

November 12, 2014

Cost & Stringency Comparison Of NGBS to LEED-H Released

The Home Innovation Research Lab has released findings from an analysis and comparison of NGBS and LEED that estimates the additional costs for a typical, code-compliant single family house to be certified at each program's various levels. Additionally, the report compares the minimum improvement in energy efficiency that can be expected at each certification level.

The NGBS structure establishes more proportional consistency and equality across all sustainability areas discretionary points that come from areas of the user's choosing is much lower in the NGBS (16 - 22% of total points) than in either LEED system (64 - 82% of total points in LEED-H 2008 and 65 - 83% in LEED v4 HD&C). Certification costs vary significantly and cost advantages shift between programs as different compliance levels, climate zone and code scenarios are assumed

Mandatory costs associated with NGBS compliance are significantly lower than the prerequisite costs for either LEED system, so NGBS certification is therefore less costly than LEED at the Bronze/Certified and Silver levels. This advantage decreases or reverses at the Gold and Emerald/Platinum levels. . [\[Get the Full Report\]](#)

Notable Energy related findings include:

- LEED tends to result in higher energy performance than NGBS.
- NGBS and LEED typically result in a 12-15% performance advantage over the IECC 2009
- Climate Zones impact the disparity of performance achievements between NGBS and LEED
- NGBS shows the highest cost for administration and certification at the Bronze/Certified rating level. Certification Cost Comparison: NGBS \$630 vs LEED \$430 at Bronze Level (Using Climate Zone 5, 2009 IECC)
- Prerequisite Costs: NGBS \$2053 vs LEED-H 2008 \$3,879 and LEED v4 \$6,783

An evaluation for the "cost of certification compliance" for NGBS vs LEED, based on 2009 IECC code-

In This Issue

[Cost & Stringency Comparison Of NGBS to LEED-H Released](#)

[Green Survey: Greater Focus on Improving Health, Wellbeing, and Productivity of Building Occupants](#)

[Sea Level Rise Mapping Tool Available to Local Governments](#)

[Productivity, Health & Well-Being The Next Chapter in Green Building](#)

[Preventing Asthma Through Building Material Selection](#)

[Construction Jobs to Grow 10 Percent](#)

[Auto Dealers Attack Tesla](#)

[EPA/DOE Release 2015 Fuel Economy Buyer's Guide](#)

[Education Opportunities](#)

[Calendar of Events](#)

[Certification News](#)

[Recent Certifications & Registrations](#)

[FGBC Committee Meetings](#)

[Funding Opportunities](#)

[Job Opportunities](#)

[FGBC Welcomes New Members](#)

Quick Links

[Join FGBC](#)

[GreenTrends](#)

[Join Our Mailing List!](#)

Articles of Interest

[EPA/DOE Release 2015 Fuel Economy Buyer's Guide](#)

Education Opportunities

Nov. 13, 2014

compliant houses shows:

- NGBS cost of compliance at the Bronze level ranges from \$2,300 - \$3,000
- LEED-H 2008 cost of compliance at the Certified level ranges from \$4,600 - \$5,200
- LEED-H v4 HD&C cost of compliance at the Certified level ranges from \$6,400 - \$8,100
- NGBS cost of compliance at the Silver level ranges from \$3,700 - \$4,200
- LEED-H 2008 cost of compliance at the Silver level ranges from \$7,100 - \$10,300
- LEED v4 HD&C cost of compliance at the Silver level ranges from \$9,600-\$12,000

[Read the full report](#)

Green Survey: Greater Focus Is On Improving Health, Wellbeing, and Occupant Productivity

Key findings of Turner's 2014 Green Market Barometer show that companies remain committed to constructing green buildings and value the financial benefits they provide building owners and occupants. Of increasing importance among survey respondents are the benefits that green buildings provide for employee health and wellbeing and for hiring and retention of employees.

"While building owners continue to incorporate green features in buildings to reduce operating costs, we see more organizations paying closer attention to the positive impacts of green buildings on indoor environmental quality and employee satisfaction and productivity." said Michael Deane, chief sustainability officer. He continued, "We are also seeing, both in our own work and from the results of the survey, increased attention to maintaining essential building operations in the face of extreme weather events."

