



MIDDLE TENNESSEE CHAPTER NEWSLETTER

January 2008
Vol. 3, Issue 1

In This Issue

- Notes from the Chair - Mike Leonard
- Letter from the Regional Chair - Sara O'Mara
- Membership is Something That Everyone Can Be Proud Of! - Michelle Fox
- Various Items of Interest
- Ventilation Woes - Barry Westbrook
- TTU Campus Gets a Little Greener- Tracey Hackett
- Tell the Governor We Need to State Energy Plan - Louise Gorenflo
- Free Home Energy Audits - Laurie Parker
- It's Coming... Paperless Billing for NES Customers - Laurie Parker
- Member Profile: Tracey Ford, AIA, LEED AP
- Local Happenings

Next Meeting

What: Core and Shell Case Study: Terrazzo

Focus on the LEED for Core and Shell Rating System with case study presentation of the Terrazzo Mixed Use Building in the Gulch. Terrazzo is Tennessee's first LEED for Core and Shell project and has been precertified by the USGBC. Includes Q&A with project team.

When: Thursday, January 24, 2008 11:30 am-1:00pm

Where: Tennessee Engineering Center, Adventure Science Center, 800 Fort Negley Blvd., Nashville, TN 37203

Cost: Chapter members, \$15. Non-Members, \$20. Lunch will be served.

RSVP: RSVP's ARE REQUIRED. Do so before Noon, Friday January 28 to Terah Huber at thuber@tmpartners.com or 615-377-9773.



Notes from the Chair - Mike Leonard



The USGBC Middle Tennessee Chapter had quite an impressive year in 2007! Our chapter membership grew by over 150%; we were presented with an Advocacy Award by USGBC national; and we hosted 3 USGBC workshops and initiated a local LEED AP exam training series.

Likewise, we have a lot to look forward to in 2008. We have a talented chapter leadership in our Board of Directors and committee structure as well as an eager and motivated membership.

Among other things, you should know that your chapter is working hard to collaborate with allied organizations in order to effectively and efficiently realize our common goals.

One of the items on our "to do list" is to select a new day of the month for our regular chapter membership meetings. We are doing so in order to resolve current conflicts with other like-minded organizations. Likewise, to comfortably accommodate our increased growth, we are evaluating our meeting venue options. Look for these changes to occur early in the year. I believe these temporary challenges will result in great new opportunities for our chapter.

Through our chapter's growth and our own personal growth through knowledge of sustainability, we must remain focused on balancing the triple bottom line of People, Planet and Profit. Here are a few thoughts on how I see Middle Tennessee meeting these goals in 2008:

People

Building green benefits the community through education and job creation. Middle Tennessee is seeing a growing number of on-the-ground examples, both residential and commercial, which will serve as hands-on demonstrations of various green design and building strategies. Building tours and case study presentations will help spread the word. A few of our chapter members are also working in the community to integrate green strategies into our local Habitat for Humanity program and local after school programs.

With education increasing and innovative technologies being implemented, such as photovoltaics and vegetated roofs, new jobs are being created in consultants and installers to meet demands.

Planet

As we expand our stock of LEED certified buildings in Middle Tennessee, we are inherently reducing our carbon footprint. With the prerequisite that all LEED certified projects beat a baseline standard by 14%, we are decreasing our dependency on natural resources, a majority of which is coal in the TVA district. Look for case studies on local examples that beat that threshold by increasing amounts.

Profit

In order to maximize profit both on the design and construction services side as well as the ownership and operation side of green buildings, we must perfect the integrated design process and the process of evaluating first costs versus life cycle costs of various strategies. Efficiency is the key to profitable design and construction. Knowing when decisions have to be made and what strategies are most effective takes time and self-education. Expect to see numerous workshops and training opportunities in 2008.

