

## Green Building Institute E-Newsletter

**Home Energy Audits**

**Upcoming Classes & Events**

**Online Auction for Products & Services**

**Only 46 days until the St. Thomas Vacation Raffle drawing!**

**Featured Members**

**Foundation Supporter**

Natural shade and windbreak



Crawl space with incompletely sealed pipes



Duct work junction (often a source of leakage - this one in the Wood home is taped and sealed with

**Dear Lynn,**

Hope you're enjoying your summer!

The Green Building Institute is revving up for the fall class line-up. Just added - Earth Home with John Spears.

Also, check out the auction items -all ready for bids!

Hope to see you at a class soon!

*Hannah*

---

---

### **Home Energy Audits**

*Q&A with Instructor Jim Conlon*

This month, Green Building Institute Executive Director, **Hannah Wood**, spoke with **Jim Conlon** of Elysian Energy. Jim instructs The Green Building Institute's "Intro to Home Energy Audits" class.

**Hannah:** In the homes you see, what are the major contributors to energy loss?

**Jim:** Since the heating load in this area (the Mid-Atlantic) accounts for about 50% of a "typical" homeowner's utility costs, the major opportunities for savings are usually found in the following areas:

- Old or poorly maintained HVAC equipment
- Inadequate or damaged insulation
- High levels of air exchange (i.e. a "leaky" or drafty home)

These are the "biggies." Of course behavior, damaged duct work, and hot water heating equipment can play a part as well, but time and again these are major opportunities for savings.

One common misconception is that new windows will help with bills. The reality is that windows are very expensive as pay back analyses I've done range from

mastic)



Inadequate insulation in the floor joist behind knee wall



Low levels of insulation - note the exposed floor joist which is only a 2x4. Good insulation would be 12 inches or so.



**Join our mailing list!**

 

20-50 years, and they aren't really there for efficiency in the first place. That is to say that windows are excellent for ventilation, natural light and a view. To generalize from an energy auditing perspective, "the best windows still make bad walls."

**Hannah:** What does the average home energy audit cost?

**Jim:** A few hundred bucks. The ballpark I've seen for properly trained and certified energy auditors is \$300-\$500 depending on the size of the home. This includes a consultation, site visit and energy report.

**Hannah:** When is the best time to do an energy audit?

**Jim:** Unquestionably the best time to do an energy audit is before improvements are done. Quite often the diagnostics and improvement analyses generate recommendations that are different than the homeowner's. I remind homeowners frequently that making home improvements without an energy auditor's recommendations is kind of like performing surgery on yourself before you get a doctor's opinion. I think my customers value the third party objectivity since I'm not there to sell them anything besides information.

One other note about the value of an energy audit: all things equal, utility rates have increased substantially in this area in the last year and a half. That means that historic usage patterns will cost substantially more.

**Hannah:** What are the differences between residential & commercial audits in terms of the process?

**Jim:** I approach residential & commercial differently depending on the expectations of the person, people or organization involved. For instance, a homeowner may want to see my report. That's it. Of course, an energy auditor should be willing to walk through the process and explain the concepts involved in building performance, but that depends on the homeowner. Interested homeowners tend to be my favorite customers because they're active listeners, and they value and appreciate the insights provided.

Commercial audits differ somewhat in that the opportunity for collaboration may be bigger. A homeowner's questions are "How can I save some dough? How can I lower my environmental impact? What should I do next?"

Similar questions are relevant to commercial audits, but the questions are more involved. Questions to ponder for commercial audits are:

- What are the immediate priorities?
- What are long term priorities?
- Is the energy audit one in a bundle of initiatives?
- Are there metrics in place to provide data going forward (i.e. when the energy auditor is off-site)?
- Are the employees (i.e. the primary initiators of usage) involved?
- Is this an opportunity to increase morale or dialogue?
- How will taking a proactive role in efficiency be communicated to stakeholders both internally and externally?

Hannah asked Jim to do an energy audit on her parents' house in Norfolk, VA. Check out the photos on the left and check back on the homepage for the link to see the actual audit report.

Thanks Jim!

---

---

### Upcoming Classes & Events

[Green Building Institute](#) classes in **CAPS**.

*All Green Building Institute classes are held at:*

The Green Building Institute

7761 Waterloo Rd.

Jessup, Maryland 20794

**Thursday, August 2, 2007**

8:30 a.m. - 5:00 p.m.

[Green Advantage Residential Workshop](#)

Civic Works & USGBC Baltimore Chapter

Pearlstone Conference Center

Reisterstown, MD

**Thursday, August 2, 2007**

7:00 p.m.

**Maryland's and The Bay Region's Inconvenient Truth:**

The Bay is in dismal shape and clean-up goals are not

being met. Sprawl and agricultural pollution continue to choke The Bay - What needs to be done and how can we achieve it?

