GREEN GUIDE for Health Care™ GGHC
Best Practices for Creating High Performance Healing Environments™
VERSION 2.1 PILOT ▪ SEPTEMBER 2005

September 2007 *Green Guide for Health Care* Quarterly Update

Overview

The *Green Guide for Health Care* is the health care sector's first quantifiable sustainable design toolkit integrating enhanced environmental and health principles and practices into the planning, design, construction, operations and maintenance of their facilities. This *Guide* provides the health care sector with a voluntary, self-certifying metric toolkit of best practices that designers, owners, and operators can use to guide and evaluate their progress towards high performance healing environments. In addition, the *Green Guide* provides industry education on tool use and best practices, and engages in research to remove barriers and advance action. Through website and project registrations, the *Green Guide* has built a learning community for the health care to accelerate a leadership position in the world of green building and operations informed by human health considerations.

The *Green Guide*'s structure is based on an organizational framework borrowed by agreement from the U.S. Green Building Council's LEED® (Leadership in Energy and Environmental Design) Green Building Rating System. While the *Green Guide* uses a credit and point system defined by specific, verifiable design and technology strategies, its goal is market transformation through education in and implementation of best practices. The *Green Guide* serves as a voluntary educational guide to support sustainable design, construction, and operations practices, encourages continuous improvement in the health care sector, and provides market signals to catalyze a richer palette of strategies.

The *Green Guide for Health Care* is a joint project of the Center for Maximum Potential Building Systems and Health Care Without Harm. Its sponsors are Hospitals for a Healthy Environment (H2E), Merck Family Fund, New York State Energy Research and Development Authority (NYSERDA), Pacific Gas & Electric (PG&E), and Southern California Edison (SCE).

Figure 1: Green Guide Website Registrant Growth

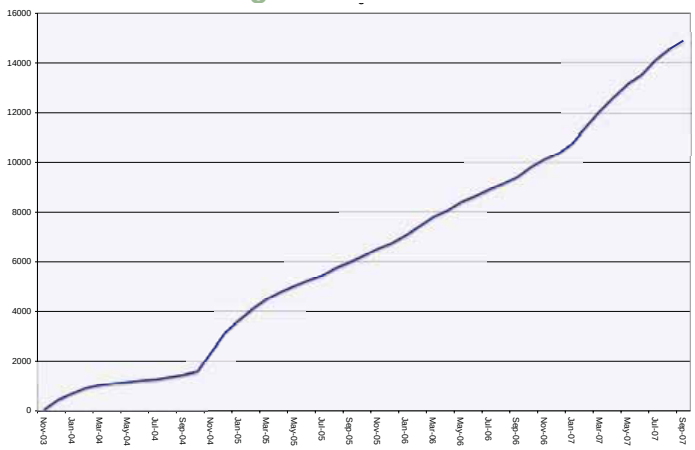
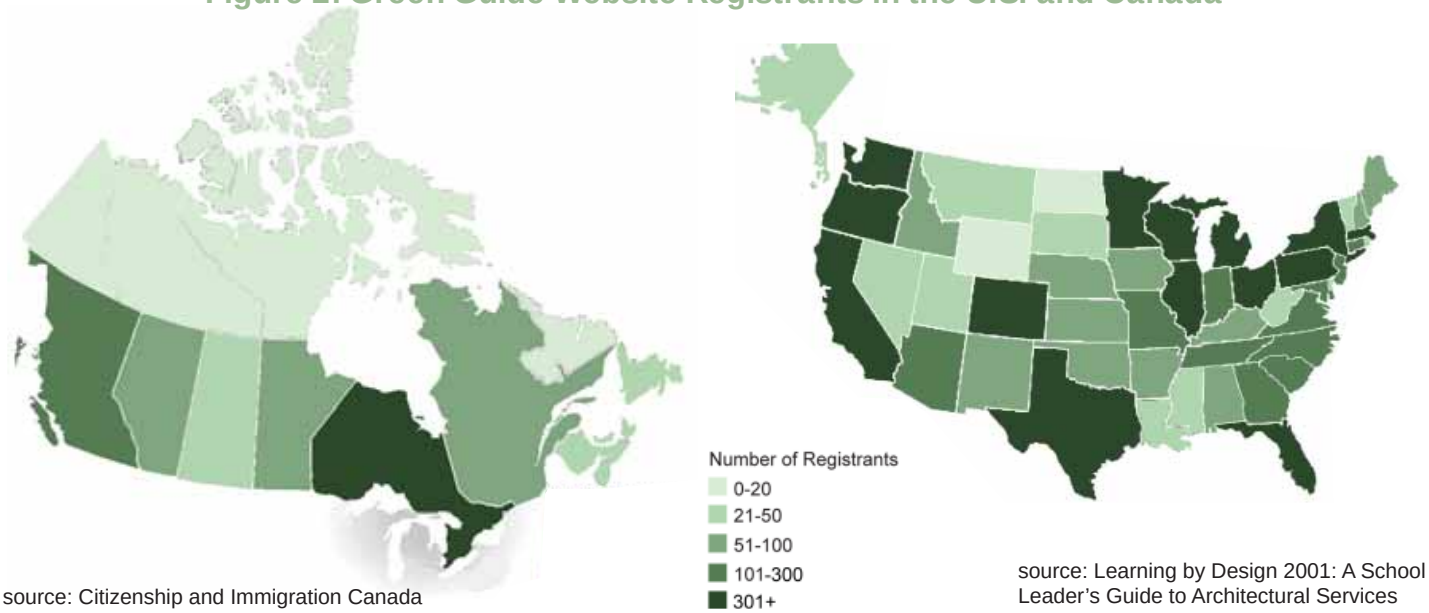