Mike

Live + Work + Play Green

Green LEEDer Chapter Sponsor

American Constructors, Inc. www.amconst.com
Alfred Williams & Company www.est1867.com
TLC Engineering www.tlc-engineers.com
Street Dixon Rick www.sdrarch.com
ASHRAE www.ashrae.org
The Comfort Group www.thecomfortgroup.com
Mohawk Commercial www.mohawkcommercial.com

Silver Chapter Sponsor

PBG www.pbgbuilders.com

 www.pella.com

Friend Chapter Sponsor

Gould Turner Group
www.gouldturner.com
SSRCx
www.ssrcx.com



Letter from Regional Chair - Sara O'Mara

Board of Directors

- Mike Leonard
- Chair
- Fernando Rodriguez
- Vice Chair
- Tracey Ford
- Secretary
- Laura Schroeder
- Resource Development Chair
- Ed Wansing
- Emerging Green Builders Chair
- Erik McKinney
- Treasurer and Finance Chair
- Erik Lund
- Regional Delegate
- Ann Olsen
- Regional Delegate

- Ken Scalf
- Board Member
- Dodd Galbreath
- Board Member

Additional Leaders

- Gina Emmanuel
- Programs Chair
- Michelle Fox
- Membership Chair
- Betsy Clapsaddle
- Communications Chair

Editorial Staff

- Winston Huff
- Newsletter Editor
- Clark Denson
- Managing Editor
- Brandi Sanders
- Graphic Designer
- John Lattimore
- Copy Editor

2007 was a very productive year for the Southeast Regional Council. We achieved most, if not all, of our regional goals. At our last face-to-face meeting at Greenbuild, we selected this year's meeting times and locations (listed below). We have asked each 2008 regional representative to bring a list of their chapter goals to our first face-to-face meeting so we can be sure that the SERC 2008 goals reflect some of the chapter goals. Our region is here to help support our chapters. In the past, the SERC created their own goals which required the chapters to take on additional work. This year we would like to adopt some of the chapter goals into our own and to help with the double linking between chapters and the regional council through interaction, communication and support. By incorporating some of the chapter goals into the SERC goals, we hope to help the chapters further their success. At each of our 2008 regional meetings, we are offering to meet with the local chapter's board to see how the SERC can help support their efforts. We are hoping that we can all learn from each other's accomplishments and lessons learned.



SERC picture from Knoxville 2007

Face-to-Face Meetings/Locations 2008

- February 22, Friday Noon – February 23, Saturday Noon – Jackson, Mississippi
- May 30, Friday Noon – May 31, Saturday Noon – Roanoke, VA
- August 29, Friday Noon – August 30, Saturday Noon – Louisville/Lexington, KY
- November – Greenbuild – Boston, MA

Membership Is Something That Everyone Can Be Proud Of! - Michelle Fox

What can I do to help the environment? If that's a question that you've asked yourself then you need to take a closer look at the U.S. Green Building Council – Middle Tennessee Chapter.

As a member you'll be able to share your voice and participate in making our community a better place to work, live, and grow. You'll also be making a difference nationally and even globally in protecting, preserving, and restoring the health of the global environment and its varied ecosystems and species.

With your membership you can make a difference by:

- Playing an active role in advocating for green building issues and helping build consumer awareness.
- Serving on a LEED or USGBC committee to shape the future of LEED and green building.
- Participating in legislative outreach efforts and staying informed of federal and local government green building programs.
- Attending USGBC advocacy training sessions.
- Becoming a LEED faculty member and teaching LEED workshops in your area.

“By accepting responsibility, we take effective steps toward our goal: an inclusive human society on a habitable planet, a society that works for all humans and for all non-humans. By accepting responsibility, we move

closer to creating a world that works for all.”

Sharif M. Abdullah
Founder, The Commonway Institute

Our Mission. The U.S. Green Building Council - Middle Tennessee Chapter is a not-for-profit organization made up of Building Industry Professionals, Facility Managers and Property Owners in Middle Tennessee and surrounding communities whose mission is to be advocates for a sustainable Tennessee. Members work together to provide educational and networking opportunities for individuals who are passionate about sustainable building.

Chapter Membership Sets You Apart. Join the USGBC - Middle Tennessee Chapter and see how chapter membership can give you a competitive edge and connect you to a world of resources you can't find anywhere else. Everyone is encouraged to join the USGBC - Middle Tennessee Chapter. Your membership in the chapter provides an unparalleled opportunity to influence change and help shape the future of green building in the Middle Tennessee area.

