



## AIA/COTE 2013 Top Ten Green Projects with **Annotations for Top Ten Plus**

### PROJECT REQUIREMENTS

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NOTE: This PDF form is for information and planning purposes only. It is not a substitute for the online submittal.

- The following information is the list of requirements requested on the online submittal forms. It is provided here in PDF format to enable entrants to compose project descriptions and select images prior to submitting them online.

### PROJECT OVERVIEW INFORMATION

Project name:

Project owner (company name):

Project location (street address, city, state/country, and postal code):

Submitting architect (company name):

Joint venture or associate architect, if applicable:

Project completion date (must be after 2003 and before October 2012; **Top Ten Plus, no later than October 2011**): Month/Year

Project site (select one from the following list):

- Previously undeveloped land
- Previously developed land
- Brownfield site

Project type (choose all that apply):

- Bank/Financial Institution
- Courthouse
- Education – College/University (campus-level)
- Education – General
- Education – K-12 School  Food Sales – Convenience Store (w/ or w/o gas station )
- Food Sales – General
- Food Sales – Supermarket/Grocery
- Food Service – Fast Food
- Food Service General
- Food Service Restaurant/Cafeteria
- Health Care – Clinic
- Health Care – Hospital Inpatient
- Health Care – Medical Office
- Health Care – Nursing/Assisted Living
- Health Care – Outpatient – General
- Laboratory
- Lodging – General
- Lodging – Hotel/Motel
- Lodging – Residence Hall/Dormitory
- Mixed – Use
- Office – 10,000sf
- Office – 10,001 to 100,000sf
- Office – 100,001 or greater
- Public Assembly – Entertainment/Culture
- Public Assembly – General
- Public Assembly – Library
- Public Assembly – Recreation
- Public Assembly – Social/Meeting
- Public Safety – Fire/Police Station
- Public Safety – General

- Religious Worship
- Residential – Mobile Homes
- Residential – Multi-Family 2-4 units
- Residential – Multi-Family 5 or more units
- Residential – Single-Family attached
- Residential – Single-Family detached
- Retail – Mall
- Retail – Non-mall, Vehicle Dealerships, misc.
- Retail Store
- Service (vehicle repair/service, postal service)
- Storage – Distribution/Shipping Center
- Storage – General
- Storage – Non-refrigerated warehouse
- Storage – Refrigerated warehouse
- Warehouse – Self-storage
- Other: \_\_\_\_\_

Project Site Context/Setting (select one from the following list):

- Urban
- Suburban
- Rural

Other Building description (select one from the following list):

- New
- Renovation
- Both (If both, list \_\_\_% new and \_\_\_% renovation)

Lot size:

Units (ft<sup>2</sup>/m<sup>2</sup>/acres/ha):

Building gross floor area: \_\_\_\_\_ square feet

BOMA floor area method used?  Yes  No

Hours of operation: \_\_\_\_\_

Total project cost at time of completion, land excluded: \_\_\_\_\_

**General Description:** Succinctly describe the project program and function, building type, and context. Describe any special or unusual problems or constraints, and how they were addressed. Do not describe environmental features—those come later. (<200 words)

**Top Ten Plus: Owner/Occupant Narrative** (500 words maximum) may include:

- > Why were the incorporated sustainable strategies important to you and/or your organization?
- > How have these features benefited the occupants, such as enhanced daily experience and health, improved business practice, lower energy bills, etc.? What features have been problematic? Anecdotes encouraged.
- > What have been the most prominent benefits of the building in use?
- > Have energy performance metrics been collected by the owner/occupant or a third-party? How were they collected?

## **The AIA Committee on the Environment's Measures of Sustainable Design and Performance Metrics**

The Top Ten Green Projects Program recognizes projects that demonstrate the highest accomplishment in environmentally sustainable architecture, combining inspired design, systems analysis, and evaluation of performance.