Figure 2: Green Guide Website Registrants in the U.S. and Canada



source: Citizenship and Immigration Canada

source: Learning by Design 2001: A School Leader's Guide to Architectural Services

Growth in Green Guide Website Registration

The *Green Guide for Health Care* has built a global online community 15,000 strong over the past four years (Figure 1). The strength of this community is its diversity, representing the design and construction fields, health care providers, education, government, the non-profit/NGO sector, and product manufacturers. The continuous and rapid growth of the *Green Guide's* online community (500 new website registrants a month) demonstrates the health care sector's desire for education and green building tools tailored to the unique challenges of health care construction, emphasizing a healing environment for patients and staff as well as regional and global environmental health considerations.

North America – Green Guide website registrants are located in every state in the U.S. and every province in Canada (Figure 2), with 18 registrants in Mexico. Figure 3 lists the states with more than 300 website registrants. California leads the U.S. in this count with over 1,000 registrants.

Figure 3: States with More than 300 Website Registrants

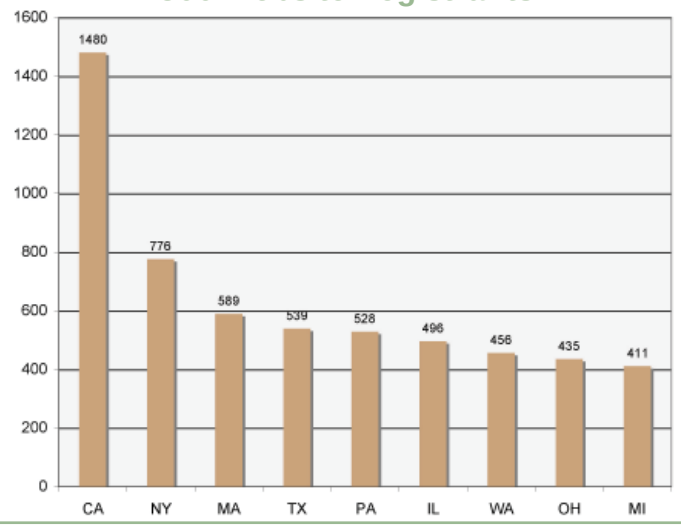
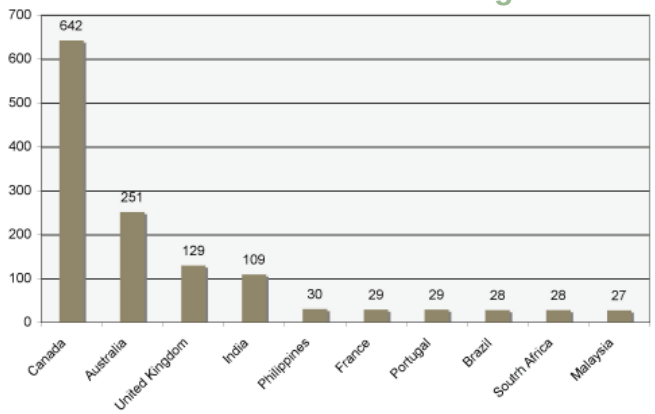


