

# **Future LEEDers: Going Green in the Child Care Industry**

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The child care field has always shown interest in evaluating environmental impacts on young children. These impacts have been stressed in child care regulations and, more specifically, in the Federal Interagency Day Care Regulations' (FIDCR) appropriateness study conducted in the 1970s. As we find ourselves in an increasingly environmentally conscience society, it is necessary for the child care industry to be mindful of its role in this trend. At the forefront of the environmentally conscious movement is LEED or Leadership in Energy and Environmental Design certification. The end result of a LEED certified building is one that has a healthy, positive effect on both the environment and anyone who enters the building. What better standard could we use in renovating and/or building new for the children that are the future of our society?

LEED design has steadily been gathering momentum over the last decade and is now being pushed to the forefront more than ever. The trend to design and operate an environmentally friendly automobile has extended to the buildings that we see and use every day. The most forward thinking, new facilities are not only constructed with LEED strategies in mind, but also operate in that way over the life of the building having a continued positive impact on the surrounding environment and the building's occupants, a path that any new child care facility would be pleased to follow.

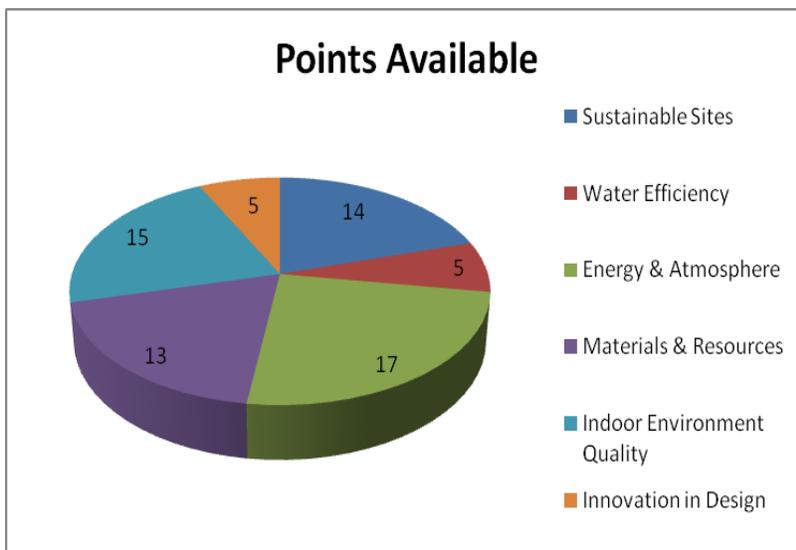
When considering if a project is going to pursue LEED certification, at any level, the decision and commitment should be made in the earliest stages of development; ideally even

before a location for the project has been determined. A project’s LEED certification is based on accruing credits, each worth one or more points, throughout the design, construction, and occupancy phases of the project. The total number of points attained determines the building’s level of LEED certification and is currently broken down in the following levels:

- **26-32**                      **Certified**
- **33-38**                      **Silver Certified**
- **39-51**                      **Gold Certified**
- **52+**                         **Platinum Certified**

A common misconception of LEED buildings is that the LEED or “green” elements only come into play with the types of materials used and how the building behaves from an energy standpoint. While these are important pieces to the puzzle, the reach of a project’s LEED strategy is far greater.

In the current LEED design guide for new construction and major renovations, the LEED credits are divided into six main categories including Sustainable Sites, Water Efficiency, Energy & Atmosphere, Materials & Resources, Indoor Environmental Quality, and Innovation in Design. Each category has a given number of credits or points that can be obtained and are not



equal from one category to the next (see figure entitled “Points Available”).

The importance of working LEED strategy into the early

phases of a project is recognized immediately under the Sustainable Sites category. For new construction, credits are available here based on which site location is chosen, how the selected site is utilized in terms of building footprint versus open space, the approach taken with impervious surfaces (paving, sidewalks, etc.), and how the new site interacts with the community around it. If the project is a renovation, credits are available for how much of the existing building is reused, ranging from the building's structural system to the finish elements. I have seen projects that decided to pursue LEED certification not only after a site had been selected, but after the building's main program and floor plan was developed. In this situation, the client has already missed opportunities for LEED points and will be at a disadvantage moving forward.

The benefits of a LEED certified building extend beyond the positive environmental impacts by increasing building occupant comfort, which can be particularly useful when a large majority of the occupants are infants and toddlers. A credit under the Indoor Environmental Quality category increases ventilation air requirements to 30% above code required minimums. Another credit is awarded if outdoor air monitoring systems are put in place to ensure that continued ventilation rates are maintained. This would be advantageous to a facility that focuses a lot of attention on controlling and eliminating airborne germs and contaminants. LEED encourages design around bringing the outdoors in. Strategies that cover day lighting and outdoor views include designing spaces such that 75% of regularly occupied areas achieve a minimum level of natural light or to provide views to the outdoors for building occupants in 90% of regularly occupied areas. Building occupant comfort is encouraged as well through the design of flexible mechanical and electrical systems where the intent is to provide controls to building occupants to personalize a work space to their own comfort level.

The primary goal of LEED is to protect and develop the natural resources that we have around us and depend on; a goal that is very similar to that of child care facilities such that you endeavor to develop and foster future generations, our greatest resource of all. For additional information about having your center become LEED certified, please contact the senior author on this article at [chris\\_fiene@hotmail.com](mailto:chris_fiene@hotmail.com).

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**References:**

U.S. Green Building Council - LEED, *New Construction & Major Renovation Version 2.2 Reference Guide*, Third edition October 2007.