

November 22, 2016

[Join Our Mailing List!](#)



US National Electric Vehicle Charging Network To Span 25,000 miles

The U.S. Department of Transportation (DOT) will create 48 charging corridors running along [55 interstate highways](#). When it's fully established, the DOT is hoping its expanded charging infrastructure will cover almost 25,000 miles of highway. The plan calls for charging stations every 50 miles along the corridors. Those stations will be identified by standard Federal Highway Administration signs, just like gas stations and rest stops.

Along with the electric charging corridor, the push to get people behind the wheel of electric cars has extended to state government fleets. Twenty-four state and local governments have committed to the electrification of their fleets, which will bring about around 2,500 new electric car purchases in 2017 alone. [\[More\]](#) [\[Map\]](#)



Nano Concrete Could Hugely Impact Housing

In This Issue

[US National Electric Charging Network to Span 25,000 miles](#)

[Nano Concrete Could Hugely Impact Housing](#)

[Sounding the Alarm on Code Compliance Costs](#)

[Solving the Problem Between Climate Change Debate and Actions](#)

TECHNOLOGY UPDATE:
[Flexible Solar Tiles Making Move Inside To Capture & Recycle Artificial Light](#)

[How to Get Home Buyers to Go Green](#)

[Making Older Condo Buildings More Eco-Friendly](#)

[Will Florida Have Enough Water by 2070?](#)

[AIA COTE Overhauls Its Top Ten Awards Criteria](#)

MEMBER SPOTLIGHT: [VBA Design](#)

ARTICLES OF INTEREST

[LED Lights Powered by Living Organisms](#)

[What Will A Trump Presidency Mean for Florida's Environment?](#)

Quick Links

[FGBC Welcomes New Members](#)

[Education Opportunities](#)

[Calendar of Events](#)

[Certification News](#)

[Recent Certifications](#)

[FGBC Committee Meetings](#)

[Funding Opportunities](#)

[Job Opportunities](#)

Articles of Interest

[LED Lights Powered by Living Organisms](#)

[What Will A Trump Presidency Mean for Florida's Environment?](#)

Quick Links

A group of scientists focused on nanocrystals were brought together by the National Science Foundation and Purdue University. They discovered a stronger, more flexible alternative to concrete. The group proved that the use of cellulose nanocrystals can increase the flexural strength of concrete by 30%. Their discovery outperforms alternatives in strength, impact resistance, and flexibility.

"It's well known that concrete is the second most used material by mankind behind water," Youngblood explains. "To prepare cement, you use limestone in a giant furnace, and the furnace produces a lot of CO2. Which means that there is a lot of impact in the environment. If you could improve the strength and use less cement, then you are reducing the impact on the environment. If you have 30% stronger concrete, then you may be able to use 30% less and move the needle that far on the impact."

The group also notes that cement contributes to 5% of the world's CO2, so any improvement would have a massive and lasting impact on the health of the environment. [[More](#)]

Sounding the Alarm on Code Compliance Costs

Most multifamily owners are familiar with reserve requirements for items such as fire alarms and alarm replacement. Yet those owners may be surprised to learn that complying with the latest fire code changes can jeopardize statutory caps on property tax increases. In fact, recent changes to the International Fire Code (IFC) could substantially increase fire safety requirements, trigger loan defaults and escalate repair and property tax costs for apartment owners. [[More](#)]

Solving the Problem Between Climate Change Debate and Actions

By Dr. Deborah Brosnan, Arlington, VA



FGBC Welcomes New Members

Mariellen Calabro
[City of DeLand](#)
DeLand

Lara Kuleshova
[City of Tallahassee](#)
Tallahassee

Ashantae Green
Jacksonville

Ren Carotti
[Carotti Engineering](#)
Oneco

Mary Flynn
Keys Affordable Development
Merritt Island

Jessica McPhillips
Keys Affordable Development
Merritt Island

Will Dunn
[Davis Dunn Construction](#)
Destin

Donna Waldrep
[Sod Solutions](#)
Mr. Pleasant, SC

Brianne Heffner
[Southport Development](#)
Tampa

Education Opportunities

January 10, 2017
Florida Water Star AP Training
Miami-Dade County Extension Office
Homestead, FL
[[More](#)]