Figure 4: Top Ten Countries with International GGHC Website Registrants



International – The website's international reach has expanded to 102 countries in addition to the United States. Four countries host more than 100 *Green Guide* website registrants: Canada, Australia, United Kingdom, and India. Figure 4 lists the top 10 countries with highest *Green Guide* website registrant representation.

Green Guide Registered Projects

Green Guide website registrants can register projects at no charge by logging onto www.gghc.org and following the prompts on the Project web page. Project registration is free, fast and easy and grants up to 14 team members access to *Green Guide* online tools such as checklists and the peer-to-peer *Green Guide* Forum open only to *Green Guide* registered project teams.

Currently, 138 projects are registered with the *Green Guide* (Figure 5), representing 33.5 million square feet of construction representing 34 U.S. states, 4 Canadian provinces, and 6 other countries (Figure 6). The project registration program has provided the opportunity for the *Green Guide* to collaborate with a broad cross-section of leading health care institutions – from seasoned trendsetters in green design and operations to newcomers.

Figure 5: Green Guide Project Growth

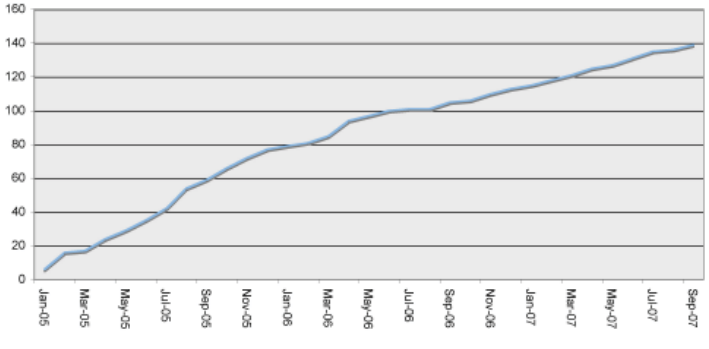


Figure 6: Green Guide Projects: Geographic Distribution

NASA ESIP funded project
(Image Source: Mission to Planet Earth Education Series)

By the Numbers

138	Registered projects
33.5	Million square feet of construction
34	U.S. States
4	Canadian provinces
6	Other countries: China, Guatemala, Malaysia, the Philippines, Poland, and Portugal
32	Average *Construction* points pursued
16	Average *Operations* points pursued
60%	Projects pursuing both *Construction* and *Operations* section

Continuing past trends, the majority of *Green Guide* registered projects are Acute Care (60% by number) and New Construction (55% by number) facilities (Figures 7 & 10). However, the other facility categories (Medical Office Buildings, Specialty facilities, and Retirement) continue to grow. Additions, Renovations, and combination construction projects (new, addition, and renovations) also continue to use the *Green Guide* and register new projects.

When averaged across all building and construction types, *Green Guide* projects are set to achieve one quarter of the available points in each category of the *Construction* section except Environmental Quality, where they average 11 of 24 total possible points. The success reported by *Green Guide* projects using the Environmental Quality section may be attributed to the section's specific emphasis on health-based credits pioneered by the *Green Guide*.

