WHAT IS LEED?

Developed by the U.S. Green Building Council, LEED is an internationally recognized mark of excellence for buildings, communities and professionals that are transforming the building industry toward energy efficiency and water efficiency, better stewardship of our natural resources and a healthier living, working and learning environment.

LEED provides building owners and operators a concise framework for identifying and implementing practical and measurable green building design, construction, operation and maintenance solutions. It is developed through a broad consensus process that includes nonprofit organizations, government agencies, architects, engineers, developers, builders, product manufacturers and other industry leaders. LEED consists of a suite of rating systems that address the complete lifecycle of buildings.

RATING SYSTEMS

- New Construction
- Existing Buildings: Operations & Maintenance
- Commercial Interiors
- Core & Shell
- Schools
- Retail
- Healthcare
- Homes
- Neighborhood Development



For more information on LEED, go to usgbc.org/leed



LEED FOR NEIGHBORHOOD DEVELOPMENT

Total Commercial LEED Projects Globally (LEED-registered, LEED-certified, LEED for Neighborhood Development).

62,372

Gross Square Footage of LEED Projects Globally (LEED-registered, LEED-certified):

11.3 billion

LEED FOR HOMES DATA*

LEED for Homes Units: 140,364

LEED for Homes Certified Units: 53,554

Gross Square Footage of LEED for Homes Projects Globally (LEED-registered, LEED-certified):

180 million

LEED-Certified Single Family Units: 12,955

LEED-Certified Multifamily Units: 40,599

LEED-Certified Affordable Units: 22,984

LEED-Certified Market Rate Units 30,570

* LEED for Homes numbers do not include residential units certified under the LEED commercial rating systems. As specified in this report, multifamily buildings may certify under the LEED commercial rating systems based on number of floors, if they're pursuing existing building certification, or other considerations.

LEED-Certified Homes Projects by Certification Level









14,277

We estimate there are as many as **150,000** certified units, if you include multifamily buildings under commercial LEED rating systems.

> McGraw Hill Construction (MHC) estimates the green market share will continue to increase, reaching 26%–33% by 2016– representing an \$83–\$105 billion opportunity based on MHC's overall Dodge residential

construction forecast as of January 2014.³

3 McGraw Hill Construction, 2014 Green Residential Study: Key Findings (2014), https://analyticsstore.construction.com/GreenHomeKeyFindings14.

Top 10 Countries with LEED for Homes Units (Certified + Registered)



"Properties certified to meet a voluntary energy efficiency standard (e.g. ENERGY STAR) or "green" standard with an energy element (e.g. LEED) tend to have higher values or rents than properties without such certification."⁴

Energy efficiency in apartments could save \$3.4 billion.⁵

"Since 2005, the green share of new single family residential construction has grown dramatically increasing from 2% in 2005 to 23% in 2013. This 23% market share equates to a \$36 billion market opportunity."⁶

⁴ Jonathan Borck, Robert N. Stavins, and Todd Schatzki, An Economic Perspective on Building Labeling Policies (2013), 24, http://www.analysisgroup.com/article.aspx?id=14140.

⁵ Anne Evans et al., Engaging as Partners in Energy Efficiency: Multifamily Housing and Utilities (2012), 4, http://aceee.org/research-report/a122. 6 McGraw Hill Construction, 2014 Green Residential Study: Key Findings (2014)

TOP TEN CREDITS

The most frequently earned LEED for Homes credits showcase key impact areas.

99%	of projects implemented nontoxic pest control alternatives by achieving Sustainable Sites credit 5	Y
98%	of projects utilized environmentally preferable products by achieving Materials and Resources credit 2.2	
95%	of projects implemented exceptional energy performance by achieving Energy and Atmosphere credit 1.2	
94%	of projects utilized appropriate HVAC refrigerants by achieving Energy and Atmosphere credit 11.2	
94%	of projects installed very high efficiency fixtures and fittings by achieving Water Efficiency credit 3.2	
94%	of projects are served by or are near existing infrastructure by achieving Location and Linkages credit 4	
90%	of projects implemented enhanced combustion venting measures by achieving Indoor Environmental Quality credit 2.2	F
86%	of projects avoided development on environmentally sensitive sites by achieving Location and Linkages credit 2	
84%	of projects promoted durability and high performance of the building enclosure and its components and systems through third-party verification by achieving Innovation in Design credit 2.3	
83%	of projects selected a location to encourage walking, physical activity and time spent outdoors by achieving Location and Linkages credit 6	

Based on 12,211 certified projects under LEED for Homes 2008 (single family and lowrise). See the "Additional Information" section for more on these numbers.