The measures and metrics describe ten criteria for selection. Top Ten entrants are asked to provide narratives responding to the measures, with quantifying metrics where possible. The narrative format allows entrants to describe briefly how the project's goals were achieved, along with lessons learned that can inform and improve future designs.

While emphasis will be placed on measurable results when available, the narrative format recognizes that qualitative goals are often subjective and therefore cannot always be evaluated quantitatively. Narrative and metrics should refer only to the final built project and not include design measures that were not implemented.

**Top Ten Plus:** Briefly describe how the project's occupancy differed over time from, or conformed to, design phase assumptions, and how the occupants have modified the building in response. Narrative and metrics should refer only to the final built and occupied project and must not include design measures that were not implemented.

### **The COTE definition of sustainability and sustainable design:**

Sustainability envisions the enduring prosperity of all living things.

Sustainable design seeks to create communities, buildings, and products that contribute to this vision.

## **Measure 1: Design & Innovation**

***Sustainable design is an inherent aspect of design excellence. Projects should express high performance concepts and intentions, and take advantage of innovative programming opportunities.***

**Narrative (200 words maximum)** may include:

- > Key environmental issues; how and why they became important priorities
- > Key ecological goals and concepts for your project and how they shaped your thinking. (Not a list of sustainable design measures.)
- > How these goals and concepts were expressed in the design
- > Sustainable design innovations.
- > How sustainability measures led to a better overall project design
- > Process of program analysis and any resource efficiencies realized by innovative programming
- > Efforts to “right size” the project and to reduce unnecessary square footage.

**Top Ten Plus:** How important did design-phase priorities prove to be after occupation? How successfully were the ecological goals and concepts implemented in the final project? Were sustainable design innovations successful in use? Provide evidence of increased occupant satisfaction, staff retention, etc...to show how sustainability measures led to a better overall project performance.

**Illustrations (optional)** may include:

- > Diagrams that illustrate sustainable design intent (**Top Ten Plus: as implemented in the completed project**)
- > Diagrams that illustrate sustainable design innovations
- > **Top Ten Plus: include images of the project in use**

## **Measure 2: Regional/Community Design**

***Sustainability is integrally tied to social, political, cultural and economic issues within communities. Describe how these issues have informed the sustainable elements of this project and how this project has contributed to the greater community.***

**Narrative (200 words maximum)** may include:

- > How the design relates to social, political, cultural and/or economic issues particular to the local context and larger region
- > How the design promotes regional and community connectivity and sense of place, public space and community interaction
- > Transportation policies, incentives, and other efforts to provide for those using transportation alternatives
- > Site selection criteria to reduce automobile use
- > How did the project team try to reduce the number of parking spaces per occupant?

**Top Ten Plus:** How has the completed design related to issues particular to the local context and larger region? Were adjustments required to improve this relationship? How successfully has design promoted regional and community connectivity? What were the lessons learned? List actual transportation policies implemented. Include a Walkscore Rating by going to [www.walkscore.com](http://www.walkscore.com).

**Metrics:** Indicate percentage of the building occupants traveling to the site by public transit (bus, subway, light-rail or train), bicycle or on foot.

Estimate percent of occupants using public transit, cycling, or walking: \_\_\_\_\_%

**Images (optional)**, with caption and credit. May include maps, diagrams, or photos showing community context.

### **Measure 3: Land Use & Site Ecology**

***Sustainable design protects and benefits ecosystems, watersheds, and wildlife habitat in the presence of human development.***

**Narrative (200 words maximum)** may include:

- > How the development of the project's site responds to its ecological context, including the watershed, and air and water quality at different scales from local to regional level
- > How the development of the immediate site and its buildings contribute to environmental quality
- > How the design accommodates wildlife habitat preservation and creation
- > How the landscape design protects or creates on-site ecosystems
- > How the design responds to local development density (rural to urban) or conditions (brownfield to greenfield)

**Top Ten Plus:** If applicable, provide data that indicates the success of the project's response to its ecological context, including improved air and water quality, enhanced ecosystems and habitat and wildlife protection.