It Pays to Become a Member. As a USGBC - Middle Tennessee Chapter member you will receive discounts for our networking and educational events. Any interested party is welcome to attend USGBC events.



Membership Is Something That Everyone Can Be Proud Of! *continued*

The People You Will Meet. As a chapter member you'll make invaluable contacts, share information and best practices, and build relationships with leaders and professionals representing a broad spectrum of industries. Our chapter members - the people who design, construct, manage, finance, insure, and occupy buildings - share a common focus: a commitment to transforming the built environment toward one that is profitable, healthy, and environmentally responsible.

Advocacy. As a chapter member you will have the opportunity to shape the local agenda through chapter and committee leadership. USGBC - Middle Tennessee Chapter members play a vital role in promoting green policy initiatives affecting issues such as energy conservation, air quality, and livable communities - hot topics among federal, state and local governments. By getting the word out and building relationships to promote green building, your chapter membership is even more valuable.

Visibility. Your chapter membership will give you recognition as a

leader in supporting a better built environment. As a national member you can proudly display the USGBC Member Logo on promotional materials to let clients and customers know about your commitment to green.

How You Can Join Us. Become a USGBC - Middle Tennessee Chapter member, and see how you can make a difference!

Dues are: \$50 for a Full Member (individual works for a USGBC member company)

\$65 for an Associate Member (individual doesn't work for a USGBC member company)

\$25 for an EGB (student or young professional who doesn't work for a USGBC member company)

You can sign up online at <http://chapters.usgbc.org/middletn/membership.html> or contact our Membership Chair, Michelle Fox at mafox-1@hotmail.com.

Various Items of Interest

Greenbuild 2007

In case you hadn't heard, the Middle Tennessee Chapter won the Advocacy Award of Excellence at the 2007 Greenbuild awards ceremony.

If you weren't able to attend Greenbuild 2007, or if you'd like to review something you may have missed, check out www.greenbuild365.org to watch videos from the 2007 conference and to read the 2007 blog.

You can also visit www.greenbuildexpo.org to buy a copy of the proceedings CD (which is "free" to people who attended the 2007 conference), as well as to sign up for the Greenbuild Newsletter. The Premium version of the proceedings allows you access to mp3 versions and videos available for download.

2007 AWARD OF EXCELLENCE



ADVOCACY



Story of Stuff

The Story of Stuff takes you on a provocative tour of our consumer-driven culture—from resource extraction to iPod incineration. Watch this 20-minute, fast-paced, fact-filled look at the underside of production, consumption, and waste. It'll teach you something. It'll make you laugh. And it just may change the way you look at all your stuff. [Learn more at www.storyofstuff.com](http://www.storyofstuff.com)

WE'RE MOVING!!!

The chapter mailing address has changed.

USGBC Middle Tennessee Chapter
P.O. Box 22515
Nashville, TN 37202-2515



Ventilation Woes- Barry Westbrook

With all the talk about indoor air quality (IAQ), it is surprising that the most important component of a healthy indoor environment is often overlooked. The American Society of Heating Refrigerating and Air Conditioning Engineers (ASHRAE) specifies a continuous supply of outside air to maintain healthy office environments. Selecting low toxicity paints and earth friendly interior furnishings does not eliminate this requirement for outside air.

We have conducted hundreds of evaluations of commercial buildings where the occupants reported respiratory illness, headaches, and all the other usual symptoms of sick buildings. In most cases, the occupants are convinced they have a mold problem, but more often than not the diagnosis is the same: INSUFFICIENT VENTILATION.

Here are the main reasons:



1. Facility managers and maintenance personnel receive little or no training on the importance of ventilation to the health and productivity of the occupants. If the maintenance staff can keep the building cool in the summer and warm in the winter, they believe their job is done. It is a little known fact that heating and air conditioning systems are not designed to maintain indoor set points during the coldest or hottest days of the year. Though these periods only constitute a fraction of the time the air conditioner is running, when these days inevitably arrive, the “savvy” maintenance technician knows that he/she can shut off the outside air supply and squeeze more performance out of the

system. This is a risky short term solution because many times the outside air supply is not restored once the weather extremes have passed. As time goes by, more and more people report a decrease in comfort and health. Productivity suffers.

