



MIDDLE TENNESSEE CHAPTER NEWSLETTER

October 2007
Vol. 2, Issue 10

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Next Meeting

What: Membership Meeting

Meet-and-greet with Committee Chairs and Board Member Nominees, and a special preview of the movie Kilowatt Ours

When: Thursday, October 25, 2007 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. Please do so **by Noon, Monday, Oct. 22** to Terah Huber at thuber@tmpartners.com or 377-9773.

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Notes from the Chair

- Mike Leonard



On October 5th at the Chapter First Friday meeting, a sizable group met at the Tennessee Engineering Center to brainstorm ideas that might be incorporated into future versions of the LEED Green Building Rating System. As requested by the LEED Steering Committee, our task was to generate a list of environmental issues and credit additions that would specifically address concerns in the Southeast Region.

The following is a summary of the ideas generated:

- 1) **High priority environmental issues in our region that differ from national patterns – the “local” conditions:**
 - a. Water conservation (potable and process water)
 - b. Geographic distinctions: Hillside developments and erosion
 - c. Urban sprawl: more prone to urban sprawl in Southeast
 - d. Air quality concerns: need to focus on “smog” reduction
 - e. Mold prevention: still a concern
 - f. Rainfall patterns with more heavy rainfall events
 - g. Humidity levels specific to Southeast
 - h. Pesticide usage: termites, ants
- 2) **LEED prerequisites or credits that could be adapted to address these issues more effectively:**
 - a. Additional percentage thresholds for efficient irrigation methods and plumbing fixtures
 - b. Lower percentage thresholds to encourage water reduction for wastewater conveyance
 - c. Include credit for reusing water discharged from mechanical equipment
 - d. More emphasis on stormwater quantity control
 - e. Raise the bar for site connectivity
 - f. Relation to community comprehensive master plan
 - g. Thresholds for local materials (awarding closer manufacturing sites): reduce 500 mile radius.
 - h. Credit for green education; creation of case study or best practices list
 - i. Put more emphasis on dealing with heavy rainfall events during and after construction
 - j. Address climate differences such as humidity levels in Southeast
 - k. Stand alone credit for percentage of tree cover
 - l. Additional breakout credits for specific infiltration strategies
 - m. Prerequisite: Do not build on property designated as having historic significance and/or archaeological value.

This list of items was forwarded to our Southeast Region delegates for compilation with items generated by other Chapters in our Region. Thank you to all who contributed to the dialogue. If you have thoughts that you would like to see included, feel free to pass those along to me and I will make sure they make their way to the proper hands.

Mike

Think Globally – Act Locally.



USGBC Chapters are passionate advocates for green building in communities all across the country.



Letter from Regional Chair - Sara O'Mara

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

This is an update from the August Chapter Steering Committee that was held in Washington, D.C.

National Updates

- **Membership**
 - Increasing: previously, bringing in 150 new members/month; now, 150 new members/week.
 - Diversifying: 55% of new members are contractors and builders; many new large corporate members; much interest among finance and insurance companies.
- **LEED**
 - 20% growth in LEED
 - Homes
 - 7600 registered, 250 units have been certified, 450 builders
 - Public Comment: just finished 1st public comment period with 1150 comments; going back into committee for 2nd public comment period in Oct.
 - Reference guide: by Greenbuild
 - LEED for Homes Providers: adding at least 20 more (currently have 12).
 - Media interest in homes is growing: 30% of 3000 green building stories focused on homes
 - Schools
 - 50 schools currently registered (about 25 additional under LEED for New Construction)
 - New LEED for Schools to substitute in former model credits
 - New Web site to be launched in mid-September (www.buildgreenschools.org)
- **Education**
 - Many new educational offerings: new technical reviews including homes (focused on builders), schools, LEED for retail, understanding LEED costs and returns, managing LEED documentation, facilitating a LEED charrette
 - Workshops
 - Tremendous increases: 200 workshops in 1st 6 months of 2007 vs. 275 in all of 2006; revenue share to chapters: \$500K in 1st 6 months of 2007 vs. \$443k in all of 2006; average revenue share in 2007 is \$5k per workshop vs. \$3300 in 2006; only 39 chapters have participated in the workshops generating that \$500k
- **GreenBuild: register now as hotel space is limited (use USGBC's room block).**

Letters to the Editor- What Is the Right Kind of Building? Part 2

The "Letters to the Editor" section is the place for our readers to express their views and opinions. Please limit your letter to no more than 300 words, and the newsletter staff will try to include your letter in the newsletter. We reserve the right to edit letters for content and length. Submit letters to cdenson@ssr-inc.com before the second Thursday of the month to be considered for that month's newsletter

What is the right kind of a building? When a structure meets some of the LEED Green points, does that mean it is the right kind of a building?