**Images (optional)**, with caption and credit. May include site strategies and outcomes.

### **Measure 4: Bioclimatic Design**

***Sustainable design conserves resources and maximizes comfort through design adaptations to site-specific and regional climate conditions.***

**Narrative (200 words maximum):** Describe how the building responds to local climate, sun path, prevailing breezes, and seasonal and daily cycles through passive design strategies.

Narrative may include:

- > Site and climatic analysis
- > Description of internal versus external building loads
- > Design strategies that reduce or eliminate the need for non-renewable energy resources
- > How these strategies specifically shaped the building plan, section, and massing
- > How these strategies specifically affected placement, orientation, and shading of the building

**Top Ten Plus:** Describe how the building has responded over time to local climate, sun path, prevailing breezes, and seasonal and daily cycles through passive design strategies. Narrative may include adaptive responses during occupancy to actual climatic context, success of Bioclimatic Design strategies, and lessons learned.

**Illustration:** Attach (or describe if not available) a psychrometric or bioclimatic chart profile of local climate ([reference: www.aud.ucla.edu/energy-design-tools](http://www.aud.ucla.edu/energy-design-tools)) that illustrates bioclimatic design strategies. Attach a building section (and/or other appropriate diagram) that demonstrates bioclimatic strategies used. (Use image fields in section 7.)

**Images (optional)**, with caption and credit. May include:

- > Psychrometric or bioclimatic chart profile of local climate ([reference: www.aud.ucla.edu/energy-design-tools](http://www.aud.ucla.edu/energy-design-tools)) that illustrates bioclimatic design strategies
- > Building section (and/or other appropriate diagram) that demonstrates bioclimatic strategies used.

### **Measure 5: Light & Air**

***Sustainable design creates comfortable interior environments that provide daylight, views, and fresh air.***

**Narrative (200 words maximum)** may include:

- > Design strategies for daylighting, task lighting, ventilation, indoor air quality, views, and personal control systems
- > How the project's design enhances connections between indoors and outdoors
- > Design team approach to integration of natural systems and appropriate technology

**Top Ten Plus:** Describe how successful these design strategies have been in actual use compared to the projected performance. Have any of these systems been adjusted during the life of the building to enhance performance? Have any systems been overridden by occupants to the detriment of overall performance?

**Images (optional) with caption and credit.** May include photos, drawings or diagrams of daylight and ventilation strategies and/or modeling.

**Metrics:** Identify the percentage of the total building area that uses daylight as the dominant light source during daylight hours (with electric lights off or dimmed below 20%). Include all areas of the building, including stairways, restrooms, and corridors. Identify the percentage of the total building area adequately served by natural ventilation (with all HVAC systems shutdown) for all or part of the year.

**Percent of regularly occupied spaces with:**

- a) daylighting at levels that allow lights to be off during daylight hours
- b) views to the outdoors
- c) in 15 feet of an operable window.

### **Measure 6: Water Cycle**

***Sustainable design conserves water and protects and improves water quality.***

**Narrative (200 words maximum)** may include:

- > How building and site design strategies manage site water and drainage, and capitalize on renewable sources (such as precipitation) on the immediate site
- > Water-conserving landscape and building design strategies
- > Reuse strategies for water including use of rainwater, graywater, and wastewater

**Top Ten Plus:** How have building and site water conservation and drainage design strategies actually performed compared with their predicted performance? Include measured potable water used for landscape irrigation (gal/yr).