Presenter: **Senator Gerald W. Winegrad**

Sponsor: [The Alliance for Sustainable Communities](#)

**Senator Gerald W. Winegrad** is a former State Senator from Annapolis and was the leading environmentalist in the Legislature who was responsible for many great Bay initiatives including the phosphate detergent ban. He Chaired the Senate Environment and Chesapeake Bay Subcommittee and served on the Chesapeake Bay Commission for 12 years. In 2002 he was presented the prestigious Life Time Achievement Award by the Chesapeake Bay Foundation.

Calvary Methodist Church  
301 Rowe Blvd, Room 102, the Library  
Annapolis, MD

**Saturday, August 4, 2007**

8:00 a.m. - 4:00 p.m.

**[D.C. Green Works - Tool Sale!](#)**

**Items include:** shovels, rakes, tools for making edges, chainsaws, large tree dollies, loppers, hand pruners, trowels, spades, 20 bicycle helmets, desks, metal file cabinets, lumber, rope, harnesses, 2 incomplete rainbarrels + material to finish them, working dishwasher.

Contact: (202) 518-6195

D.C. Greenworks  
1701 6th Street, NW  
Washington, D.C. 20001

**Sunday, August 5, 2007**

2:00 p.m. - 4:00 p.m.

**[Kilowatt Ours Film Screening](#)**

This captivating documentary reveals the underreported side effects resulting from America's voracious appetite for coal-generated electricity.

Arlington Central Library  
1015 N. Quincy Street  
Arlington, VA

**Thursday, August 9, 2007**

8:30 am - 5:00 pm

**[LEED® for New Construction Technical Review](#)**

[USGBC - Baltimore Regional Chapter](#)

Loyola College Graduate Center  
Timonium Campus  
Timonium, MD

**Saturday, August 11, 2007**

9:00 a.m. - 3:00 p.m.

**[Preservation Maryland Colleagues Workshop](#)**

Learn how to save a bit of history for your old home, while making it more energy efficient and saving thousands of dollars on repairs.

For registration please contact Jessica Bentz:  
jbentz@preservationmaryland.org

Preservation Maryland  
24 West Saratoga Street  
Baltimore, MD 21201

**Tuesday, August 14, 2007**

6:00 p.m. - 8:30 p.m.

**[Green Drinks](#)**

Poste Brasserie  
555 8th Street, NW  
Washington, D.C.

**Saturday, September 8, 2007**

8:30 a.m. - 4:15 p.m.

**[HOW TO BE GREEN](#)**

Introductory seminars on:

- Efficient and healthy buildings
- Solar hot water for your home
- Rainwater collection for garden use
- Solar electric for your home

**Registration:**

\$35 - Green Building Institute Member  
\$65 - Non-Member (before Aug 25, 2007)  
\$75 - Individual membership & class

**[More information & registration](#)**

Green Building Institute  
7761 Waterloo Rd.  
Jessup, MD

**Tuesday, September 11, 2007**

7:00 p.m. - 8:30 p.m.

**[EARTH HOME: Building Self- Sufficient Homes](#)**

*What is Earth Home?*

A fully integrated self sufficient building system that uses local materials to meet all the needs of the occupants for comfort, water, sanitary waste, electricity, hot water and cooking, without the need for central power, water or sewer.

Instructor: **John Spears**, C.E.M., LEED AP  
President, Sustainable Design Group  
President, CEO, International Center for Sustainable Development

What are the components of an Earth Home?  
What topics will be covered in the program?

- Compressed Earth Brick Construction
- Rain Water System
- Composting Toilet
- Grey Water System
- Solar Water Heater
- Solar Electricity
- Solar Oven
- Environmental Responsive Building Design

**Benefits of Earth Home:** Built with local materials, Affordable, Non Toxic and healthy, Zero Energy, Zero Water & Zero Waste

**Registration:**

\$29 - Green Building Institute Member\*  
\$35 - Non-member (before August 15, 2007)  
\$39 - Non-member (on or after August 16, 2007)  
\$77 - Individual Membership & class  
Students  
\$12 - Student Member  
\$34 - Student Membership & class

[More information and registration](#)

Green Building Institute  
7761 Waterloo Rd.  
Jessup, MD

**Wednesday, September 12, 2007**

11:00 a.m. - 1:30 p.m.