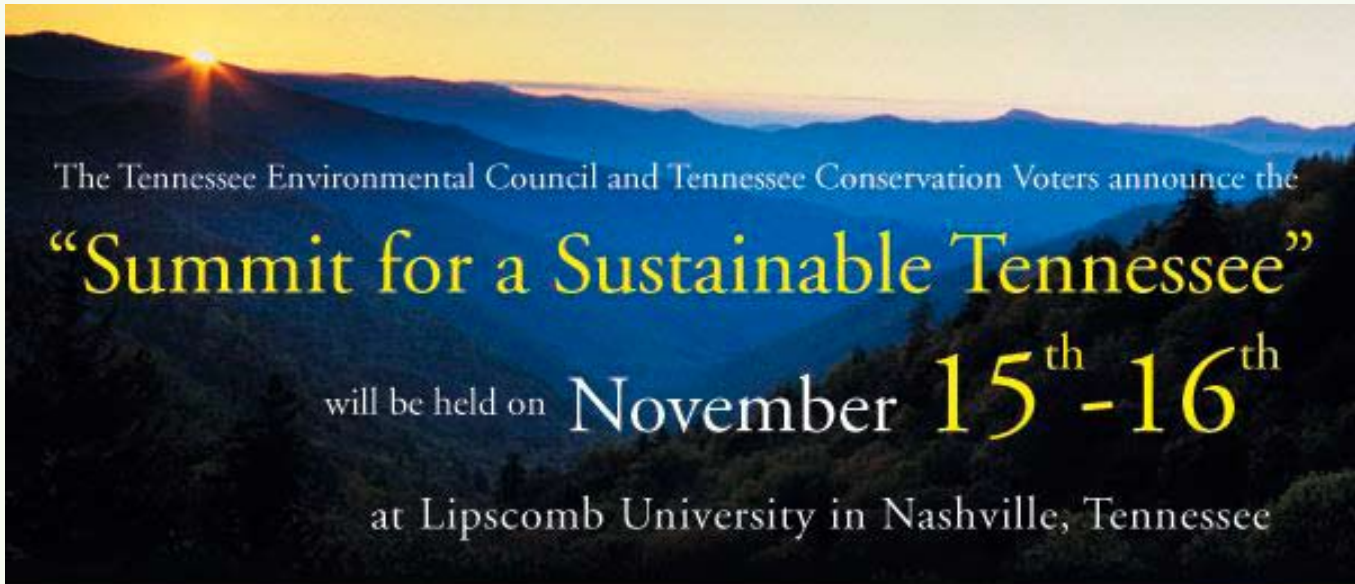
I believe that every room in a building should have adequate light and air. I also believe that a substantial piece of the sky should be visible through the windows from a standing position in the room to ensure good daylight and especially to deter claustrophobia.

Another point: why can't an office building be built around a cluster of trees or a semi-circle of trees or be built next to a community garden or a pocket park where individuals could go for a picnic lunch or even a place to go to discuss business? Pleasant landscaping using

native plants and trees should only be planted around a right kind of a building. Most architects and engineers unfortunately see no vital link between the site plan and the building other than the objectives requested.

Buildings are symbols of the values of knowledge and culture, and disappointments will set in if the grounds of the particular buildings do not express the values of the environment or "spirit of place."

Maury Miller III
Earth Friends Photography
Architectural and Location Photography
Watershed Coordinator for West and Middle Tennessee
Through Southeast Watershed Forum



The Tennessee Environmental Council and Tennessee Conservation Voters announce the
“Summit for a Sustainable Tennessee”
 will be held on **November 15th-16th**
 at Lipscomb University in Nashville, Tennessee

SUMMIT for a SUSTAINABLE TENNESSEE

*One vision, one voice moving Tennessee toward
 a healthy and sustainable future for its
 people, places, and economy.*

“You won’t want to miss this opportunity
 to help create, prioritize and advance a
 statewide conservation agenda and
 action plan.”

Start participating now!

www.sustainabletn.org



Local Statistics:

Middle Tennessee Chapter Members	385
Middle Tennessee Accredited Professionals	232
Middle Tennessee Certified Projects	2
Middle Tennessee Pre-certified Projects	1





Tankless Water Heaters, Part 3 - Winston Huff



Building managers seeking to curtail their organizations' energy and water use are exploring a range of products and technologies, and natural gas tankless water heaters

have received a great deal of attention in these efforts. This article, the last in a series of three, discusses available water heating technologies to help managers quantify the benefits for their organizations.

