

Resources for Greener Museums



ARCS Conference

November 1, 2013

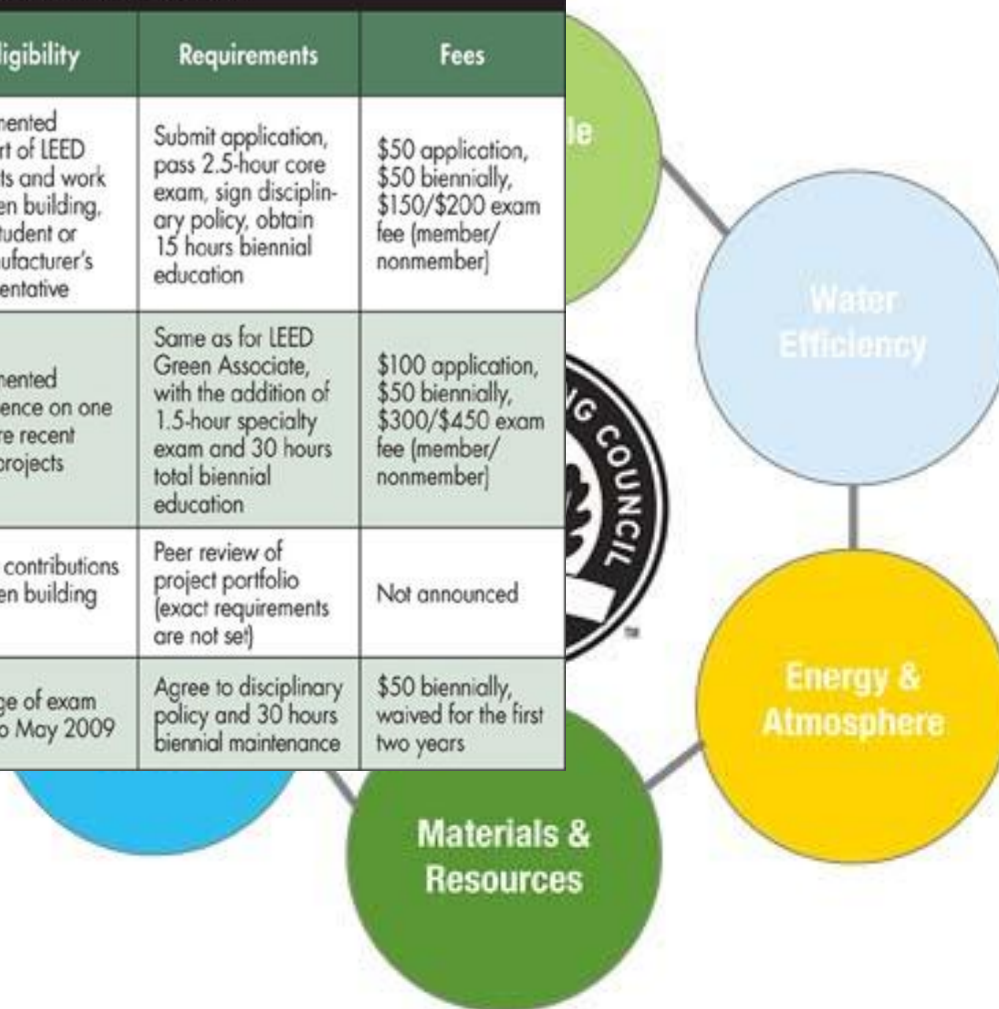
Janice Klein, EightSixSix Consulting

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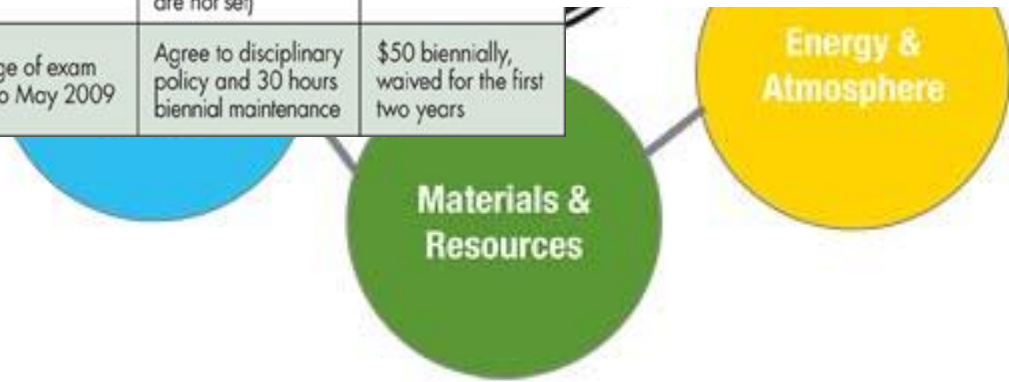
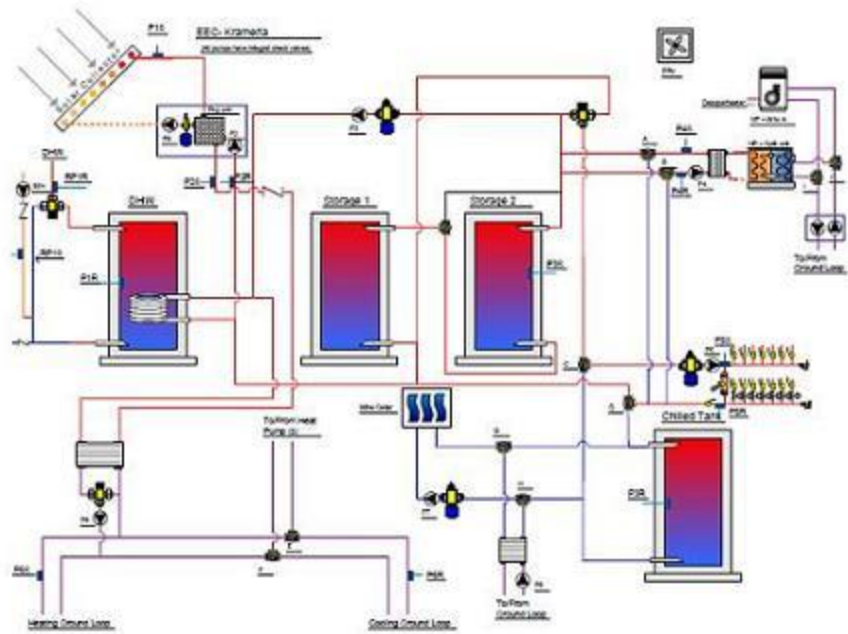
THE NEW LEED CREDENTIALS

Credential Type	Description	Eligibility	Requirements	Fees
LEED Green Associate	Basic credential signifying involvement in green building	Documented support of LEED projects and work in green building, e.g., student or a manufacturer's representative	Submit application, pass 2.5-hour core exam, sign disciplinary policy, obtain 15 hours biennial education	\$50 application, \$50 biennially, \$150/\$200 exam fee (member/nonmember)
LEED AP+	The core credential for professionals on LEED projects; specialty designations, e.g. homes and interiors	Documented experience on one or more recent LEED projects	Same as for LEED Green Associate, with the addition of 1.5-hour specialty exam and 30 hours total biennial education	\$100 application, \$50 biennially, \$300/\$450 exam fee (member/nonmember)
LEED AP Fellow	Distinguished class of professionals	Major contributions to green building field	Peer review of project portfolio (exact requirements are not set)	Not announced
Legacy LEED AP	Existing LEED APs will be integrated into LEED AP+	Passage of exam prior to May 2009	Agree to disciplinary policy and 30 hours biennial maintenance	\$50 biennially, waived for the first two years