- ROADMAP TO A GREEN CAMPUS

Campus. The word originates from the Latin, "field," and was used in the 18th century to define the open space or plain within which a college or university was situated. It was an entity set apart to educate and advance knowledge. The 21st century campus is now recognized as a comprehensive and complex system of interrelated elements. Campuses today range from rural to urban, from single buildings to expansive complexes, and from community colleges to public and private four-year institutions to major research universities. Today, some 18 million students, as well as a corresponding number of faculty, staff and visitors, experience the campus in the United States. With more than 4,300 institutions of higher education located throughout the nation, encompassing hundreds of millions of square feet of building space, the campus has become an integral part of our communities.

INTRODUCTION

A growing and collective desire to create a society living in harmony with the environment is revolutionizing how buildings and neighborhoods are envisioned, built and operated. As dynamic places that conduct research, pioneer technological innovations, engage faculty and students and encourage community partnerships, America's college and university campuses have the opportunity to serve as leaders, models and incubators for the creation of new and revitalized green communities. Colleges and universities are the most viable forces for change in today's society. Their commitment to sustainability is critical to establishing new standards, developing ground breaking approaches and preparing future global citizens.

In 2008, the U.S. Green Building Council (USGBC) launched its Green Campus Campaign as a way to acknowledge the integral role of campus communities in accelerating the sustainability movement. A green campus focuses on more than the life cycle of buildings, grounds, and infrastructure. It encourages research, promotes advocacy efforts, develops curriculum, and supports academic and mission-based goals that further sustainability on-campus.

sus·tain·a·bil·i·ty

Sustainability promotes meeting the needs of the present without compromising the ability of future generations to meet their own needs. Its success is measured by the triple bottom line: environmental responsibility, economic prosperity, and social equity.

Source: The United Nation's 1983 Bruntland Commission.

USGBC's vision is to achieve green schools for everyone within this generation. As a way to meet this vision and build on the work of the Green Campus Campaign, USGBC recently formed the Center for Green Schools at USGBC.

green cam·pus

A green campus is a higher education community that is improving energy efficiency, conserving resources and enhancing environmental quality by educating for sustainability and creating healthy living and learning environments.

The Center encourages the participation of all stakeholders, including administrators, capital planning and facilities staff, faculty, students, and the surrounding community by providing the tools, dialogue and resources needed to create green schools. The success of a green campus is dependent on an integrated approach to planning and implementing sustainability initiatives.

Engaging these stakeholders early will result in a plan that reflects the realities and needs of the campus and community while furthering the institutional mission.



Universities and colleges are living laboratories. They develop the tools and techniques needed to implement innovative green technology and methodology. Through comprehensive sustainability plans that integrate curriculum offerings, research initiatives, student engagement opportunities, and collaborative partnerships, educational institutions can realize the concept of "campus as teacher." In the process, green campuses provide students opportunities to develop green job skills that prepare them to be top candidates in an increasingly competitive job market.

To advance the objectives of the Center for Green Schools and assist colleges and universities of various sizes, budgets, and locations in defining and meeting their sustainability goals, USGBC created t he *Roadmap to a Green Campus*. The *Roadmap* offers a strategy for using the LEED[®] green building certification program as a framework for developing and evolving campus-wide sustainability plans. LEED is an internationally recognized third-party certification system that measures how well buildings and communities perform using several metrics, including site management, energy savings, water efficiency, CO₂ emissions reduction, improved indoor environmental quality, and stewardship of resources. It provides a concise framework for identifying and implementing practical and measurable green campus solutions. The *Roadmap* references more than one hundred tools and resources to support campus greening efforts and profiles institutional success stories.

