

# Green Trends

A COMMUNICATION SERVICE OF THE FLORIDA GREEN BUILDING COALITION

October 11, 2016

## Why Cities Matter for Sustainable Development

In many ways, cities are our greatest risk. The challenges presented by climate change, rapid migration, and disasters-both man-made and natural-most acutely affect cities. But cities are also our greatest opportunity. They are the places where innovation happens, where solutions that improve lives are born, where wealth generation is accelerated and where efficiency gains are most achievable. And as the world becomes increasingly urban, there has never been a more important time to be undertaking this work.

Urban Resilience is the capacity of individuals, communities, institutions, businesses, and systems within a city to survive, adapt, and grow no matter what kinds of chronic stresses and acute shocks they experience.

Chronic Stresses weaken the fabric of a city on a daily or cyclical basis. Examples include:

- high unemployment
- overtaxed or inefficient public transportation system
- · endemic violence
- · chronic food and water shortages.

Acute shocks are sudden, sharp events that threaten a city. Examples include:

- earthquakes
- floods
- disease outbreaks
- terrorist attacks

Improving the individual systems that make up a city will increase the resilience of the city overall. Resilient systems withstand, respond to, and adapt more readily to shocks and stresses to emerge stronger after tough times, and live better in good times.

Resilient cities demonstrate seven qualities that allow them to withstand, respond to, and adapt more readily to shocks and stresses.

 Reflective: using past experience to inform future decisions Join Our Mailing List!

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**ARTICLES OF INTEREST** 

<u>Cellulose Insulation - The</u> ABCs

Date of "Substantial Completion" Now Different For Each Subcontractor

New York's New Renewable Energy Standard

- Resourceful: recognizing alternative ways to use resources
- Robust: well-conceived, constructed, and managed systems
- 4. **Redundant**: spare capacity purposely created to accommodate disruption
- Flexible: willingness and ability to adopt alternative strategies in response to changing circumstances
- Inclusive: prioritize broad consultation to create a sense of shared ownership in decision making
- 7. **Integrated**: bring together a range of distinct systems and institutions

## [More]

Learn more about making resilient on Green!

Communities at the GreenTrends

Conference next week (Oct 19-21) in Hollywood.

www.GreenTrends.org

# Green Financing Programs For Multifamily Take Off

Fannie Mae, Freddie Mac, and the Federal Housing Administration (FHA) want to make it easier, and more cost effective, for multifamily owners to go green.

Each of the three entities now touts lending programs designed to recognize green building measures by taking the advantages of conservation into their underwriting and all-in rates. That means owners can get additional loan proceeds and better pricing, to make energy- and water-efficiency improvements on their properties. [More]

# Definitive Advice from the Industry's Best On Selling and Marketing Green

Builders haven't historically been known for their marketing savvy, and many green builders have told us over the years that they have struggled with communicating the benefits of their advanced offerings to homebuyers. Recently, production builders like Meritage Homes and KB Home have changed the game, marrying cost-effective, high-performance, resource-efficient, solar-powered homes and sophisticated marketing strategies.

C.R. Hero, vice president of environmental affairs for Meritage Homes, affirmed that both homes and the marketing of those homes have evolved substantiallymore so in the past decade than in the past 100 years. With advances in everything from energy-efficient products to home automation technology to

Orlando Has Highest Homebuilding Momentum in Nation

Ways to Make Homes & Towns More Age-Friendly

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### **Quick Links**

Join FGBC

**GreenTrends Conference** 

### FGBC Welcomes New Members

#### Leigh Newton

Habitat for Humanity of Greater Orlando Area Orlando

### Micha Morelisse

BouTeak by Jackie Morelisse Inc. Estero

#### Sean Gibbons

<u>City of Bonita Springs,</u> <u>Community Development</u> <u>Department</u> Bonita Springs

### Frank O'Neill

City of Venice Venice

**Education Opportunities** 

building science, green homes are safer, healthier, and more efficient and durable than ever before.