Key findings include:

- The financial factors most highly rated in the decision-making process to incorporate green features in construction projects were energy efficiency, asking rents, ongoing operations and maintenance costs, and occupancy rates.
- Several non-financial factors were highly-rated benefits of green buildings, including health and well-being of occupants, indoor air quality, employee productivity, impact on brand and reputation, and satisfaction of employees and occupants.
- The likelihood of incorporating water efficiency into new projects climbed from 57% in 2012 to 71% in 2014.
- The ability to maintain or quickly resume operations in the event of extreme weather conditions such as hurricanes, tornadoes, floods,

11 a.m. - 1 p.m.
Energy Star Portfolio Manager Training
Winter Park
Community Center
Winter Park, FL
[\[Register\]](#)

Dec. 5, 2014
FGBC Certifying Agent Annual Verification Course
Orlando, FL
[\[Register\]](#)

Calendar of Events

November 17-20, 2014
ARCSA Annual Conference
Phoenix Convention Center
Phoenix, AZ
[\[More\]](#)

December 5, 2014
Re-Energize Florida
Rosen Plaza Hotel
Orlando, FL
[\[More\]](#)

Certification News

Commercial
Registered: 31
Certified: 11

High Rise
Registered: 29
Certified: 6

Homes
Registered: 8786
Certified: 8343

Single-Family: 7001
Multi-Family: 1342

Land Developments
Registered: 62
Certified: 13

Local Government
Registered: 73
Certified: 51

FGBC Committee Meetings

Board of Directors
2nd Wednesday
Monthly
3 p.m.

Commercial
1st Tuesday
Monthly
2 p.m.

Education

and drought have made building resiliency a priority of executives.

- For the first time, more than half of the executives said the level of a vendor's sustainable practices was extremely or very important for their organization when choosing a supplier of goods and materials
- Respondents (43% compared to 17% in 2012) expressed a significantly increased interest in alternative green certification rating systems over LEED. [[More](#)]

See the companion story below on how design impacts worker productivity.

Sea Level Rise Mapping Tool Available to Local Governments

A few Florida counties are testing a computer mapping tool that details the vulnerability of their roads to rising sea levels. The University of Florida GeoPlan Center has developed the Florida Sea Level Scenario Sketch Planning Tool with funding from the Florida Department of Transportation Office of Policy Planning.

The mapping tool, which visualizes areas of transportation infrastructure that may be vulnerable to rising seas and inland flooding from 2020 through 2100, is intended for local governments to use as they make long-term plans for their infrastructure needs. The tool visualizes various sea level scenarios at future time periods in an effort to inform transportation planners and highlight infrastructure for potential avoidance, minimization, or mitigation.

Hillsborough and Broward counties are testing the mapping tool through a Federal Highway Administration climate resilience pilot project. Broward County also is testing the tool for three other South Florida counties that have also signed a compact to address climate change adaptation strategies. [[More](#)]

Productivity, Health & Well-Being The Next Chapter in Green Building

A new report, *Health, Wellbeing and Productivity in Offices: The Next Chapter for Green Building*, presents overwhelming evidence that office design significantly impacts the health, wellbeing and productivity of staff.

The report finds that a range of factors - from air quality and lighting, to views of nature and interior layout - can affect the health, satisfaction and job performance of office workers. The report also presents a simple toolkit that businesses can use to measure the health, wellbeing and productivity of their buildings and inform financial decision-making.

1st Thursday
Monthly
3 p.m.

High-Rise
3rd Tuesday
Monthly
11 a.m.

Homes and Affordable Housing
(Joint Meeting)
2nd Tuesday
Monthly
2 p.m.

Land Development
2nd Thursday
Quarterly
2 p.m.

Local Government
3rd Wednesday
Monthly
10:30 a.m.

Membership and Programs & Promotions
(Joint Meeting)
3rd Thursday
Monthly
2 p.m.

Funding Opportunities

[St. Johns River WMD Water Programs](#)

[South Florida WMD Water Programs](#)

[Southwest Florida WMD Water Programs](#)

FHFC Multifamily Energy Retrofit Program (MERP)
[\[More\]](#)

Job Opportunities

[APA Florida Job Board](#)

[Green Dream Jobs](#)

FGBC Welcomes New Members

Karin Wright
[Habitat for Humanity of Greater Miami, Inc](#)
Miami

Cheree Gulley
[Housing Finance Authority of Miami-Dade County](#)
Doral

Harry Tuttle

Some takeaways from the report are:

