Resources for Greener Museums

ARCS Conference
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Innovation in Design
Sustainable Sites
Water Efficiency
Energy & Atmosphere
Indoor Environmental Quality
Materials & Resources
### The New LEED Credentials

<table>
<thead>
<tr>
<th>Credential Type</th>
<th>Description</th>
<th>Eligibility</th>
<th>Requirements</th>
<th>Fees</th>
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<tbody>
<tr>
<td>LEED Green Associate</td>
<td>Basic credential signifying involvement in green building</td>
<td>Documented support of LEED projects and work in green building, e.g., student or a manufacturer’s representative</td>
<td>Submit application, pass 2.5-hour core exam, sign disciplinary policy, obtain 15 hours biennial education</td>
<td>$50 application, $50 biennially, $150/$200 exam fee (member/nonmember)</td>
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<td>LEED AP+</td>
<td>The core credential for professionals on LEED projects; specialty designations, e.g. homes and interiors</td>
<td>Documented experience on one or more recent LEED projects</td>
<td>Same as for LEED Green Associate, with the addition of 1.5-hour specialty exam and 30 hours total biennial education</td>
<td>$100 application, $50 biennially, $300/$450 exam fee (member/nonmember)</td>
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<td>LEED AP Fellow</td>
<td>Distinguished class of professionals</td>
<td>Major contributions to green building field</td>
<td>Peer review of project portfolio (exact requirements are not set)</td>
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<td>Legacy LEED AP</td>
<td>Existing LEED APs will be integrated into LEED AP+</td>
<td>Passage of exam prior to May 2009</td>
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- **Water Efficiency**
- **Energy & Atmosphere**
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![Diagram of energy and atmosphere systems]
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Green Museum Initiative

PIC Green
http://www.pic-green.net/

Green Exhibit Checklist
http://www.exhibitseed.org/green-exhibit-checklist
The Green Museum: A Primer on Environmental Practice  by Sara S. Brophy and Elizabeth Wylie
Green Museums Initiative

- Green Museums Accord
- Green Museums Initiative Online Community
- Green Museums Best Practices
Green Museums Accord

A five-part voluntary self-enforcing pledge

Commit
Evaluate
Implement
Educate
Share
Green Museums Initiative
Online Community

Part of California Association of Museums Online Community:
http://calmuseums.ning.com/
Green Museum Best Practices


Administration
Building
Collections
Education
Exhibits
Green Museum Best Practices: Collections

Use localized climate control monitoring and reusable microclimate exhibition casework to reduce electrical demand
Use energy-efficient lighting and green construction materials
Add insulation in storage areas to reduce the need for heating and cooling
Reuse crates and containers, or share them with other museums.
Use museum shipping and packing companies that commit to sustainability within their organizations
Use recycled and non-toxic supplies and materials
## PIC Green Network

**Sustainability Excellence Award**

**Sustainable Operations Tool Kit**

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<td>Exhibits</td>
<td>Facilities</td>
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<td>Event Planning</td>
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PIC Green Collections Toolkit

• Websites
  – AIC Conservation Wiki

• Resource Lists
  – Sustainable Practices for Collections Care

• Articles / Docs / Tools
  – 10 Agents of Deterioration
  – Environmental Guidelines for Museums
  – Conservation 2 = Preserving Collections x Our Environment
  – From Gray Areas to Green Areas: Developing Sustainable Practices in Preservation Environments
  – From the Outside In: Preventive Conservation, Sustainability and Environmental Management

American Alliance of Museums
Green Exhibit Checklist

The GEC awards points in 5 KEY STRATEGIES:

- Reduce new material consumption
- Use local resources
- Reduce waste
- Reduce energy consumption
- Reduce products with toxic emissions

A sixth category awards points for innovation in the design and construction of the exhibit. This encourages exhibit teams to strive for new and creative solutions to reduce environmental impacts.
Reduce Raw New Material Use

- Use recycled materials
- Reuse building materials
- Use wood from responsibly-managed forests.
- Use rapidly renewable materials (bamboo, wheat board, etc.).
- Construct exhibits using fewer materials that damage the environment and exploit natural resources.

© OMSI 2012
Use Regional Resources

- Specify local raw materials, within 500 miles
- Source products manufactured locally, within 500 miles.
- Hire local contractors for labor, within 250 miles
- Batch orders of goods to reduce packaging material.
Reduce Waste

• Design components to be re-purposed after exhibit retires
• Choose materials that can be recycled at end of exhibit
• Choose construction methods that allow components to be taken apart
• Eliminate need for consumables that end up in trash.
• Design for durability and low-maintenance.
• Use water responsibly in exhibit.
Reduce Energy Consumption

- Choose energy-efficient electronics and parts.
- Reduce number of energy-consuming interfaces.
- Use alternative energy sources (human-powered, solar, wind).
- Use auto-shut off on electronic components.
Reduce Toxic Emissions

• Choose zero/low VOC paints & finishes.
• Avoid PVC, styrene.
• Use soy inks on graphic panels.
• Use products that are formaldehyde-free.
• Avoid carpet with toxic materials.
Innovation

- Post checklist assessment on ExhibitSEED website for peer review.
- Incorporate a new design or production strategy that reduces environmental impact.
- Plan ahead for the exhibit’s end-life.