[The Myths and Realities of Going Green](#)

Lecture given by Stan Sersen  
, Board President & Founder, The Green Building Institute  
President, ASG  
CEO & General Member, Environmental Design and Resource Center  
Sponsor: Howard County Chamber of Commerce  
The Great Room  
8600 Foundry St.  
Savage, MD

**Friday - Saturday, September 14-15, 2007**

[Renewable Energy Symposium & Expo](#)

See products, systems, materials, and technology related to renewable energy applications.  
Frostburg State University  
101 Braddock Road  
Frostburg, MD

**Monday - Thursday, September 24-27, 2007**

**[Solar Power 2007](#)**

Long Beach, CA

**Saturday - Sunday, October 6-7, 2007**

**[D.C. Green Festival](#)**

Washington D.C. Convention Center

801 Mount Vernon Place, NW

Washington, D.C.

**Saturday - Sunday, October 6-7, 2007**

11:00 a.m. - 5:00 p.m.

**[Solar Tour 2007](#)**

Come join our 17th annual tour of Solar Homes and Buildings

Washington D.C., Maryland, Virginia

**Tuesday, October 9, 2007**

10:30 a.m. - 4:30 p.m.

**[Being Greener in the Landscape and Nursery Industry](#)**

How to Compost Green Industry Materials - Seminar and Field Day

Chesterfield Farm

Davidsonville, MD

**Friday - Saturday, October 12-20, 2007**

**[2007 Solar Decathlon](#)**

Check out University of Maryland's entry [Leaf House](#).

National Mall

Washington, D.C.

**Saturday, October 20, 2007**

8:30 a.m. - 5:00 p.m.

**[INTRO TO GREEN HOME RENOVATIONS](#)**

Topics Covered:

- What are the differences between Green vs. conventional renovations?
- What is Integrated Design and how can I use it in my renovation?
- How do I approach doing a green renovation?
- How will an energy audit improve my design?
- How do I incorporate passive solar?
- What kind of materials should I use?
- What are some of the challenges in green renovations?

\$99- Green Building Institute Member - General participant

\$130 - Non-Member - General participant

\$300 - Case Study submission & participant

**[More information & registration](#)**

Green Building Institute  
7761 Waterloo Rd.  
Jessup, MD 20794

**Wednesday, October 24, 2007**

7:00 p.m. - 9:00 p.m.

**[INTRO TO PASSIVE SOLAR DESIGN](#)**

*What topics will be covered in the class?*

- Determining an appropriate site location based on climate/environmental factors
- Choosing house orientation
- Determining window placement and style
- Methods of insulating the home to naturally regulate heat/cooling
- Making use of overhangs and shade & much more

\$29 - Green Building Institute Member

\$41- Non-Member (before Sept 14, 2007)

\$75 - Individual Membership & class

[More information & registration](#)

Green Building Institute  
7761 Waterloo Rd.  
Jessup, MD

**Saturday, December 1, 2007**

8:45 a.m. - Noon

**[GO GREEN, \\$AVE GREEN](#)**

Learn:

- Steps to reduce energy costs
- Conservation methods
- How to use natural resources on your site
- Ways to improve indoor air quality
- How to take action in your own homes and lives
- About community resources and contacts
- How to decrease the environmental burden on the local environment

*Howard County (Maryland) residents who earn less than \$50K for families and \$30K for singles are welcome to register.*

[More information & free registration](#)

The Green Building Institute  
7761 Waterloo Rd.  
Jessup, MD

**Monday - Thursday, December 10-13, 2007**

[Ecobuild America](#)

Washington Convention Center  
Washington, D.C.

**Wednesday - Friday, April 30 - May 2, 2008**  
**[6th Annual Greening Rooftops for Sustainable Communities Conference](#)**

Baltimore Convention Center  
Baltimore, MD

Green Building Institute

---

---

**Online Auction for Products & Services**  
***Bid today and support The Green Building Institute!***

**How do I make my initial bid?**

- 1) Email [auction@greenbuildinginstitute.org](mailto:auction@greenbuildinginstitute.org)
- 2) Include Item # & bid amount in Subject field
- 3) Copy message body format below\* and replace with your contact info.
- 4) You will receive a confirmation email confirming your bid.

Bobby Smith  
Item #  
Bid: \$55  
7822 Green St.  
Greentown, MD 20999  
[bobbysmith@greentown.com](mailto:bobbysmith@greentown.com)  
Phone: (443) 777-2020

**Items for bid:**

Item #4  
**[EcoSenseHome Conversion Pack - Green cleaning products](#)**

Estimated Retail Value: \$215

Min Bid: \$9

Bidding extended!

Bidding closes: 10:00 a.m. Thursday, August 16, 2007

This exceptional collection of cleaning products includes everything you need to clean your counters, do the laundry, wash windows, clean your bathroom, and more!

The EcoSense Home Conversion Pack is a 90-day supply of 16 different cleaners, plus mixing bottles and the EcoSense DVD that will help you instantly convert your home to safer, naturally sourced EcoSense cleaners.

