Guiding Principles for High Performance Federal Buildings

Guiding Principles Assessment by GBCI

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VP, Technical Solutions
U.S. GREEN BUILDING COUNCIL
AGENDA

GBCI Focus on the Federal High Performance Sustainable Buildings Check List, The Guiding Principles

• Guiding Principles Assessment By GBCI
• Goals of Program
• Program Description
• Reporting
• Resources
Guiding Principles Assessment by GBCI

PROGRAM GOALS

• Eliminate redundant reporting
• Leverage LEED specifications to meet principles
• Support third party assessment
• All project types:

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– Supporting Existing Buildings & New Construction/Major Renovation
– LEED & Non-LEED Projects
Guiding Principles Assessment by GBCI

PROGRAM OVERVIEW

• Initial assessment

• Tools for agencies:
  
  *Determine where project is on path to conformance*

• Support for implementation and documentation

• Third-party verification of conformance by GBCI

• Reporting through a centralized platform
LEED NC AND GUIDING PRINCIPLES

All Prerequisites
15 Credits Contribute to Guiding Principles

Guiding Principles requirements can be met through LEED credits
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Guiding Principles

OUTDOOR WATER

• Reduce outdoor potable water consumption by a minimum of 50 percent

LEED NC

WEC1 WATER EFFICIENT LANDSCAPING

• Reduce potable water consumption for irrigation by 50 percent
# Guiding Principles Assessment

**Sustainable New Construction and Major Renovations**

*LEED NC v2009 Certified Project Compliance Path*

## General Information

<table>
<thead>
<tr>
<th>Field</th>
<th>Details</th>
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<tbody>
<tr>
<td>Building Name</td>
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<tr>
<td>LEED Project #</td>
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<td>Address</td>
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<tr>
<td>Rating System</td>
<td>LEED NC v2009</td>
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</table>

## Guiding Principle

### I. Employ Integrated Design Principles

<table>
<thead>
<tr>
<th>Integrated Design</th>
<th>Use a collaborative, integrated planning and design process that: Initiates and maintains an integrated project team as described in the Whole Building Design Guide in all stages of a project’s planning and delivery.</th>
<th>Verification of Compliance</th>
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<tbody>
<tr>
<td></td>
<td>No LEED equivalent. Select documentation collected to demonstrate compliance:</td>
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<tr>
<td></td>
<td>- Narrative description of integrated design process</td>
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<td></td>
<td>- Other:</td>
<td></td>
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<tr>
<td></td>
<td>- OR -</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Indicate why Guiding Principle is not applicable to project:</td>
<td></td>
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</tbody>
</table>
### Guiding Principles Assessment

**Sustainable New Construction and Major Renovations**

**LEED NC v2009 Certified Project Compliance Path**

#### III. Protect and Conserve Water

| Outdoor Water | Use water efficient landscape and irrigation strategies, such as water reuse, recycling, and the use of harvested rainwater, to reduce outdoor potable water consumption by a minimum of 50 percent over that consumed by conventional means (plant species and plant densities). The installation of water meters for locations with significant outdoor water use is encouraged. |

Select the path and documentation collected to demonstrate compliance:

- [ ] Earned WEc1 Water Efficient Landscaping in LEED NC v2009
- [ ] Water efficient landscape and irrigation strategies pursued, WEc1 not earned
  
  - [ ] Watery tool
  - [ ] **LEED NC v2009 WEc1 form**
  - [ ] Other: [ ]

- OR -

Indicate why Guiding Principle is not applicable to project:

[ ]
Guiding Principles

ON-SITE RENEWABLE ENERGY

(EISA) Section 523, meet at least 30% of the hot water demand through the installation of solar hot water heaters, when lifecycle cost effective.

*No LEED equivalent.* Select the path and documentation collected to demonstrate conformance.
# Guiding Principles Assessment

**Sustainable New Construction and Major Renovations**

## II. Optimize Energy Performance

<table>
<thead>
<tr>
<th>On-Site Renewable Energy</th>
<th>No LEED equivalent. Select the path and documentation collected to demonstrate compliance:</th>
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<tr>
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<td><strong>Solar hot water heater included in design</strong></td>
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<tr>
<td></td>
<td>- Design documents showing solar heating system</td>
</tr>
<tr>
<td></td>
<td>- Construction documents demonstrating solar heater installation</td>
</tr>
<tr>
<td></td>
<td>- Calculations demonstrating 30% hot water demand met</td>
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<td>- Other:</td>
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<tr>
<td></td>
<td><strong>Solar hot water heater NOT included in design</strong></td>
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<tr>
<td></td>
<td>- Lifecycle calculations demonstrating that providing 30% of hot water demand</td>
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<tr>
<td></td>
<td>through the installation of solar hot water heaters is not cost effective.</td>
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<tr>
<td></td>
<td>- Other:</td>
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</table>

- OR -

Indicate why Guiding Principle is not applicable to project:
Guiding Principles Assessment by GBCI
NEW CONSTRUCTION (MAJOR RENOVATION)

LEED PROJECTS

• Over 55% of GP program achieved through achieved LEED credits
• GPC Verification Form
• Supplemental documentation sent in tandem with LEED application
• Documentation guidance available for all elements
Guiding Principles Assessment by GBCI
NEW CONSTRUCTION (MAJOR RENOVATION)

NON-LEED PROJECTS

- GPC Verification Form
- Supplemental documentation sent using LEED Online
- LEED forms and tools used to demonstrate conformance with the GPC program
- Documentation guidance available for all elements
LEED EB AND GUIDING PRINCIPLES