**Metrics:**

- > Percent reduction of regulated potable water (Baseline per LEED for New Construction 2009): \_\_\_\_\_%
- > Is potable water used for irrigation? [YES/NO]
- > Percent of rainwater from maximum anticipated 24-hour, 2-year storm event that can be managed on site: \_\_\_\_\_%

## **Measure 7: Energy Flows & Energy Future**

***Sustainable design conserves energy and resources and reduces the carbon footprint while improving building performance and comfort. Sustainable design anticipates future energy sources and needs.***

**Narrative (200 words maximum)** may include:

- > How the building design reduces energy loads for heating, cooling, lighting, and water heating
- > How the design and integration of building systems contributes to energy conservation and reduced use of fossil fuels, reduces green house gas emissions and other pollution, and improves building performance and comfort.
- > Techniques for systems integration, use of controls and technologies, efficient lighting strategies
- > Use of on-site renewable and alternative energy systems.
- > Anticipation of future and carbon neutral fuel sources
- > Strategies to reduce peak electrical demand.
- > Strategies to reduce the plug load
- > How the building or parts of the building provide “resilience,” the ability to function in the event of power outages or interruptions in fuel supply
- > Describe how lighting controls help reduce lighting energy use

**Top Ten Plus narrative should address how all of the above strategies have worked out in terms of actual performance, AND:**

- > **Relate strategies used to encourage energy reduction behavior among occupants and visitors.**
- > **Has the occupancy or usage of the building changed significantly from the design? If so, describe increases or decreases in these factors.**
- > **Discuss lessons learned – how would the building be designed differently today?**
- > **Note whether the project has obtained an official Energy Star score, what the score was and for what year.**

**Metrics:** In recognition of the AIA’s commitment to reduce energy use in buildings by 60% by the year 2015, with the goal of carbon neutrality by 2030, please include the following information about your submittal:

- > **Total EUI (kBtu/sf/yr) Top Ten Plus: provide actual (not projected) EUI**  
*Total energy use by the facility including energy purchased from utilities and provided by on-site renewable sources.*
- > **Net EUI (kBtu/sf/yr) Top Ten Plus: provide actual (not projected) Net EUI**  
*Net purchased energy use (total energy use, less any energy generated on-site from renewable resources).*
- > **Percent Reduction from National Average EUI for Building Type Top Ten Plus: Actual Reduction**  
*Use EPA’s [Target Finder](#) to establish your baseline for percent reduction(window #3). If your building type isn’t available in Target Finder, refer to AIA’s 2030 Commitment Reporting Tool, available on the [Call for Entries](#) page, for national averages and alternate options.*
- > **Home Energy Rating (HERS) Index: \_\_\_\_\_**  
*For low-rise residential only.*
- > **Lighting Power Density in (watts/sf)**  
*Describe impact of lighting controls to be described in narrative*
- > **Upload Energy Data Attachment . Top Ten Plus: Upload Energy Star Portfolio Manager Statement of Energy Performance Report**  
*Options include: LEED EA Prerequisite 2 submittal, Title 24 report, or summary of energy modeling results*  
**Remove all firm names from PDFs.**

### **Measure 8: Materials & Construction**

***Sustainable design includes the informed selection of materials and products to reduce product-cycle environmental impacts, improve performance, and optimize occupant health and comfort.***

**Narrative (200 words maximum)** may include:

- > Efforts to reduce the amount of material used on the project.
- > Materials selection criteria, considerations, and constraints, such as optimizing health, durability, maintenance, and energy use, and/or reducing the impacts of extraction, manufacturing, and transportation.
- > How the building enclosure will perform in relationship to air, moisture, water and thermal characteristics
- > Consideration given to impacts on the environment over the full life cycle and the results of life cycle assessment if available.
- > Description of any "green lease" program.
- > Construction waste reduction plans and any strategies to promote recycling during occupancy.

**Top Ten Plus:** Include lessons learned from materials selection relating to occupant health, durability, maintenance, and energy use, and/or reducing the impacts of extraction, manufacturing, and transportation. Include whether the strategies to promote recycling during occupancy been effective, and why or why not. Include the ratio of amount of recycled materials to amount of waste generated in annual operation.

**Images (optional)** with caption and credit. May include up to three images that illustrate concepts or finished details of the building envelope design.

### **Measure 9: Long Life, Loose Fit**

***Sustainable design seeks to enhance and increase ecological, social, and economic values over time.***

**Narrative (200 words maximum)** may include:

- > How the project was designed to promote long-term flexibility and adaptability.
- > Anticipated service life of the project, and description of any components designed for disassembly.
- > Materials, systems, and design solutions developed to enhance versatility, durability, and adaptive reuse potential.