February 9, 2017
FGBC Certifying Agent Annual Verification Class
Orlando, FL
[[Register](#)]

May 11, 2017
FGBC Certifying Agent Annual Verification Class
Fort Myers, FL
[[Register](#)]

[Energy Star Webinars](#)

[Florida Solar Energy Center \(FSEC\)](#)

[Building America Webinars](#)

[Build Your Future Scholarships](#)

[Calendar of Events](#)

The disconnect between the climate change "debate" in politics and climate change "action" on main street couldn't be greater.

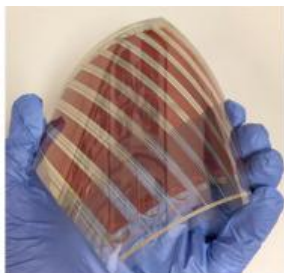
Amid political disinterest and denial, I flew to Florida to address the annual convention of the Florida Green Building Coalition. When I got to the convention, nobody was debating climate change. But for a different reason. They were too busy dealing with it.

Knowledge that can help those engaged in this work is frequently not communicated to them. Three kinds of information that can help them to shape their innovations and actions are:

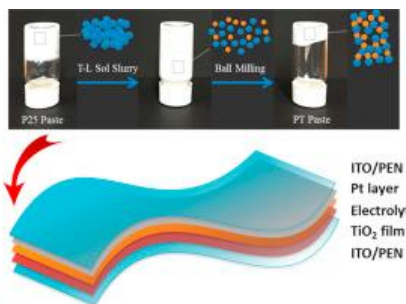
1. Knowledge of the existing or upcoming treaties, laws and policies that are likely to affect them. For instance, CoP21 and a recent US Appeals court ruling pave the way for Carbon taxes and Carbon offsets.
2. Awareness of the incentives and ordinances that are emerging locally across the country.
3. Understanding of the local and science-based climate-change projections that can lead to workable solutions.

Climate change has become a bottom-up issue. Individuals and the private sector are no longer waiting for Washington to decide whether it is real or important. They are taking the lead. [\[More\]](#)

TECHNOLOGY UPDATE: Flexible Solar Tiles Making Move Inside To Capture & Recycle Artificial Light



Flexible Dye Sensitized Solar Cell Module



Roofs have long been the realm of solar panels, right up to Tesla's announcement a few weeks ago of energy-harvesting roofing tiles, but solar panels can also be hiding in windows and walls, and soon, might make their way indoors too. A Virginia Tech team is developing low-cost, flexible solar tiles that could be incorporated into curtains and wallpaper to capture natural sunlight and artificial light.

Flexible and less than half a millimeter thick, the researchers' new solar panels are each palm-sized and can generate about 75 mW of power, but can be scaled up in rolls to be used in curtains, window shades and wallpaper. They're made using a screen-printing process that adheres a layer of titanium oxide paste

December 5-9, 2016 ARCSA 2016 Annual Conference Reinventing Water Supplies

Las Vegas, NV
[\[More\]](#)

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

Jacksonville, FL
[\[More\]](#)

December 14, 2016 Performance Construction Workshop & Roundtable Networking Event

Venice, FL
*Hosted by Mitsubishi
Electric & Habitat for
Humanity South Sarasota
County*
[\[More\]](#)

January 10-12, 2017 International Builders Show

Orlando, FL
[\[More\]](#)

March 12-15, 2017 Southeast Recycling Conference & Trade Show

Hilton San Destin Golf
Resort & Spa
Destin, FL
[\[More\]](#)

