# The Green Architect

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## Green Design Made Simple

I recently taught a class entitled "Introduction to LEED®" for architects in our office. I began the class by explaining that green design and sustainable design are much bigger concepts than merely the U.S. Green Building Council's LEED rating system. By the end of the class, however, I realized that the popularity of the system comes from the fact that the USGBC has made their definition of green design relatively simple to understand and follow. To paraphrase their message:

> *Disrupt the natural surroundings as little as possible and demand the least from the earth to support your project.*

In order to meet this goal an architect and owner should follow these steps:

○ Build buildings near existing infrastructures (the definition of infrastructure is expanded in LEED's version 2.2, Sustainable Sites Credit 2, to include places of worship, grocery stores, day care centers, cleaners, beauty shops, hardware stores, to name a few.)
○ Prevent rain and irrigation water from running off your site. Make use of it for irrigation or consider providing a gray water system to reduce potable water demand.
○ Use plants to provide shade for your project. Native plants and/or low water plants for your climate zone are optimum to reduce or eliminate the need for irrigation systems.
○ Select roofing and paving materials that reflect light to reduce heat islands (the thermal gradient temperature change between developed and undeveloped areas).
○ Consider nocturnal lives of animals and humans by reducing light trespass to adjoining properties and the night sky.
○ Provide the smallest building footprint and disturb the least amount of natural plant and animal habitat.
○ Incorporate details and components that encourage people to use public transportation, hybrid vehicles, or bicycles.
○ Make the building as energy efficient as possible. Consider providing some of your own green power or buying it from your local utility.
○ Reduce ozone depleting CFC-based refrigerants and provide carbon dioxide sensors in your HVAC systems.
○ Commission your building systems to assure that they are working at their peak effectiveness.
○ Recycle construction waste and encourage building occupants to recycle.
○ Use products with recycled content and those that are harvested and/or manufactured regionally. Purchase wood products from foresters that follow the Forest Stewardship Council's (FSC) guidelines.
○ Improve the quality of the air in a building for construction workers and all future occupants by eliminating tobacco smoke and specifying products with low VOC content. Provide ventilation systems that effectively introduce outside air.
○ Provide natural daylight and views to as many occupants as possible.

After the class, one of the participating architects approached and thanked me for reminding him of what he had learned as a young architecture student 50+ years ago. He was currently working on a master planning project where there were two distinct options. After hearing the presentation it was clear that one was dramatically more green. He intended to present the option with a newfound confidence that it offered the owner an opportunity not considered before.

I felt good about reminding another professional of why I, along with many other architects, went into the profession: to make the world a better, more beautiful place, to make people happier and healthier. The utopian plans developed by the architects that we studied and admired never included smog-filled skies, pedestrian unfriendly environments, large desalinate water plants, or the elimination of forests.

A great way to expand your knowledge of green architecture is to attend one of the 30+ green-influenced sessions, tours, and workshops being offered at this year's AIA National Convention in Los Angeles. I was proud to see that one such