB

LEED-EB Version 2.0 Registered Building Checklist

Building Name:

Building Address:

Yes	?	No	Sustainable Sites	Possible Points 14
[illegible]			Prereq 1 Erosion & Sedimentation Control	Required
[illegible]			Prereq 2 Age of Building	Required
			Credit 1.1 Plan for Green Site & Building Exterior Management - 4 specific actions	1
			Credit 1.2 Plan for Green Site & Building Exterior Management - 8 specific actions	1
			Credit 2 High Development Density Building & Area	1
			Credit 3.1 Alternative Transportation - Public Transportation Access	1
			Credit 3.2 Alternative Transportation - Bicycle Storage & Changing Rooms	1
			Credit 3.3 Alternative Transportation - Alternative Fuel Vehicles	1
			Credit 3.4 Alternative Transportation - Car Pooling & Telecommuting	1
			Credit 4.1 Reduced Site Disturbance - Protect or Restore Open Space (50% of site area)	1
			Credit 4.2 Reduced Site Disturbance - Protect or Restore Open Space (75% of site area)	1
			Credit 5.1 Stormwater Management - 25% Rate and Quantity Reduction	1
			Credit 5.2 Stormwater Management - 50% Rate and Quantity Reduction	1
			Credit 6.1 Heat Island Reduction - Non-Roof	1
			Credit 6.2 Heat Island Reduction - Roof	1
			Credit 7 Light Pollution Reduction	1

Yes	?	No	Water Efficiency	Possible Points 5
[illegible]			Prereq 1 Minimum Water Efficiency	Required
[illegible]			Prereq 2 Discharge Water Compliance	Required
			Credit 1.1 Water Efficient Landscaping - Reduce Water Use by 50%	1
			Credit 1.2 Water Efficient Landscaping - Reduce Water Use by 95%	1
			Credit 2 Innovative Wastewater Technologies	1
			Credit 3.1 Water Use Reduction - 10% Reduction	1
			Credit 3.2 Water Use Reduction - 20% Reduction	1

Yes	?	No	Energy & Atmosphere	Possible Points 23
[illegible]			Prereq 1 Existing Building Commissioning	Required
[illegible]			Prereq 2 Minimum Energy Performance - Energy Star 60	Required
[illegible]			Prereq 3 Ozone Protection	Required
			Credit 1.1 Optimize Energy Performance - Energy Star 63	1
			Credit 1.2 Optimize Energy Performance - Energy Star 67	1
			Credit 1.3 Optimize Energy Performance - Energy Star 71	1
			Credit 1.4 Optimize Energy Performance - Energy Star 75	1
			Credit 1.5 Optimize Energy Performance - Energy Star 79	1
			Credit 1.6 Optimize Energy Performance - Energy Star 83	1
			Credit 1.7 Optimize Energy Performance - Energy Star 87	1
			Credit 1.8 Optimize Energy Performance - Energy Star 91	1
			Credit 1.9 Optimize Energy Performance - Energy Star 95	1
			Credit 1.10 Optimize Energy Performance - Energy Star 99	1
			Credit 2.1 Renewable Energy - On-site 5% / Off-site 25%	1
			Credit 2.2 Renewable Energy - On-site 10% / Off-site 50%	1
			Credit 2.3 Renewable Energy - On-site 20% / Off-site 75%	1
			Credit 2.4 Renewable Energy - On-site 30% / Off-site 100%	1
			Credit 3.1 Building Operation & Maintenance - Staff Education	1
			Credit 3.2 Building Operation & Maintenance - Building Systems Maintenance	1
			Credit 3.3 Building Operation & Maintenance - Building Systems Monitoring	1
			Credit 4 Additional Ozone Protection	1
			Credit 5.1 Performance Measurement - Enhanced Metering (4 specific actions)	1
			Credit 5.2 Performance Measurement - Enhanced Metering (8 specific actions)	1
			Credit 5.3 Performance Measurement - Enhanced Metering (12 specific actions)	1
			Credit 5.4 Performance Measurement - Emission Reduction Reporting	1
			Credit 6 Documenting Sustainable Building Cost Impacts	1