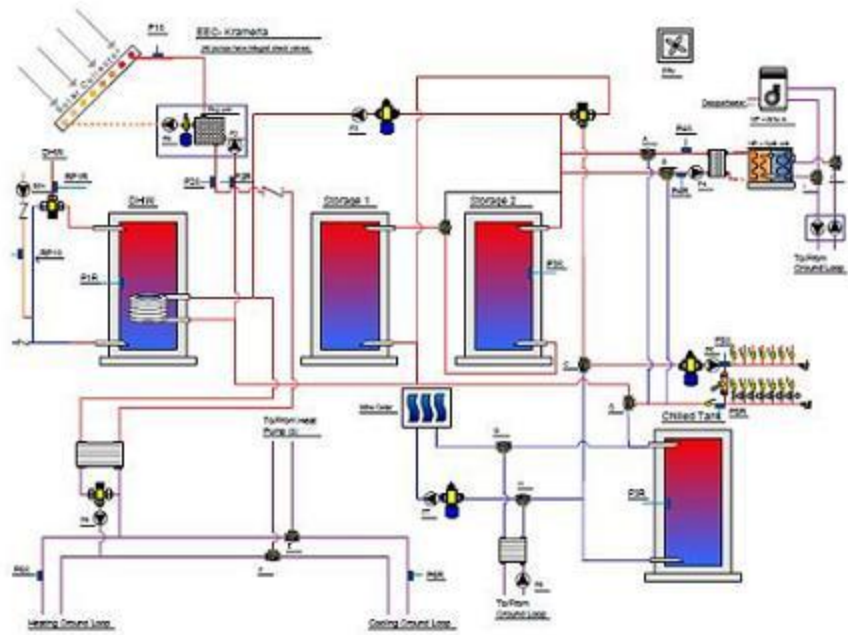
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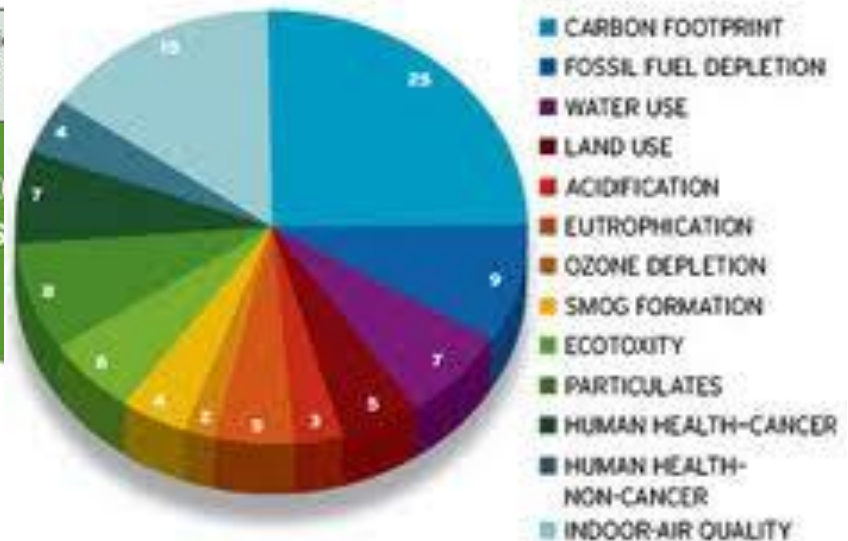