But, when marketing and selling green homes, says CR, the devil isn't actually in the details (referring to specific information about products like low-e windows, insulation packages, or water heaters). Rather, it's in a builder or Realtor's ability to translate the benefits of those details (products) into a story that inspires homeowners to make good decisions about why a particular home is the best choice for them.

When offering advice to fellow sales and marketing professionals, CR suggests creating a list of standard features that make green homes better, and then selling the benefits of those features so that homebuyers view them as essential needs (rather than wants.) "Building green isn't about spending money for a lower functioning product. Green homes cost less, last longer, are healthier to live in, and are better investments. They translate into higher appraisal values and sometimes provide a buyer with better underwriting options. So, green homes represent an opportunity for homebuyers to optimize their investments and purchase the best homes possible," he explains. [More]

Put Your Money on Green!



Hear nationally recognized appraiser Sandra Adomatis discuss "Getting the most out of your green appraisals" during the upcoming GreenTrends Conference next week in Hollywood.

## **Code Changes Offer More Duct Choices**

Two sets of code changes up for vote with the International Code Council next month would give builders greater flexibility in meeting the International Residential Code (IRC) and International Energy Conservation Code (IECC) in the areas of unvented attics and buried ducts. [More-Part 1] [More Part 2]

## Developing Tools to Measure IAQ

We know high-performance buildings can lead to problems with IAQ, so researchers are working on ways to solve the issues. A better building envelope and improved ventilation systems are important first steps in improving the problem. But without knowing exactly how good or bad air quality inside a home actually is, these problems can't be measured. That's why the Lawrence Berkeley National Laboratory is working to develop an IAQ scoring tool.

### October 18-19, 2016 FGBC Certifying Agent Designation Class

FSEC [Register]

#### November 2-4, 2016 Water Efficiency Rating Score (WERS) Training & Exam

St. Johns River
Management District
Service Center
Maitland, FL
[Register]

### November 10, 2016 The Greening of a Small City, Key West

9 a.m. - 12 p.m. New Key West City Hall [More]

#### January 10, 2017 Florida Water Star AP Training

Miami-Dade County Extension Office Homestead, FL [More]

**Energy Star Webinars** 

Florida Solar Energy Center (FSEC)

**Building America Webinars** 

Build Your Future Scholarships

#### Calendar of Events

## October 17-19, 2016 CREF 2016 InterContinental Hotel Miami, FL

[More]

(FGBC 15% Discount Code - CREF2016-FGBC)

## October 19-21, 2016 GreenTrends Conference

Seminole Hard Rock Hotel & Casino Hollywood, FL [More]

### October 29, 2016 USGBC-South Florida Gala Verde

West Palm Beach, FL [More]

#### November 3-5, 2016 FHBA Fall Leadership Conference

Hilton Sandestin Beach Golf Resort & Spa Miramar Beach, FL [More]

December 5-9, 2016 ARCSA 2016 Annual The scorer will function much like a HERS score. It will take a series of measurements conducted by a third party to determine the home's IAQ rating.

When developing new scoring systems, researchers typically use a relative score, meaning the score is relative to a reference home. For example, most energy scoring systems take energy ratings of a standard home and measure them against measurements from a comparison home to get the score. Because there is no current IAQ standard for researchers to use as a comparison, the Lawrence Berkeley National Lab is creating a rating system that's absolute.

The score will depend on a number of house characteristics. Some will be more basic, like adhering to ASHRE Standard 62.2 for ventilation, which includes factors such as installing exhaust fans in bathrooms and kitchens. Another is using a system that dilutes indoor emissions with fresh outdoor air.

It also will take into account using building materials that are low emitting, like VOC paints and certified wood products that are low formaldehyde. A homeowner could get a higher score if the home includes a radon control system, carbon monoxide detector and a whole-house filtration system to remove indoor particles.

"Particles are the number one pollutant in homes," says Iain Walker, lead of the residential building group for Lawrence Berkeley National Laboratory. "If you put in a good filter and have a control system that removes particles with heating or cooling, it would improve your score."