April 24-27, 2017 CxEnergy Conference & Expo

Omni Orlando Resort
At ChampionsGate
Orlando, FL
[\[More\]](#)

Certification News

Homes

Registered: 13,887
Certified: 13,803

Commercial

Registered: 45
Certified: 15

High Rise

Registered: 54
Certified: 18

Land Developments

Registered: 62
Certified: 13

Local Government

Registered: 87
Certified: 63

Recent Certifications

City of Aventura

Location: Aventura
Type: Local Government

onto a thin, flexible base, making them fairly cheap to produce. [[More](#)]

How to Get Home Buyers to Go Green

What does green mean to the average home buyer? And how can they qualify it?



Manny Gonzalez, principal at KTGy and architect on the Greenbuild KB Home ProjekT, says that the most digestible way for home buyers to understand green is in cost savings. He advocates for the HERS Index, which is a measurement of a home's energy efficiency that values the energy features in terms of their efficiency and in terms of the expected cost of utility bills.

Now, that's something a home buyer will understand. Plus, it will allow them to compare two same-priced homes side by side along with each home's utility costs to see which is the better long-term purchase.

KB Home produces an annual sustainability report showing the measures of sustainability incorporated into their homes and the impacts of those measures as it relates to cost savings for homeowners. It's an impressive read. [[More](#)] [[Sustainability Report](#)]

Making Older Condo Buildings More Eco-Friendly

Condos produce some of the highest levels of carbon dioxide emissions in the United States each year, experts say. Of course, constructing a building using sustainable energy sources is probably the most sensible way to go to try to reduce a carbon footprint. But what do you do if you're in an old building with antiquated infrastructure?

According to the U.S. Green Building Council, commercial and residential buildings account for more than 39 percent of the carbon dioxide emissions in the United States each year. Other statistics show that buildings account for almost half of carbon dioxide emissions. Most of these emissions come from the combustion of fossil fuels to provide heating, cooling and lighting, as well as appliances and electrical equipment.

Several condo associations are introducing eco-friendly features as they retrofit their older buildings. Some of the energy efficiency improvements include replacing older laundry machines with highly efficient models, installing solar thermal panels on the roof and swapping out inefficient lightbulbs for energy saving bulbs.

To avoid upfront costs for a building, HOAs can turn to

Certified: 11/4/16
Score: 32
Level: Silver

Beachwalk Resort

Location: Hallandale Beach
Type: High-Rise
Certified: 10/7/16
Score: 51
Level: N/A

Recent Registrations:

Village of Wellington

Location: Wellington
Type: Local Government
Size: 61,500

Miami Center 747

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

High-Rise

3rd Tuesday
Monthly
11 a.m.

Homes

2nd Tuesday
Monthly
2 p.m.

Land Development

4th Wednesday
Bi-Monthly
2 p.m.

Local Government

3rd Thursday
Monthly
10:30 a.m.

Programs & Promotions

3rd Tuesday
Monthly
3 p.m.

Funding Opportunities

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

[South Florida WMD Water Programs](#)

[Southwest Florida WMD Water Programs](#)

[FHFC Multifamily Energy](#)

energy management investor firms that cover the initial costs and customize energy savings plans for businesses and buildings. [\[More\]](#)

[Retrofit Program \(MERP\)](#)

[Job Opportunities](#)

[APA Florida Job Board](#)

[Green Dream Jobs](#)

[Florida Facility Managers Assn Job Board](#)

Will Florida Have Enough Water by 2070?



During the next half century, urban sprawl across Florida could double the water consumption of cities and suburbs, according to a new study released.

It's a thirst Florida will be hard pressed to quench without putting natural resources at risk or making big improvements in conservation, water reuse technology and landscaping practices.