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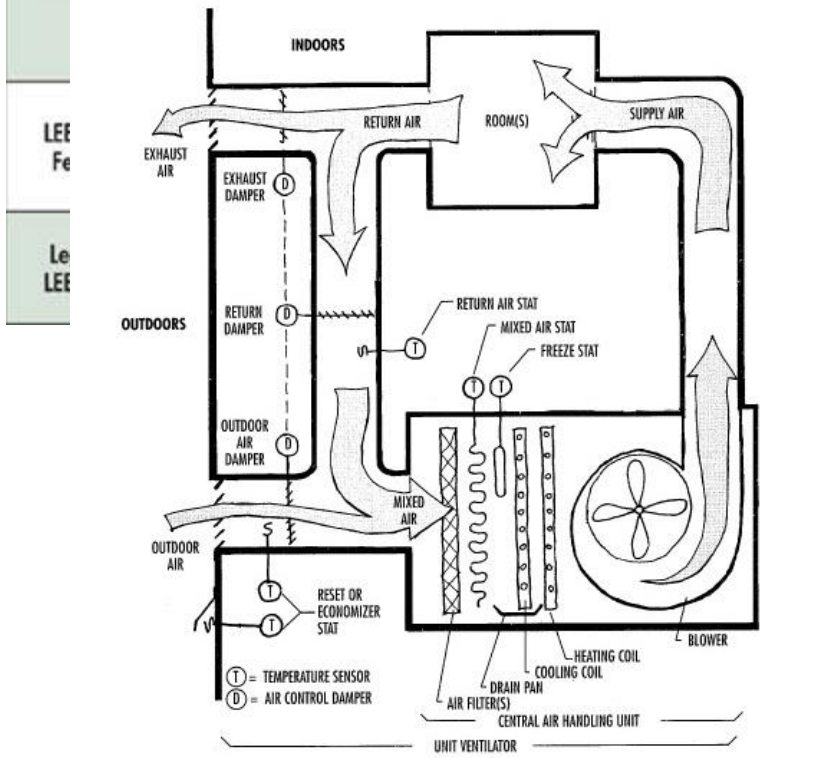
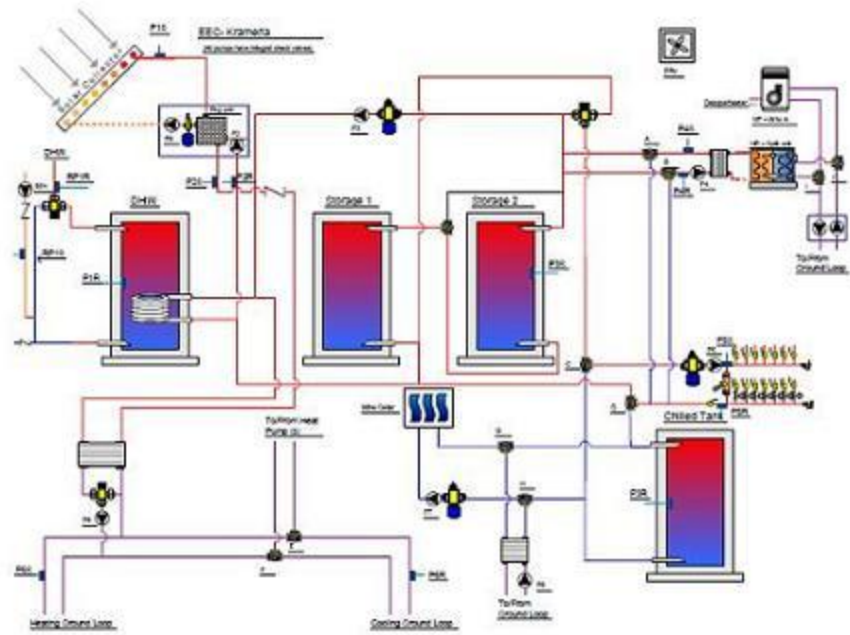


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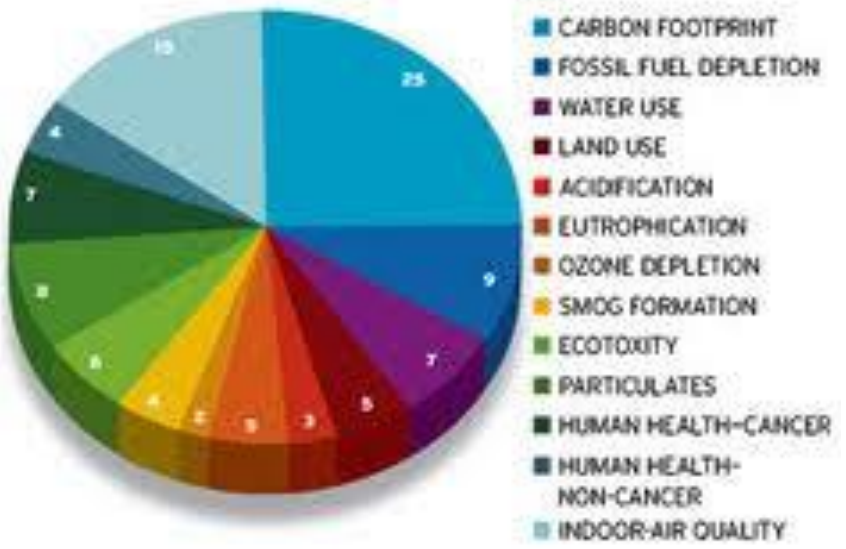
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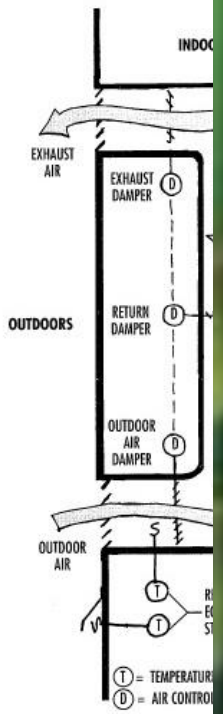
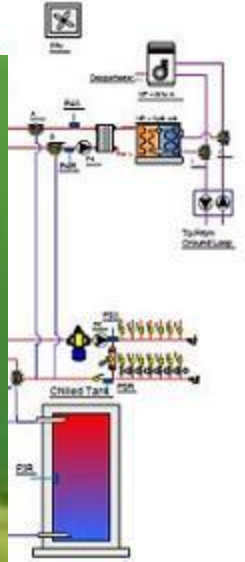
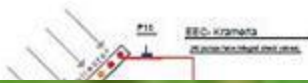
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UNIT VENTILATOR