The score also depends on moisture prevention. For example, a homeowner that seals the ground from the crawl space to prevent moisture entry would earn a higher score. Homeowners in humid climates would earn a higher score by installing a humidifier.

The score also could be affected by the layout of the home. "In most new construction, the house has a garage attached. We put things like cars, gasoline-powered lawn mowers, old cans of paints and chemicals in there," Walker says. "If this is the case, homeowners can earn an improved score if they have done a good job of air sealing between house and garage." [More]

# Lstiburek on Air Sealing & Compartmentalizing Townhouses and Row Houses

Row Houses - Beautiful until you try to have them meet building code air leakage requirements. No one really cared until recently. Ah, we had firewalls, but did we really care? Nope. We didn't measure the air

### Conference Reinventing Water Supplies Las Vegas, NV [More]

December 11-13, 2016 FL Public Transportation Assn. Annual Conference Jacksonville, FL

#### **Certification News**

#### **Homes**

[More]

Registered: 13,693 Certified: 13,543

## **Commercial** Registered: 45

Certified: 15

## High Rise

Registered: 54 Certified: 17

#### **Land Developments**

Registered: 62 Certified: 13

#### **Local Government**

Registered: 86 Certified: 62

#### **Recent Certifications**

#### **Icon Bay**

Location: Miami Type: High-Rise Certified: 8/15/16 Score: 55 Level: N/A

#### **Recent Registrations:**

#### Miami Center 747

Location: Miami Type: High-Rise Size: 329,000 s.f.

#### Wynwood 25

Location: Miami Type: High-Rise Size: 456,316 s.f.

#### **FGBC Committee Meetings**

#### **Board of Directors**

2nd Wednesday Monthly 3 p.m.

#### Commercial

1st Tuesday Monthly 2 p.m.

#### Education

1st Thursday Monthly 3 p.m. leakage of the units themselves. The firewalls did separate the units from one another from "a fire perspective" but the air leakage around them, along them and through them was pretty much ignored.

Now we have a building code requirement to air seal townhouses and row houses....and that means we actually measure things. Before we measured things we just said we were doing good things. Nothing like a tested metric to mess things up. Anyone think it is easy to get to 3 ach@50 Pa in a townhouse or a row house? Especially ones with "tuck in" garages with living space over them? Or with walls that off-set from one unit to another?

I want to make things easy for all of you. Ready? The two most important decisions to make are where to locate the air handler and where to locate the ductwork. Make these two decisions correctly and you are likely to meet the code - if you also do the other stuff that I am going to address. Don't make them correctly and the rest of the stuff I am going to address will not save you. [More]

## EB-5: Alternative Financing Moves Into Commercial



The Highlands a planned North Miami Beach condominium is seeking EB-5 capital.

What was once scarcely used as a source of development financing now has a waiting list. Condominium projects, and more recently hotels and even restaurants, are increasingly turning to EB-5 investors to fund their construction and business expansion.

"It's very difficult to get financing," said Roger Bernstein, an immigration attorney who heads the EB-5 For Florida Regional Center. He said the tight lending environment is motivating developers and entrepreneurs to explore alternative financing like EB-5. The visa program grants permanent U.S. residency to investors and their immediate family members if they create at least 10 domestic jobs and invest a minimum of \$500,000 in U.S. real estate projects. [More]

#### GreenTrends

1st Tuesday Monthly 4 p.m.

#### High-Rise

3rd Tuesday Monthly 11 a.m.

#### Homes

2nd Tuesday Monthly 2 p.m.

#### Land Development

4th Wednesday Monthly 2 p.m.

#### **Local Government**

3rd Thursday Monthly 10:30 a.m.

#### Membership (New)

3rd Wednesday Monthly 3 p.m.

#### **Programs & Promotions**

3rd Tuesday Monthly 3 p.m.