How do we move this discussion from the theoretical to what steps actually should be taken? Below are a series of recommendations to more effectively manage Florida's water supply for the benefit of residents, agriculture and the environment alike:

Expand Public Water Conservation Efforts

- Increase funding and outreach for the Florida Water Star and Florida-Friendly Landscaping™ programs to promote greater water conservation in new and existing development
- Require Florida Friendly Landscaping™, manual irrigation, soil moisture sensors, or comparable water conservation technology for all new development
- Require permitted water users to monitor the amount of groundwater used
- Partner with developers and local governments to establish conservation goals, water budgets and water use monitoring strategies prior to the approval of new development
- Update the Florida Building Code to require indoor and outdoor water efficiency standards for new construction and major remodeling
- Adopt registration and training standards for irrigation professionals
- Establish conservation rate structures that incentivize lower levels of water consumption
- Construct and incentivize the use of reclaimed water facilities

Reduce Personal Water Use

- Use Florida-Friendly Landscaping™ and other measures to reduce or eliminate landscaping water use, and seek formal Florida-Friendly Landscaping™ recognition
- Lessen the need for irrigation by using the right plants in the right locations, grouping them according to water needs, and using rain barrels

- or cisterns to capture rainwater for irrigation
- Reduce stormwater runoff through mulching plant beds, using porous surfaces for patios, walkways and driveways, and creating swales or low areas to hold and filter water on your property
- If an automated irrigation system is used, ensure that it is designed and operated to meet strict water conservation criteria including drip systems, soil moisture sensors, automatic rain shutoff sensors and/or other technology to significantly reduce water use
- Make sure the irrigation system is calibrated correctly and check it regularly for breaks and head alignment
- Do not water if it has rained in the last 24 hours or if rain is forecast in the next 24 hours
- Select Florida Water Star certified properties when purchasing a new home, and follow Water Star guidelines when remodeling an existing home
- Use Water-Sense labeled high-efficiency appliances to significantly reduce indoor water consumption

[\[More\]](#) [\[Study\]](#)

AIA COTE Overhauls Its Top Ten Awards Criteria

With the increasingly higher performance expectations for buildings, the AIA Committee on the Environment upped the ante on its Measures of Sustainable Design for its annual Top 10 awards recognition program.

AIA's "Measures of Sustainable Design" offer a very specific vision for what "sustainable" means in the context of design. This has been quite different from green certification frameworks such as the FGBC Florida Green and LEED, which focus on technical performance, not design excellence.

Until 2017, the COTE Top Ten award recognized 10 projects based largely on predicted performance, while award recipients from previous years were eligible to submit post-occupancy data and narratives to be recognized with a single COTE Top Ten Plus award.

In 2017, these separate tracks are merged: The 'Plus' designation will denote projects with exemplary actual performance and post-occupancy lessons. There will be only ten award recipients total, and previous Top Ten award recipients are ineligible to submit.

Project teams are strongly encouraged to submit projects for which performance and occupant satisfaction data are available a period of 12 months or more with at least 75% occupancy. There is no time limit for submission after project completion. [\[More\]](#)
[\[New Top Ten Measures\]](#)

MEMBER SPOTLIGHT:
VBA Design, Panama City, FL



**Victoria
Williams
President**

[VBA Design](#) is a certified Woman Owned Small Business formed in 2012 that provides superior architectural and interior design services to the private sector and Public/Governmental clients with high level design quality. We do this with LEED Certified Professionals, knowledgeable construction cost estimations and high client involvement. VBA Design is licensed in four (4) states, Alabama, Florida, Georgia and Louisiana with a host of credentials including FDOT DBE Certified, WOSB Certification in the state of Florida, LEED AP BD+C and over 20+ years' experience. Recent projects include hospital renovations, K-12 campus planning and facility design, warehouse and manufacturing, worship assemblies, homeland security and restaurants.



Visit our website: www.vbadesign.us

We believe that design is the poetry of the soul that should engage, nurture and delight those it serves. By truly listening to our clients and engaging them throughout the design process, VBA Design is privileged to be designing a better experience for our clients.