Figure 9: Average Credit Breakdown — All GGHC Projects

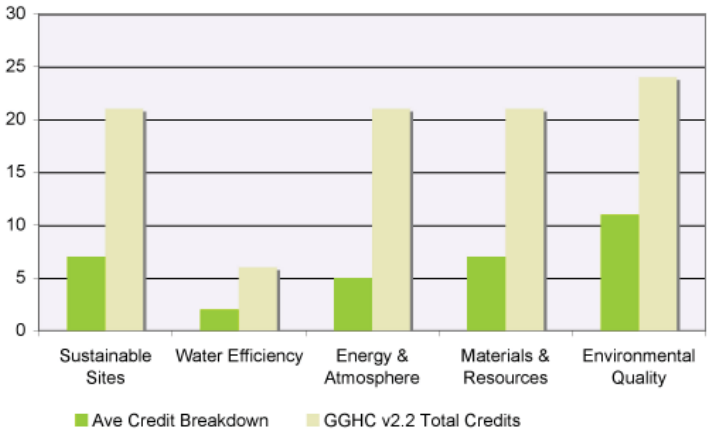


Figure 7: Green Guide Facility Type — Number of Projects

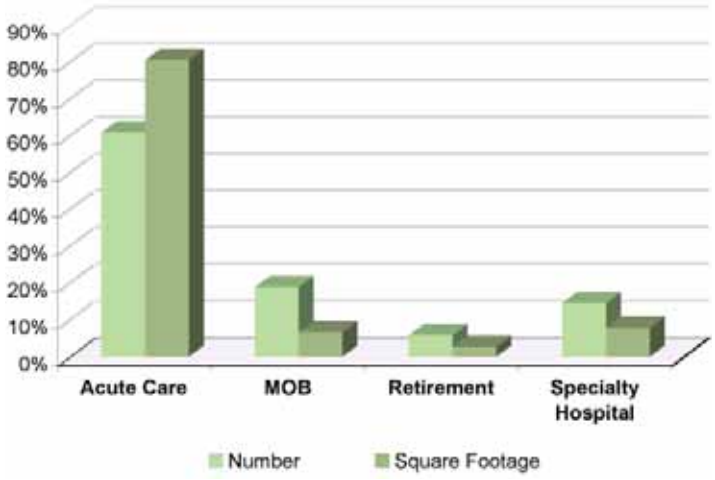


Figure 10: Green Guide Project Type — Number of Projects

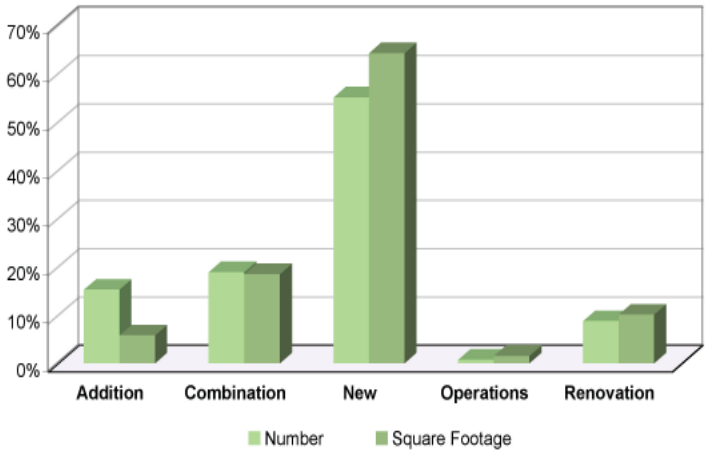


Figure 8: Green Guide Facility Type — Average Credit Breakdown

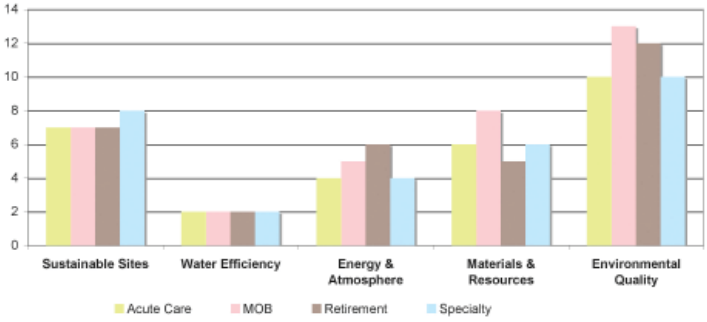
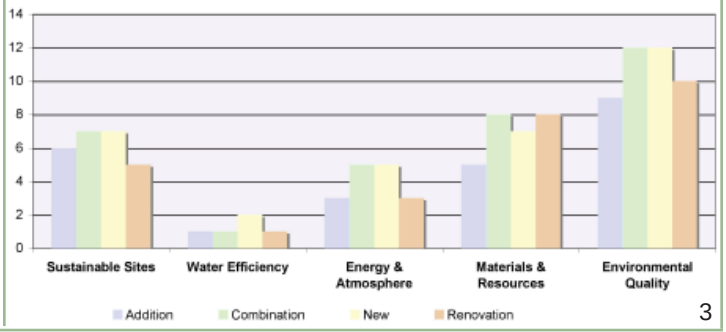


Figure 11: Green Guide Project Type — Average Credit Breakdown



Green Guide Educational Outreach

In August 2007, the *Green Guide* released the *Green Guide for Health Care Version 2.1 Pilot Report*. The Pilot Report presents a groundbreaking, comprehensive portrait of the health care industry's approach to green building and operations. Pilot projects are analyzed "At a Glance" by building type and construction type, offering a quick, graphic guide to average credit achievement levels. The Report identifies significant lessons learned and key strategies for success, as well as highlights case studies of selected *Green Guide* Pilot projects.

All *Green Guide for Health Care* educational materials can be accessed in the "Downloads" folder in the secure areas of the *Green Guide* website (www.gghc.org). To access this portion of the website, click on the "login" link at the top of the *Green Guide* homepage and log on to the website.

Green Guide for Health Care Presentations

The *Green Guide* staff and Steering Committee members presented at several regional and national conferences and educational events in September.

AIA Utah Healthcare Conference (Midway, UT)

Consorta Source 2007 (Chicago, IL)

FacilityCare East Coast Summit 2007 (Orlando, FL)

Health & Sustainability Conference (Ithaca, NY)

Emerging Technology and Green Construction in the Healthcare Industry (Washington, DC)