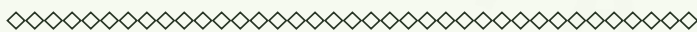
2. Many heating and air conditioning contractors do not have sufficient training on the importance of ventilation. When confronted with health complaints, they often promote ultraviolet lights, high-efficiency filtration, and even equipment replacement. These things do nothing to solve the real problem.

3. Many commercial buildings have heating and air conditioning systems that have no provision at all for outside air. They are ventilated accidentally through random leaks and penetrations in the building envelope. Is there any wonder that occupants in these buildings are not as productive as they should be?

4. Heating and air conditioning systems are not properly balanced. This creates pockets of stagnant air and areas of less than optimum air quality. Occupants in these areas suffer due to an invisible problem, and most unfairly, they can be seen as “complainers”.

So what can we take away from all of this? Most outside air complaints relate to poor ventilation and not a mysterious airborne contaminant. For existing buildings, insufficient ventilation is the rule and not the exception. When occupants report symptoms of poor indoor air quality, do not pass go, and do not collect \$200. Go directly to the ventilation system (if there is one) and see what you find.

Barry Westbrook
DocAir LLC
4014 Flagstone Court
Franklin, Tennessee 37069
Phone: 615-373-2498
bwestbrook@docair.com



Local Statistics:

Middle Tennessee Chapter Members	412
Middle Tennessee Accredited Professionals	232
Middle Tennessee Certified Projects	3
Middle Tennessee Registered Projects	32





TTU Campus Gets a Little Greener - Tracey Hackett

(Reprinted from the Tennessee Tech University Visions, Fall 2007 with permission of Tennessee Tech University)

With more than \$112,000 of environmentally friendly sustainability projects in the works, Tennessee Tech University will be going a little greener this fall.

These are the first campus projects that will be funded by the sustainable campus fee of \$8 per undergraduate student each semester that was approved by a student vote in fall 2005:

- purchasing two electric vehicles to offset gasoline vehicle usage and installing solar panels on them for charging;
- replacing incandescent lighting with more efficient metal halide fixtures on the intramural fields;
- replacing steam control valves for more efficient residence hall heating and reduced coal consumption;
- modifying the university's diesel generators to operate on a 20 percent blend of biodiesel fuel;
- and purchasing \$1,500 in the Tennessee Valley Authority's Green Power Switch program.

"Those projects were emphasized to reduce the campus carbon footprint and benefit TTU students," said Larry Wheaton, TTU's facilities engineer and chairman of the campus energy task force. "As local utilities improve the capacity to generate more clean energy, participation in those programs will be considered by future sustainability committees."

At this time, TTU's energy task force has a total budget of approximately \$139,000 at its disposal, and any money remaining after the implementation of this year's projects will be added to funds collected during fall 2007.

"Next year's sustainability committee will also be accepting ideas and

initiatives which comply with the TBR sustainable campus fee guidelines," Wheaton said. "Current projects are within budget and well on their way to completion.

"We applaud the students' leadership in selfimposing the additional fee for environmental stewardship and encourage returning students and new students to get involved with issues of sustainability," Wheaton concluded.

TBR sustainable campus fee guidelines, current project status and more information about TTU's sustainable campus fee can be found at www.tntech.edu/scf.



TTU President Bob Bell drives a new electric vehicle around campus. The car was bought using funds from the university's sustainable campus fee. *Photo: TTU Photo Services*

Tell the Governor We Need a State Energy Plan - Louise Gorenflo, Solar Valley Coalition

Energy efficiency (EE) is our cleanest and cheapest energy solution, and will do more for the economy than any other energy resource. Dollars saved from lower energy bills can be invested into technologies that can further reduce our energy consumption. EE must be our first response to rising energy costs, capacity shortages, and carbon emission challenges.