CATEGORIES

Sustainable Sites (22%)

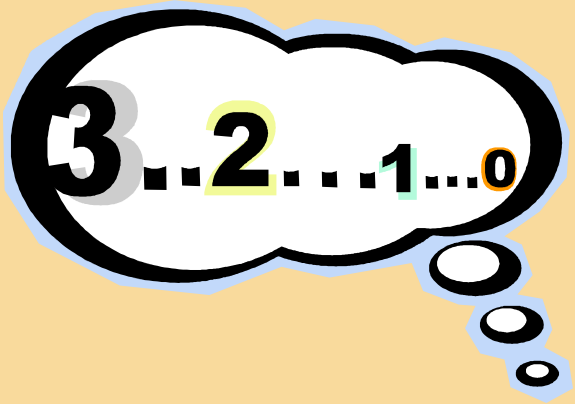
Materials & Resources (20%)

Water Efficiency (8%)

Energy & Atmosphere (27%)

Indoor Environmental Quality (23%)

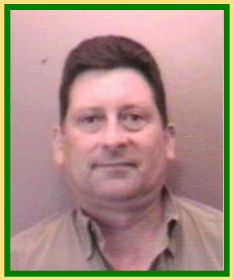
LESSON LEARNED



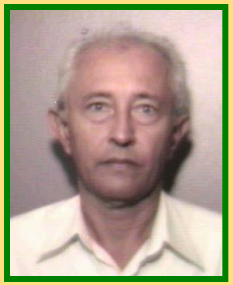
GREEN BUILDING TEAM

Cesar Noble

Clara Ortiz



José Rivera



Nelson Cruz

Manuel Alvarado

Olga Lugo

Julio López

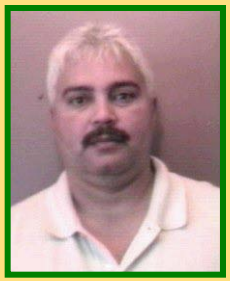
Rafael Féliz

Waldemar Crespo

Wanda Marrero

José Solá

Raul Nuñez



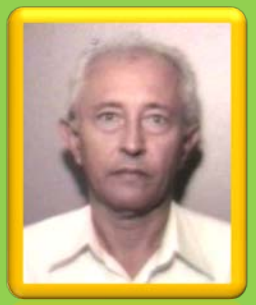
Carmelo González

Green Building Core Team


Cesar Noble


Clara Ortiz


José Rivera


Nelson Cruz


Manuel Alvarado


Olga Lugo


Julio López


Waldemar Crespo


Wanda Marrero


José Solá


Carmelo González

TEAM SELECTION

ORGANIZATION LEADER

NO TEMPS.