#### **Funding Opportunities**

St. Johns River WMDWater Programs

South Florida WMD Water Programs

Southwest Florida WMD Water Programs

FHFC Multifamily Energy Retrofit Program (MERP)

### **Job Opportunities**

APA Florida Job Board

**Green Dream Jobs** 

Florida Facility Managers Assn Job Board

# CxEnergy 2017 Conference & Exposition Scheduled for April 2017 in Orlando



Presented by the AABC Commissioning Group (ACG), the Energy Management Association (EMA) and the Associated Air Balance Council (AABC), the CxEnergy Conference & Expo has become the go-to event for commissioning, test and balance, and energy management professionals. The conference offers a broad range of topics over a day and a half of concurrent educational sessions while providing plenty of structured time to visit carefully targeted vendors in the Expo Hall, and network with colleagues, speakers, and other experts. CxEnergy will once again draw hundreds of the nation's leading commissioning experts, energy management professionals, MEP engineers, HVAC testing professionals, facility managers and building owners.

CxEnergy's highly regarded technical program features over 30 one-hour sessions covering topics including commissioning, energy management, building and facility specialty systems, new technologies, regulatory & code compliance and more. CxEnergy's Exposition Hall showcases the variety of companies providing leading-edge commissioning and energy management products and services as well as controls, instruments, and metering devices. CxEnergy also offers pre-conference certification opportunities for Commissioning Authority (CxA) and Energy Management Professional (EMP). For questions, please contact ACG Headquarters at Anna@Commissioning.org or call 202-737-7775. FGBC members save 10% on registration with discount code FGBC10. Register today: www.CxEnergy.com

Save the Date USGBC Gala Verde

October 29, 2016 Hilton West Palm Beach 600 Okeechobee Blvd West Palm Beach, FL

Hosted by the USGBC South Florida Chapter, GalaVerde recognizes those outstanding projects, inspirational businesses, dedicated



individuals, and instrumental Chapter members who are LEEDing the way to a more sustainable built environment in the South Florida community. [More]

# KB Home ProjeKt Looks at the Future of Green Building

Presented at the 2016 Greenbuild Expo, the KB Home ProjeKt was designed to serve as an unprecedented time-travel look ahead to the years 2020 and 2050 as a way to bring new perspective and strategic scenario-planning opportunities to builders and consumers alike. The home incorporated a range of future and current technologies that are reshaping high performance homes. [More] [Photos]

## **New Eco-Friendly Product Alternatives**

ARCHITECT assistant editor of products and technology Selin Ashaboglu presents six alternative options for fixtures, furnishings, and building materials that improve traditional products with ecofriendly features. Some highlights include:

### Plank, made by Baux

Plank is a new line of modular, recyclable acoustic wall panels made of wood wool, cement, and water, and designed by Swedish construction material company Baux. Plank comes in gradated beige in 45.6" by 11.4" and 22.8" by 5.7". The tiles mitigate sound as well as absorb and release heat to help maintain a room's temperature, according to the company.

#### Colorburst, from Viridian Reclaimed Wood

Reclaimed oak from tractor-trailer truck decking and pine and fir granary beams are repurposed in this colorful line of panels from the Portland, Ore.-based lumber company. Available in 0.38" to 0.63" thicknesses, 5" widths, and variable lengths from 2' to 8', the FSC-certified panels come in a choice of robin egg blue (top), haute pink (middle), viridian green (bottom), and cascade white, along with custom colors. viridianwood.com

## Zip System R-9 R-Sheathing, from Huber Engineered Woods

The company adds R-9 insulation board to its sheathing line for residential, multifamily, and light commercial applications, helping projects aiming to meet the prescriptive foam insulation requirements of the 2015 International Energy Conservation Code. The sheathing includes a water-resistant barrier that can be made airtight with the company's flashing tape. The system has no added urea formaldehyde and uses Sustainable Forestry Initiative-certified wood. Panels come in nominal 4'-by-8' sheets. [More]

## **Alpen R10 Windows**

A new window from Alpen High Performance Products achieves an R value previously unheard of in the U.S. The Zenith series ZR10 double-film fixed picture window insulates nearly as well as some walls. It was verified to deliver a .10 U-Factor, which equates to an R10 insulating factor [More]

## Model Homes Underway in Babcock Ranch

Kitson & Partners announced that Naples-based Stock Development has started construction of five furnished lakefront model residences in the Lake Timber neighborhood at Babcock Ranch. Babcock Ranch is a new 18,000-acre eco-centric, solar powered town being developed by Kitson east of Fort Myers, off State Road 31 in Charlotte County.