Yet the Southeast region has fallen far behind nationally as it continues to invest heavily into new capacity rather than energy efficiency. Tennessee ranks 43rd in energy efficiency policies, followed closely by Alabama (46th) and Mississippi (49th). The Southeast lags for a variety of reasons. Historically, cheap energy prices have kept EE a low political priority, and because the South has a younger economy, the focus has been on meeting growth needs. Now, however, is the time for our Governor to make Tennessee a regional and national leader.

Markets alone won't reap enough EE due to

barriers such as income elasticity, principal-agent barriers (builder-buyer, landlord-tenant), and information-cost barriers (consumers don't have time and money to study each purchase). More than half of building energy usage is affected by these and other barriers.

Tennessee must have a comprehensive state energy plan that will maximize our reliance on energy efficiency and renewable energies. We need a sustainable transportation plan that reduces our need for oil and new highway construction through public transportation and Smart Growth. Our state can address global warming and reduce its carbon footprint with these ideas. State policies can provide incentives that will lead to job growth and technological innovation, fueling the transformation of our economy. An EE comprehensive state energy plan can clean our water and air with policies that promote compact development, recycling of resources, and reducing waste.

Actions needed

Contact Governor Phil Bredesen and Tennes-

see Energy Policy Director Ryan Gooch to let them know that you want a comprehensive energy efficiency plan for Tennessee that provides concrete targets for energy efficiency, implementation of renewable energy sources, and consumer education.

Governor Phil Bredesen:

phil.bredesen@state.tn.us

Ryan Gooch, State Energy Policy Director:

ryan.gooch@state.tn.us, 615-741-2994

Please let TN Environmental Council know to track responses: TEC@tectn.org.

More Information

- American Council for Energy Efficient Economy provides recognized leadership in supporting and evaluating state energy plans: www.aceee.org
- Solar Valley Coalition's website has a section on TN State energy planning and other states' energy plans: www.solarvalleycoalition.net/StateEnergyPlan/TNStatePlan.html



Free Home Energy Audits:

Everyone has the power to get informed about their homes' usage.

- Laurie Parker



Like most people, you're probably concerned with your total monthly expenses whether you live in a house or an apartment. And, you may have noticed that your energy bills make up a considerable portion of that cost.

The first step toward reducing your bill is figuring out how much electricity you use. The energy right Home e-Valuation is possibly the easiest way to accurately determine your usage and your monthly costs, and it doesn't require a scheduled in-home visit.

In fact, you can complete the audit in your pajamas and slippers while you sip your morning coffee.

This tool provides specific feedback based on your energy consumption. The audit estimates are based on your heating and air conditioning equipment, the average usage of your appliances, and the size of your family.

There are two easy ways to complete an energy right Home e-Valuation at energyright.com. Fill out the online audit for instant results, or request a paper version to be mailed to your home. After you've completed the survey, you'll receive a detailed, customized report of your energy use and suggestions for potential savings in a couple of weeks. It's easy, and absolutely free.

But don't stop there! energy right also provides the Energy Library, a comprehensive online resource designed to provide you with home energy information using easy to understand terms and illustrations. In addition, the Energy Library has an extensive set of Frequently Asked Questions (FAQ) on energy use in the home. For example:

Q. Aside from adjusting the temperature, are there other easy ways I can save on water heating?

A. The simplest way to save is to use less hot water. Use low flow showerheads, wash clothes in cold or warm water instead of hot, and only run full loads in your clothes washer and dishwasher.

If you can't find answers to your questions in the Energy Library ask an online energy advisor via email. Help is just a click away at energyright.com.

It's Coming...Paperless Billing for NES Customers- Laurie Parker



Nashville Electric Service will soon offer a paperless billing system that will eliminate the need for hard copy bills. Customers who sign up for the program will receive their bill by email and pay online at www.nespower.com.

"E-billing will make it easier for our customers to manage their accounts, and this technology will cut down on our production costs and benefit the environment," says Teresa Corlew, NES Chief Customer Care Officer.

The program works to save trees by using "green-friendly" e-bills that reduce the demand for paper.

- According to the National Arbor Day Foundation, one tree makes approximately 3,333 sheets of paper. And, one ton of uncoated virgin (non-recycled) printing and office paper uses 24 trees.
- The American Forest & Paper Association states that every ton of paper recovered saves 3.3 cubic yards of landfill space.
- The United States Post Office reports that total mail volume in 2006 grew by 1.4 billion pieces.