NO CONTRACTOR

UTILITIES/ENERGY LEADER

BICYCLES PARKING

HYBRIDS CARS PARKING

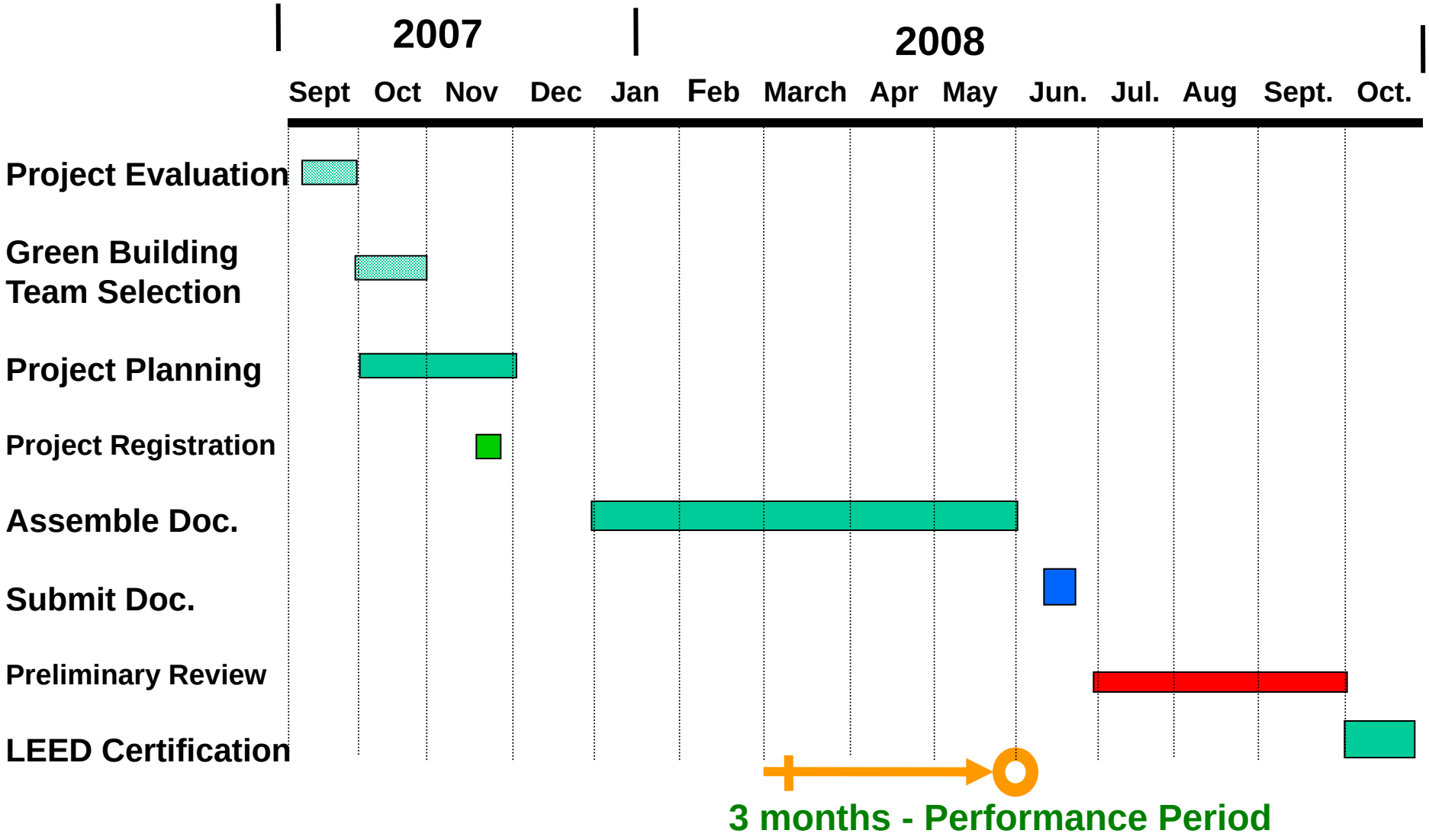
RECYCLING PROGRAM

EROSION/SEDIMENTATION PROGRAM

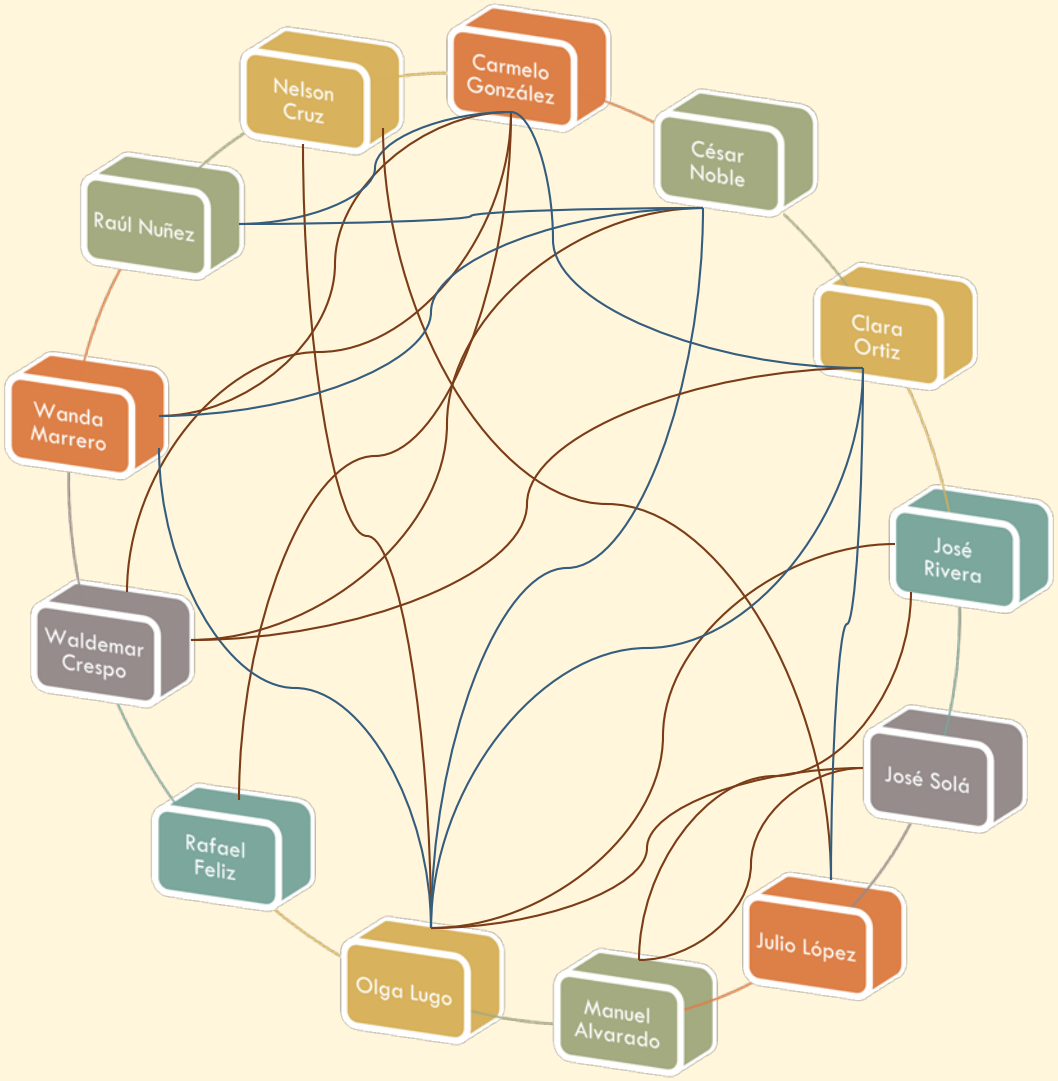
DATA Management

- Evaluations generate more requirements
- Narratives
- Case Studies

Performance Period vs. schedule



Credits Sinergy



ENERGY PROGRAM

Steps to LEED Certification

McNeil

Healthcare Actual Reductions

...

ENERGY SAVINGS

29%

CARBON SAVINGS

34%

WATER USE SAVINGS

55%

WASTE COST SAVINGS

69%

Source:
Capital E

Levels of LEED Ratings

Platinum 68-92 points

Gold 51-67 points

Silver 43-50 points

Certified 34-42 points

Green Buildings worldwide are certified with a voluntary, consensus-based rating system. USGBC has four levels of LEED.

GREEN FACTS

Green Building

McNeil Healthcare, LLC
Las Piedras, Puerto Rico

LEED-EB 2.0
Certified 39 Points

29%
energy intensity reduction

55%
water savings

- 16 Acre Conservation Area
- Storm water Mitigation
- REC Credits
- Continuous Commissioning
- Comprehensive Recycling
- Green Cleaning
- Environmentally Preferable Purchasing Policy
- Continuous IAQ Management

With a long history of environmental leadership and innovation, the ISO 14001 Certified McNeil Las Piedras campus is following through with the Johnson and Johnson corporate Healthy Planet 2010 initiative with it's LEED-EB certification.

- **Second LEED Certified building in Puerto Rico**
- **First LEED-EB project in Puerto Rico**
- **First LEED certified Pharmaceutical cGMP facility in the world.**