**Top Ten Plus:** Have design strategies incorporated to promote long-term flexibility and adaptability proven effective?

**Images (optional)** with caption and credit. May include photos, drawings, or diagrams of the project illustrating its flexibility and adaptability.

### **Measure 10: Collective Wisdom and Feedback Loops**

***Sustainable design strategies and best practices evolve over time through documented performance and shared knowledge of lessons learned.***

**Narrative (200 words maximum)** may include:

- > How you modeled and evaluated the design during the programming and design phases.
- > How you evaluated the performance of the built results.
- > Collaborative efforts between the design team, consultants, client, and community.
- > How the process enhanced the performance and success of the building.
- > Lessons learned during the design, construction, and occupation of the building.
- > How these lessons would change your approach to this project if starting over, or to future projects.
- > Commissioning and any on-going monitoring of building performance and occupant satisfaction.

**Top Ten Plus:** Has the project's post-occupancy performance been actively monitored? If so, by whom and what is the focus of the monitoring? Was the design team compensated by the owner for post-occupancy evaluation services? Describe lessons learned during the occupation of the building and how these lessons would change your approach to this project if starting over, or to future projects.



**Images (optional)** with caption and credit. May include photos, drawings, or diagrams of lessons learned.

**Cost and Payback Analysis:** Describe atypical project cost issues and provide estimated payback of any investment in green measures. (<200 words) **Top Ten Plus: Provide the status of payback of any investments in sustainable design measures.**

**Process and Results:** Describe any notable aspects of the process of designing and building this project, especially as they relate to its environmental performance.

PreDesign  
Design  
Construction process  
Operations/maintenance  
Commissioning  
Measurement & verification/post-occupancy evaluation

**Rating System(s) Results:** Rating systems results are not required. However, if the project has been officially rated under LEED®, BREEAM, or other green building programs, please list:

Rating system:  
Rating date: (MM-DD-YYYY)  
Score or rating level:

#### **ADDITIONAL IMAGES**

Provide additional images so that you have uploaded a total, including those uploaded on other screens, of at least 10 (and at most 18) digital images illustrating the project. Emphasis should be placed on graphics that best inform the jurors about the innovative sustainable design solutions that have been developed. Include the appropriate credit and caption for each. *Jurors will NOT see the credit field, so firm names there are acceptable.*

Minimum Informational Requirements (**Top Ten Plus must provide current images**):

- > Context Plan (the place, region, neighborhood); must include North arrow
- > Site Plan; must include North arrow
- > Floor Plans; must include North arrow
- > Elevations
- > Sections and Details; include at least one section that illustrates daylighting, natural ventilation, or other sustainable design strategies.
- > Photographs of completed project, interior and exterior

Accepted file formats: jpg, jpeg, gif, png. File size limit: 5 MB file per image.

Note: The low-resolution images you upload via the submission forms are for online use only. Top Ten winners will be asked to submit high-resolution images to AIA/COTE.

#### **PROJECT TEAM AND CONTACT INFORMATION**

At least one person must be identified as the "Primary Information Contact," and a phone number and email address must be provided for that person.

*For all project team members, identify role on the team, and list name, company name, city and state. Additional contact information is optional.*

#### **LEGAL FORMS**

Download, complete, and upload the legal forms contained in [this document](#) to complete your submission process.

*You can complete this form by inserting scanned signatures, or by printing it, signing it, and scanning the document. The accuracy of these forms is of critical importance in providing information that the AIA will use in publicizing the winning projects. All credits on the award citations and in publications will be based on this form. Any errors or omissions will be the responsibility*

*of the entrant. The forms will not be viewed by the jury. Please note that when crediting Award recipients in publications and citations, it is the policy of the American Institute of Architects to list only the architecture firms associated with the project, not individuals.*

**END OF FORM**