For more information about scheduling a *Green Guide* presentation or workshop, contact Adele Houghton, *Green Guide for Health Care* Project Manager at adeleh@gghc.org, 512 928 4786.

GGHC/H2E Green Building Teleconference Series: Second Half of 2007

The *Green Guide* continues its partnership with Hospitals for a Healthy Environment (H2E) on a monthly Green Building Teleconference Series. For more information about the series and to listen to previous teleconference presentations, visit H2E's website at www.h2e-online.org.

JULY 2007
Specifying Green Furniture and Furnishings
An overview of the environmental and health concerns surrounding furniture and medical furnishings in the healthcare sector and a case study of a project that successfully specified green products throughout the facility.

AUGUST 2007
Toxic Chemical Avoidance in Health Care Construction and Facilities
An overview of why health care projects should avoid Chemicals of Concern and where to focus the designer's and specifier's attention. Case study of a health care facility that has developed policies to avoid the use of toxic chemicals in construction, demolition, and building systems equipment.

SEPTEMBER 2007
"How To" Achieve Materials & Resources Credits
A panel discussion of professionals who will recount how they achieved specific Materials & Resources strategies on a project, from schematic design through construction.

OCTOBER 2007
Sustainable Food Procurement and Design
An overview of the sustainable food movement in health care and its implications to facility design.

NOVEMBER 2007
Introduction to the Pharos Project
A guided tour of the multi-attribute green materials evaluation tool: Pharos.

DECEMBER 2007
"How To" Achieve Environmental Quality Credits
A panel discussion of professionals who will recount how they achieved specific Environmental Quality strategies on a project, from schematic design through construction.