- Indoor Air Quality: Productivity improvements of 8-11% are not uncommon as a result of better air quality.
- Thermal Comfort: Studies consistently show that even modest degrees of personal control over thermal comfort can return single-digit improvements in productivity.
- Lighting/Daylighting: Good lighting is crucial for occupant satisfaction. Several studies in the last decade have estimated productivity gains as a result of proximity to windows, with experts now thinking that the views out are probably the more significant factor, particularly where the view offers a connection to nature.
- Noise: Being productive in the modern knowledge-based office is practically impossible when noise provides an unwanted distraction
- Noise distraction relates closely (although by no means solely) to interior layout. There are a whole range of fit-out issues that can have an effect on wellbeing and productivity, including workstation density and configuration of work space, breakout space and social space. [[More](#)]

[Habitat for Humanity of South Palm Beach](#)

Delray Beach

Sandy Roman

Roman Realty Group,
LLC
Windermere

Nino Griego

[itecdesign](#)
Miami Beach

Preventing Asthma Through Building Material & Product Selection

A new Healthy Building Network (HBN) report, *Full Disclosure Required: A Strategy to Prevent Asthma Through Building Product Selection*, provides information on how, through the careful selection of building materials and furnishings, reduce and even avoid exposures to certain chemicals that can lead to the onset of asthma. The report identified 20 top-priority asthmagens in nine chemical groups that are used in building materials and have a high likelihood of occupant exposure. These asthmagens are found in foam insulation, paints, adhesives, floors and carpets, among many other interior materials.

Additionally, it identified a dozen chemicals commonly used in building products that can impact the development of children's lungs at their earliest ages and lead to the onset of asthma. The report consider eight of these chemicals to be top priorities for consideration in asthma prevention strategies. These eight chemicals belong to a class of chemicals known as phthalates. Certain phthalates have been banned in many consumer products intended for use by children due to their suspected toxicity, but remain widely used in soft vinyl building products and furnishings.

According to the Centers for Disease Control, asthma rates in the United States are rising despite the proliferation of asthma control strategies, including

indoor air quality programs. As asthma affects more people, it becomes increasingly clear that new strategies need to be considered, focusing on the prevention of asthma onset. [[Full Report](#)]

In another report, "Phthalate-Free Plasticizers in PVC," HBN examined replacements for phthalate plasticizers in Polyvinyl Chloride (PVC) building materials. Plasticizers are added to PVC to make it flexible, but since they are not tightly bound to the PVC molecules, they migrate from PVC products. Phthalates, the most commonly used plasticizers in PVC, are known endocrine disruptors - chemicals that interfere with hormone signaling, which is especially critical to early childhood development. Additionally, many phthalates are known carcinogens and reproductive and developmental toxicants. Exposures to these toxic plasticizers from PVC products can occur throughout their lifecycle. Therefore, it is crucial that PVC products containing phthalate plasticizers be eliminated from the built environment. In response to consumer and regulatory pressures, PVC building products manufacturers have begun to offer phthalate-free products

Recommendation:

Due to its overall human health and environmental impacts from manufacturing to disposal, PVC should be a choice of last resort in the selection of building materials. If the use of flexible PVC is unavoidable, two bio-based products - Grindsted Soft-n-Safe (COMGHA) and Polysorb ID 37 (Isosorbide diesters) are well studied, appear to be the least toxic, and therefore should be preferred over the other plasticizers studied in this assessment. [[Full Report](#)]

Construction Jobs to Grow 10 Percent

Construction jobs in Florida should grow faster than other fields through 2017, according to a forecast released October 31. University of Central Florida economist Sean Snaith expects construction jobs to grow 10.4 percent over three years. Jobs in trade, transportation and utilities - which includes retail - are expected to grow 3.8 percent; professional and business services, 3.6 percent; education and health services, 2.2 percent; and leisure and hospitality, 2 percent.

Auto Dealers Attack Tesla

State legislatures across the country are trying to stall Tesla sales. Auto dealers are pushing back against the electric vehicle maker by invoking laws that prevent manufacturers from directly selling to consumers, which the California-based Tesla does.

Legislation restricting Tesla direct sales to consumers has been filed or passed in Arizona, Colorado, Georgia, Massachusetts, Michigan, Minnesota, Missouri, New Hampshire, New Jersey, New York, North Carolina, Ohio, Texas, Virginia, Washington, West Virginia and Pennsylvania.

Gasoline-powered vehicles still dominate auto sales, with more than 11.5 million sold this year through September, according to the National Automobile Dealers Association. But electric vehicles such as Tesla are catching on, with more than 45,000 sold this year, up from 35,000 a year ago. Hybrid vehicles contributed another 360,000 sales, and plug-in hybrid vehicles accounted for an additional 44,000. [[More](#)]