Homes by Towne has also started construction of furnished models in Lake Timber, the first neighborhood to be built at Babcock Ranch. Fox Premier Builders and Florida Lifestyle Homes of Fort Myers will begin construction of additional models between now and mid-October. Completed models are expected to be open for viewing in early 2017. Each home at Babcock Ranch is being built to Florida Green Building Coalition Certification standards. [More]

Put Your Money on Green! his passion, vision and innovations taking place right now at Babcock Ranch - the

world's first solar town. Hear his keynote address at the <u>GreenTrends Conference</u> in Hollywood, Oct 20, 2016.

## Rocking the Cradle to Cradle

The gorilla in the room of many a sustainability conversation is how to make the math work financially. Who'll pay? What's the return on the investment in construction processes and outcomessheltered spaces--that are smarter and better performing ecologically? How can the value--in cost of total ownership, or saved energy bills, or measurable reduction of carbon production--justify the expense

somebody has to go to to move the needle in the right direction?

Each of these questions may cause a different level of pursuit, discovery, and inquiry, when you supply for each a two-word answer: "the children."

If every process, product, material, and design made were made with that answer fully in mind would the debate of cost and value around intending and achieving more sustainable practice and results in home building change? [More]

## Regional Rail Service Proposed as I-75 Relief

A task force created by the Florida Department of Transportation to study ways that Florida can provide relief to I-75 has competed its recommendations in a report released October 1, 2016.

The task force studied a six county area between Tampa and Jacksonville. This study area comprised Alachua, Citrus, Hernando, Levy, Marion and Sumter Counties. The final report's recommendations come in three categories: immediate actions, near-term changes to existing corridors and long-term considerations for future corridors. Proposed actions included improving safety through operational corrections, providing financial support to local governments for improving local roads near I-75, supporting intercity bus operations, and expanding regional rail service. [More] [Report]

# How To Evolve Your Sustainability Reporting Process

Reporting sustainability metrics is becoming a widely accepted practice. Regulatory agencies are requiring the reporting of EHS performance data, and more customers, partners, investors, and non-governmental organizations (NGOs) than ever are requesting that same data. There are numerous benefits to having all the information about metrics in hand. Companies that have consistent, comprehensive data demonstrate responsibility, accountability, and commitment to sustainability. They can also score well in the many public indices that have emerged to track progress against commitments. At the same time, this is still a relatively new business process for many, and the emerging process is rife with opportunities and pitfalls.

One thing is for sure: Sustainability reporting is here to stay. The scope will only expand in the coming years. Fortunately, whether your company has just started to work on sustainability reporting or is in the

middle of a rapidly expanding program, there is light at the end of this tunnel.

**Start with a solid foundation**. Starting with a spreadsheet can help meet short-term deadlines. However, in the long-term you want to consider systems that better facilitate data entry, provide robust audit logs, and have the capacity of linking the sustainability reporting with the regulatory reporting process. [More]

# Bill Gates, Total Invest \$14M In Bioproduct Technology

Microsoft founder Bill Gates and global energy giant Total are investing \$14 million to help commercialize a technology that may produce cheaper bioplastics and biofuels.

Renmatix's Platrose technology converts waste biomass to cellulosic sugars, which then can be used as feedstock for chemicals and fuels. This process uses supercritical water instead of enzymes, solvents or acids to reduce costs, the company says.

The company won a 2015 Presidential Green Chemistry Challenge Award for its technology, which the White House says could result in a sizeable increase in the production of plant-based chemicals and fuels. [More]