Green Guide in the News:

Third Quarter 2007

Jody Lannen Brady, "Going Green: What You Can Do to Help," *Biomedical Instrumentation & Technology*, Volume 41, Issue 5 (September-October 2007).

Tracy Hampton, "Hospitals and Clinics Go Green for Health of Patients and Environment," *Journal of the American Medical Association*, Vol. 298 No. 14.

Diane Laux, "Environmental Edge: The Color of Health," *The Source*, Consorta, Inc., September 2007.

McGraw Hill Construction, *2007 Health Care Green Building SmartMarket Report*.

"The Nurture Report: Going Green 2.2." Steelcase, 2007, www.nurturebysteelcase.com.

Sara Solovitch, "Hospital Construction Projects Catch Green Building Fever," *San Jose Business Journal*, August 31, 2007.

Green Guide Public Registered Projects as of September 2007

Note: The Green Guide only releases the name of projects that have given permission to be publicly recognized.

ARIZONA
Phoenix Children's Hospital, Phoenix, AZ
San Carlos Alternative Rural Health Care Center, Peridot, AZ

CALIFORNIA
Highland Hospital, Oakland, CA
Kaiser Permanente Modesto Medical Center, Modesto, CA
La Maestra Community Health Center, San Diego, CA
Palomar Pomerado Health, San Diego, CA
Santa Barbara Cottage Hospital, Santa Barbara, CA
Veterans Homes of California, West Los Angeles, CA
Veterans Homes of California, Ventura, CA
Washington Hospital, Fremont, CA

COLORADO
Denver Health Medical Center, Denver, CO
Longmont United Hospital, Longmont, CO
Grand River Medical Center, Rifle CO

CONNECTICUT
MidState Medical Center, Meriden, CT

IDAHO
Boise Medical Center, Boise, ID
Saint Luke's Magic Valley Regional Medical Center, Twin Falls, ID

ILLINOIS
Rush University Medical Campus, Chicago, IL

IOWA
Jefferson County Hospital, Fairfield, IA

INDIANA
Indianapolis Community Hospital South, Indianapolis, IN
Saint Joseph's Regional Medical Center, South Bend, IN

MAINE
Orthopaedic Associates, Windham, ME

MASSACHUSETTS
Beverly Hospital, Beverly, MA
Brigham and Women's Hospital, Boston, MA
Children's Hospital, Boston, MA
Dana-Farber Center for Cancer Care, Boston, MA
Spaulding Rehabilitation Hospital, Boston, MA

MICHIGAN
Metropolitan Hospital, Grand Rapids, MI

NEW JERSEY
Hackensack University Medical Center Gabrellian Women's and Children's Pavilion, Hackensack, NJ
Holy Name Hospital, Teaneck, NJ

NEW YORK
Bedford Stuyvesant Family Health Center, Brooklyn, NY
New York Presbyterian Hospital, New York, NY
Risk Reduction Institute of Brooklyn, Brooklyn, NY

OHIO
The Christ Hospital, Cincinnati, OH
Salem Community Hospital, Salem, OH

OKLAHOMA
Muskogee Community Hospital, Muskogee, OK
Saint John Owasso Hospital, Owasso, OK

OREGON
Donald Dexter Dental Clinic, Eugene, OR
Oregon Health & Science University Patient Care Facility, Portland, OR
Salem Hospital, Salem, OR
Wellspring Medical Center, Woodburn, OR

TENNESSEE
Bon Aqua Health Care, Bon Aqua, TN

TEXAS
Christus St. Catherine Hospital, Katy, TX
Dell Children's Medical Center of Central Texas, Austin, TX

WASHINGTON
Saint Anthony's Hospital, Gig Harbor, WA

WISCONSIN
Amery Regional Medical Center, Amery, WI

VARIOUS LOCATIONS
US Department of Health and Human Services Critical Access Hospital Prototype (200 nationwide)

INTERNATIONAL
BHCI Birthing Home, Zamboanga City, the Philippines
Casa de Saude, Portugal (various locations)
CSSS de la Montagne, Montréal, Quebec, Canada
McGill University Health Centre, Montréal, Quebec, Canada