The approach detailed in the *Roadmap* has been successfully initiated on campuses across the United States. While every institution's path will be different, the core commitment to leading efforts toward a greener tomorrow transcends vast differences in campus size, setting, and history. The steps and strategies outlined in the *Roadmap* provide the information and guidance

PLAN A SOLID SERVICE PROJECT

GET THE GREEN LIGHT Be sure to follow campus protocol for hosting an event and inform your faculty advisor of your plans. Getting buy-in before you start the heavy lifting will make the project that much more successful, exciting and impactful.

TELL US WHAT YOU'RE PLANNING Green Apple Day of Service reaches thousands of communities around the world and we want to be able to share your story. Be sure to register when you start planning your event, and send us photos, videos and stories after the project is complete.

FOR THAT MATTER, TELL EVERYONE! The best way to get people to help you out is to tell them about it. Take advantage of social media, campus listservs, and local message boards at the grocery store, neighborhood schools and libraries to recruit volunteers. Tap the expertise and enthusiasm of your local USGBC chapter members and be sure to invite the media.

DON'T FORGET TO HAVE FUN! You've worked hard to green your campus, so for-the-love-of-all-things-green, celebrate your success! Recognize hard work with awards ceremonies, groundbreakings or ribbon cuttings for new green buildings. Invite the community to experience your green projects, and you might just recruit some new champions along the way.



IDEAS

SAVE WATER Find ways to use water more efficiently and teach people and communities about this essential resource. Consider replacing fixtures, collecting rainwater or creating signs reminding people about responsible water use.

CONSERVE ENERGY Tackle energy efficiency and explore alternative energy sources through energy audits, educational signage and more.

INDOOR IMPROVEMENTS Look for ways to improve the indoor environment at a school through classroom clean-ups, low-VOC paint jobs, lighting upgrades and more.

WASTE NOT Kick off a recycling program, teach your campus about composting, or encourage your entire community to have a waste-free Saturday.

TAKE IT OUTSIDE Plant gardens, paint murals and install rain barrels to connect volunteers and organizers to the outdoor spaces at their schools and campuses.

EDUCATE Offer free workshops and seminars for students and communities and lead tours of LEED-certified buildings to demonstrate the importance of sustainable school and campus improvements.

GETTING STARTED ON YOUR CAMPUS

Asking yourself these questions can help you identify where you and your group can have the most impact.

ARE OUR BUILDINGS GREEN?

- Has our campus assessed buildings to determine their deficiencies?
- Has our campus performed energy audits on existing facilities?
- Does our campus have plans to improve the energy efficiency of buildings?
- Does our school have plans to seek LEED certification for new buildings or major renovation projects on campus?
- Does our school have plans to seek LEED for Existing Buildings:
 Operations & Maintenance certification for existing facilities on campus?

ARE OUR POLICIES AND PRACTICES GREEN?

- Does our campus have a recycling and waste management program? If so, is it effective and are members of the campus community active participants?
- Does our campus have a green cleaning policy? An environmentally friendly groundskeeping program?
- Does our campus have a sustainable purchasing policy?

IS OUR TRANSPORTATION GREEN?

- Is our campus bicycle friendly?
- Does our campus provide easy access to public transportation or major transportation hubs to get to town?
- Is it safe to walk on campus?
- Does our campus promote alternative transportation, such as preferred parking for hybrid or electric vehicles?

IS OUR CURRICULUM GREEN?

- Does our campus offer a sustainability major or minor?
- Does our campus offer majors that incorporate sustainability into the curriculum? If so, how many?
- Does our freshman orientation or freshman experience include sessions to promote sustainability awareness?

ARE OUR LEADERS GREEN?

- · Has our campus made a formal commitment to sustainability?
- Is our campus a USGBC National Member organization?
- Has our campus signed the American College and University Presidents' Climate Commitment?
- Does our campus employ a dedicated sustainability officer?
- Does our campus endowment have environmentally sound investment practices?
- Does our campus have a green student fee to provide funding to develop and implement sustainability initiatives?
- Is our school listed in the Princeton Review's Guide to 311 Green Colleges?