- CARBON FOOTPRINT
- FOSSIL FUEL DEPLETION
- WATER USE
- LAND USE
- ACIDIFICATION
- EUTROPHICATION
- OZONE DEPLETION
- SMOG FORMATION
- ECOTOXICITY
- PARTICULATES
- HUMAN HEALTH-CANCER
- HUMAN HEALTH-NON-CANCER
- INDOOR-AIR QUALITY



Green Museum Initiative

<http://www.calmuseums.org/index.cfm?fuseaction=Page.ViewPage&PageID=941>



PIC Green

<http://www.pic-green.net/>



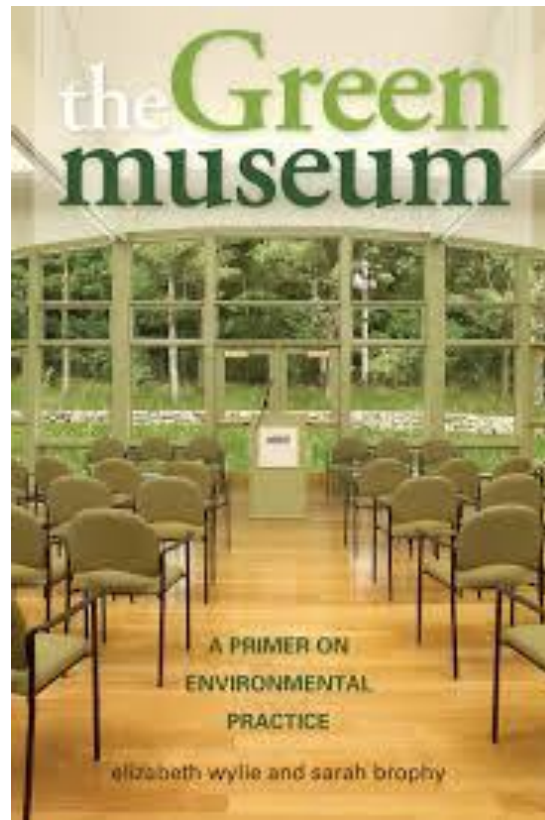
Green Exhibit Checklist

<http://www.exhibitseed.org/green-exhibit-checklist>

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

[http://www.calmuseums.org/ data/n_0001/resources/live/GMI
_Best Practices final v2.0.pdf](http://www.calmuseums.org/data/n_0001/resources/live/GMI_Best_Practices_final_v2.0.pdf)

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

Building and Construction	Collections	Energy
Gardens & Landscapes	Exhibits	Facilities
Food Service	Event Planning	Graphics
Lighting	Paper	Recycling

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*

Green Exhibit Checklist

Green Exhibit Checklist

The Green Exhibit Checklist (GEC) is a tool to evaluate the environmental sustainability of exhibits. The goal of the Checklist is to inspire exhibit teams to reduce the environmental impacts of exhibit production.

The Green Exhibit Checklist can be a useful tool in early planning to help set project goals. Then, once the exhibit is on the floor, the Checklist is used to assess the final outcome.

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.

- Step 1** Team sets goal for the exhibit: Platinum, Gold, Silver, and Bronze.
- Step 2** Designer and fabricator review checklist to find the best strategies for meeting goal.
- Step 3** After production, the fabricator fills out the GEC with the relevant material information.
- Step 4** Exhibit team conducts walk-through, using the material information to award points.

We encourage teams to post their Checklist results online for the benefit of the entire museum industry. For more information or to post your Checklist evaluation see www.exhibitseed.org.

Exhibition Title: _____
Date: _____
Producing Facility: _____
Host Site: _____
Your Name: _____
Role/Title: _____

Ratings are awarded for the total score:

- PLATINUM (20–24 points)
- GOLD (15–19)
- SILVER (11–14)
- BRONZE (8–10)

Envisioning Sustainability
www.exhibitseed.org

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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.



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.

GREEN EXHIBIT
CHECKLIST



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.