7 out of 8 Prerequisites
16 Credits Contribute to Guiding Principles Program

Over 65% of Guiding Principles requirements can be met through LEED credits
# LEED EB AND GUIDING PRINCIPLES

## Guiding Principles for Sustainable Existing Buildings

### Project Checklist

#### I. Employ Integrated Assessment, Operation, and Management Principles

<table>
<thead>
<tr>
<th>Doc</th>
<th>In Place</th>
<th>No</th>
<th>Element</th>
<th>Notes</th>
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#### II. Optimize Energy Performance

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<td>Energy Efficiency</td>
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<td>x Option 1: ENERGY STAR Rating of 75 or Higher</td>
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<td>Option 2: Reduce Energy Use by 20% Compared to Use</td>
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<td>Option 3: Reduce Energy Use by 20% Compared to ASHRAE 90.1-2007</td>
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#### III. Protect and Conserve Water

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<td>Outdoor Water Use</td>
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<td>Option 3: Use No Potable Irrigation Water</td>
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</table>
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THIRD PARTY REVIEW

PRELIMINARY REVIEW
• Review comments
• Project team response

FINAL REVIEW
• Conformance level awarded
• Option to “appeal” elements where conformance was not awarded (additional fee)
• Certificate provided to confirm conformance
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RESOURCES

• Customer touch point with GBCI Staff
• Access to all resources (guide, tools, samples)
• Guiding Principles Assessment Form
• Submit using LEED Online
• Clear and simple documentation requirements
• Streamline documentation
• Option for 3rd Party Verification
ACKNOWLEDGMENT

• Report on conformance
• Status of conformance with GP & LEED if applicable
• Certificate if fully compliant with GP
• GBCI will work with agency to discuss progress, gaps, and next steps
• GBIG, Reporting Tool
GUIDING PRINCIPLES FOR SUSTAINABLE NEW CONSTRUCTION AND MAJOR RENOVATIONS

GUIDING BASED FOR SUSTAINABLE EXISTING BUILDINGS

LEED for New Construction 2.2
(Gold)
Holt Cat. - Sulphur Springs

LEED for New Construction 2.2
(Silver)
ARNG Readiness Center, Camp Navajo

LEED for New Construction 2.2
(Certified)
MCC Institute for Culinary Arts
Omaha, Nebraska

LEED for New Construction 2.2
(Certified)
nbi 1 k2m Offices
Cleveland, Ohio
LEED & Guiding Principles

Why It's Green

- **9** Green activities
  - See all

- **4** Buildings containing green activities
  - See all

- **6** Places with Buildings containing green activities
  - See all

LEED Certification Activity

- **3** certified activities

- **516,388** LEED certified set

Recent Activity

- **22505 SR 9 SE**
  - LEED NC 2.1
  - 09/6/2012

- **Marvin Luther King Jr. Federal Building**
  - LEED NC 2.1
  - 12/21/2011

- **Byron G. Rogers US Courthouse**
  - LEED EB 1.0
  - 03/1/2012

- **Land Port of Entry - Malden**
  - Guiding Principles: New Construction/Major Renovation
  - 09/10/2012

- **FERC**
  - Guiding Principles: New Construction/Major Renovation
  - 09/10/2012

View All Activities »
LEED & Guiding Principles

Why It's Green

- **ACTIVITIES**: 9
  - Green activities
  - See all

- **BUILDINGS**: 4
  - Buildings containing green activities
  - See all

- **PLACES**: 6
  - Places with Buildings containing green activities

LEED Certification Activity

- **3** certified activities

- **516,388** LEED certified sq ft

Recent Activity

- **22505 SR 9 SE**
  - LEED NC 2.1
  - 09/05/2012

- **Martin Luther King JR. Federal Building**
  - LEED NC 2.1
  - 02/22/2011

- **Byron G. Rogers US Courthouse**
  - LEED EB 1.0 Pilots Only
  - Accepted Before 09/04
  - 09/29/2008

Sample GP Activity

Guiding Principles: New Construction/Major Renovation
- 01/01/2010

GPcompliant

View All Activities
## LEED & Guiding Principles

### Overview

Showing 8 published activities

<table>
<thead>
<tr>
<th>Name</th>
<th>Activity</th>
<th>Date</th>
<th>Outcome</th>
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</thead>
<tbody>
<tr>
<td>27505 SR 9 SE Woodinville, WA US</td>
<td>LEED NC 2.1</td>
<td>2012-09-13</td>
<td>Platinum Certified</td>
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<td>FERC Washington, DC US</td>
<td>Guiding Principles: New Construction/Major Renovation</td>
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<tr>
<td>Byron G. Rogers US Courthouse Denver, CO US</td>
<td>LEED EB 1.0 Pilots Only (Accepted Before 1/1/04)</td>
<td>2006-09-21</td>
<td>Gold Certified</td>
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<td>Land Port of Entry-Wild Horse Havre, MT US</td>
<td>Guiding Principles: New Construction/Major Renovation</td>
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<td>Partial GP Compliance</td>
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<tr>
<td>ATF HQ Washington, DC US</td>
<td>Guiding Principles: Existing Building</td>
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<td>GP Compliant</td>
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<tr>
<td>Francis Perkins Bldg Washington, DC US</td>
<td>Guiding Principles: Existing Building</td>
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<td>Not GP Compliant</td>
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<tr>
<td>EPA Ariel Rios Washington, DC US</td>
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<td></td>
<td>Partial GP Compliance</td>
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</tbody>
</table>
CONCLUSION

- Program in Beta Test
- Customize for Agency
- Focus on GP Conformance
- LEED as Tool
- Adaptable Program
Contact Information

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