[Click here for the full description.](#)

---

---

***Water & money-saving toilet***

**Item #5: Water & money saving toilet**

**[Stanton 12" Rough-in Elongated White Bowl](#)**

Estimated Retail Value: \$171

Min Bid: \$11

Bidding closes: 10:00 a.m. Thursday, August 16, 2007

Stanton has a **dual force technology** flushing system which includes a **.8** gallon flushing option (for liquid waste removal) and a 1.6 gallon water consumption option consistently requires only one flush to remove waste, providing exceptional bulk performance.

**This functionality saves the average family of 4 up to 6,000 gallons of water each year.** This is a great way to reduce water consumption and save money on your next water bill!

Thanks to [Kohler](#) for the donation!

---

---

***Waterless urinal for commercial use***

**Item #6 [Steward Waterless Urinal](#)**

Estimated Retail Value: \$525

Min Bid: \$15

Bidding closes: 10:00 a.m. August 17, 2007

What is Steward and why should you convert your current commercial urinal?

Steward Waterless urinal provides significant value to the customer by reducing water, sewage and maintenance costs.

Waterless urinals can save 40,000 gallons\* of water

per fixture per year, based upon a typical commercial installation. **Cartridge-free design!**

Click [here](#) for more information.

**Only 46 days until the St. Thomas Vacation Raffle drawing!**

***Don't forget about your upcoming winter vacation!***



**[St. Thomas Vacation Raffle](#)**

Enter to win airfare for two people & one week lodging at Bluebeard's Castle on St. Thomas in the U.S. Virgin Islands from January 5 - 12, 2008.

*Countdown is on! 46 days left to purchase raffle tickets.*

**Raffle Drawing:** Saturday, Sept. 15, 2007

**Purchase Tickets:**

\$20 each (Check or Cash)

[\\$21 \(Credit card - Online only\)](#)

6 tickets for \$100 (Cash, Check or [Online](#))

All proceeds benefit The Green Building Institute. Only 500 tickets available. Need not be present to win.

[Buy tickets now!](#)

**Featured Members**

**Founding Member**



**Integrative Design**

[ASG](#)® is a group of Architects and Construction consultants who specialize in building analysis, forensic investigations, and Green building and both

Residential (Multi-family)  
and Commercial LEED® projects.

---

---

### Corporate Platinum Member



[Whole Foods Market](#) is the world's leading natural and organic foods supermarket. The Whole Foods Market motto, "Whole Foods, Whole People, Whole Planet" captures the company's mission to find success in

customer satisfaction and wellness, employee excellence and happiness, enhanced shareholder value, community support and environmental improvement.

---

---

### Business Members



[Conservation Engineering](#) helps commercial clients save resources and utility costs, monitors and reports operational conditions, manages building system projects, and optimizes lighting.



[Harvey W. Hottel, Inc.](#) is 62 year old mechanical contractor that has a subsidiary Hottel Group that Designs, Installs and Services sustainable systems. Mark and Richard Hottel have the certifications for the design and installation of Geothermal Ground systems and have successfully completed approximately 100 over 12 years. We have completed several commercial LEED certified building with several in the design process.



[Moonlighting Alternative Energy Solutions](#)

Sales and Installation of Solar Panels, Wind Turbines, Energy Efficient doors and Windows, 3M Window Film, Ductless Air Conditioning Systems, Tank-less Water Heaters, Commercial lighting Retrofits, Radiant Barriers & Insulation



[Steven Kahle Architects, Inc.](#)

focuses on design excellence with sustainable design as a core component. Our portfolio includes: Commercial,

47 RENDALL STREET, SUITE 2 ANAPOLIS, MARYLAND 21401 410.268.7224 301.858.5853  
W W W . S K A S T U D I O . C O M

Institutional,  
Residential, Retail and Hospitality projects.

---

---

### Foundation Supporter



Believing that businesses should reinvest in the communities that sustain them, [Village Real Estate Services](#) created the [Village Fund](#), its philanthropic partner. This fund supports nonprofit initiatives that contribute to positive sustainable growth, citizen empowerment and social change.

The Green Building Institute, a 501 (c) (3) non-profit organization, educates the public and building & design professionals about sustainable building practices and technologies.

Sincerely,

Hannah C. Wood  
Executive Director  
The Green Building Institute

---

email: [info@greenbuildinginstitute.org](mailto:info@greenbuildinginstitute.org)  
web: <http://www.greenbuildinginstitute.org>

[Forward email](#)

✉ **SafeUnsubscribe®**

This email was sent to [info@greenbuildinginstitute.org](mailto:info@greenbuildinginstitute.org), by [info@greenbuildinginstitute.org](mailto:info@greenbuildinginstitute.org)  
[Update Profile/Email Address](#) | Instant removal with [SafeUnsubscribe™](#) | [Privacy Policy](#).

Email Marketing by