- According to the international publication Next Generation Power & Energy, there is a massive and growing awareness of the environmental impact of paper production. For every 38,500 bills produced:

- **One ton** of paper is used
- **Two tons** of trees are destroyed
- **16,450 gallons** of water are used
- **1,941 pounds** of solid waste are generated
- **60 pounds** of air emissions are spewed out
- **5,058 pounds** of greenhouse gases are emitted

"We have set a goal of reducing the amount of paper bills we mail out by 10-percent. That's approximately 35,000 bills each month, which is a lot of pulp and paper," Corlew claimed. "Beyond the environmental impact, we project a savings of over \$100,000 per year."

The new service will be available to both residential and commercial customers. By enrolling, customers agree to no longer receive a paper bill in the mail. They will be able to log into their account, view their balance and usage history, and make an electronic payment from a checking or savings account for free. Credit card payments will also be accepted, but a \$3.95 service fee will be charged by the third party vendor.

Be on the lookout for more information about going paperless in the next couple of months on your billing statement and online at nespower.com.



Member Profile: Tracey Ford, AIA, LEED AP



Tracey Ford and Sandy Bivens Receive Middle TN AIA Honors Award



Shelby Bottoms Nature Center

- Project Architect at Everton Oglesby Architects (EOA)
- New Middle Tennessee USGBC Board Member and Chapter Secretary
- LEED AP trainer for Nashville seminars sponsored by EOA
- Project Architect for the Metro Parks and Recreation Three Nature Centers – Shelby Bottoms Nature Center, Beaman Park Nature Center and Bells Bend Nature Center.
- One of her projects, the Shelby Bottoms Nature Center, is a Building Outside the Box (BOB) site registered to be EarthCraft Certified upon completion and recently received an Honors Award for design excellence from the Middle Tennessee Chapter of the American Institute of Architects.
 - o Located in the Cumberland River flood plain, the 3,100 square foot Shelby Bottoms Nature Center perches on telephone poles nine feet above an existing wetland. Accessed by an expressive 210’ long accessible winding boardwalk, the trail offers outlooks to view the greenway and river.
 - o With the sustainable focus of “water”, the green roof is designed to gather rainwater into artistic scuppers and rain chains that then funnel the rainwater into a natural “bio-swale” below.

Local Happenings

JANUARY

Thursday 1/24

What: Core and Shell Case Study: Terrazzo

This month’s meeting will focus on the LEED for Core and Shell Rating System with a case study presentation of Terrazzo. The Terrazzo Mixed Use Building in the Gulch is Tennessee’s first LEED for Core and Shell project and has been Pre-certified by the USGBC. There will be a brief presentation on Terrazzo and its green features followed by a Q&A panel discussion with the project team.

When: Thursday, January 24, 2008 11:30 am Registration, 12:00-1:00pm Lunch and Presentation.

Where: Tennessee Engineering Center, Adventure Science Center, 800 Fort Negley Blvd., Nashville, TN 37203

Cost: 15 for USGBC-Middle TN Chapter members. Non-Members, \$20. Lunch will be served.

RSVP: RSVP’s ARE REQUIRED. Please do so **no later than Noon, Friday Jan. 18th** to Terah Huber at thuber@tmpartners.com or 615-377-9773.

FEBRUARY

Sunday 2/24 - Tuesday 2/26

What: Green Development, Good for Water and the Bottom Line

This conference, focusing on Green Development and its contribution to the efficiency and quality of our water is sponsored by a two state joint venture between the Kentucky Dept. for Environmental Protection and the Tennessee Department of Environment and Conservation, and is funded by a grant from the U.S. EPA Office of Water.

When: Sunday, February 24 – Tuesday, February 26, 2008

Where: Sheraton Music City Hotel, Nashville, TN

For Conference Schedule and details, go to www.outreach.utk.edu/GreenDevelopment

or call UT Conferences at: 865-974-0280

Would you like to:

- be a member?
- be an accredited professional?
- register and certify your building?

Visit us at www.usgbc.org/chapters/middletennessee/