In the U.S., storage tank water heaters have been the norm for years. It is now apparent, however, that this approach can waste more than 50% of the potential energy in natural gas, a decision that makes little sense with today's high energy costs. Because water heating systems are typically the second largest energy user in a facility after the HVAC system, an energy efficient water heating system can significantly reduce energy costs. To meet this market need, water heater manufacturers offer a wide range of new systems including

tankless, high efficient condensing tank, and high efficient condensing instantaneous heaters.

NEW EFFICIENT WATER HEATER TECHNOLOGIES

As described in articles from the previous two months, tankless water heaters save energy by eliminating the need for a storage tank. The efficiency of the burner is also an important factor to keep in mind. Tankless heaters use at best 84% of the potential energy of natural gas to heat water. Tankless heaters are limited by the fact that when more than 85% of the heat is removed from the combustion process, acid condenses in the water heater flue and can corrode the water heater or flue. These types of heaters, tankless and storage, are called non-condensing type heaters and are 84% efficient or less.

High efficient condensing tank water heaters, which are nearly 100% efficient, are another choice in new energy saving technology. They

can also be provided as a complete system with the interconnecting piping, equipment, controls and valves installed at the factory.

Finally, condensing instantaneous heaters are nearly 100% efficient and do not require storage tanks while maintaining the hot water demand for a facility. Technically these are tankless heaters; however, the industry refers to small heaters as "tankless" and large heaters as "instantaneous". The condensing tank and instantaneous heaters have single point connections that can reduce the installation cost compared to numerous tankless heaters while providing a single point of contact if problems arise.

There is no "one size fits all" system for water heaters, and as a result it is important to consider the gallon demand of hot water and the GPM flow required for each type of facility. When this is established, the most efficient type of water heater system can be installed.

NES Electric Rates, An Explanation of What's Changing - Laurie Parker

• Fuel Cost Adjustment (FCA)

A six-percent increase has gone into effect for this quarter (October-December) due to extremely low rainfall levels over the summer. The lack of rain resulted in less hydroelectric generation, which is TVA's cheapest form of power supply. As a result, TVA had to purchase more power from the market and use more costly forms of replacement generation. The average impact for residential customers is an additional \$5.88 on their monthly electric bill.

How does the FCA work? The actual cost of fuel and purchased power is compared to the projected costs the rates were based on. The difference is then multiplied by the kilowatt-hours of energy used to account for any changes in price.

Does it appear on my bill? The FCA appears as a dollar amount on your bill. The adjustment is included in the "total amount due" for the month.

• TVA Rate Increase

TVA has announced plans for a single digit (6-9%) rate increase in April 2008, stating the need to prepare now to meet the growth in demand and reduce dependency on volatile energy market prices.

TVA expects fuel and purchased power costs to increase in 2008, primarily because of higher coal prices and deferred power costs from 2007. TVA also anticipates the effects of the drought to linger into 2008, reducing hydro generation from normal levels.

Of the \$1 billion in capital spending for new generation, \$317 million is budgeted to begin construction of a second unit at TVA's Watts Bar Nuclear Plant. The capital budget also includes \$423 million for investment in additional gas-fired generation, \$190 million for transmission system upgrades and \$383 million for clean-air initiatives. New gas-fired generation includes building a 600-megawatt combined cycle gas plant adjacent to TVA's existing Lagoon Creek peaking plant near Brownsville, Tennessee.

In addition to providing new generating capacity, TVA is expanding its energy-efficiency initiatives. Their 2008 budget includes \$22 million for the first phase of a renewed emphasis on energy efficiency and reduction in peak power demand.

What is NES doing?

We realize our customers are working hard to conserve and save on energy costs where they can. We have been tightening our belt as well, because the last thing we want to do is pass on any unnecessary expenses to you.

For 68 years, Nashville Electric Service has supplied customers with affordable, reliable electricity to enhance the standard of living and to help our local economy stay competitive in the global marketplace.

In July 2005, NES implemented a five-year Strategic Plan, which includes a set of strategies to address cost-containment. Many of these strategies are already showing results and saving money.

In the past year, NES has met a key strategic goal of keeping our workforce below 1,000 employees. By utilizing contract workers whenever possible to help maintain our system, we have reduced our overtime costs by \$188,000. A newly installed automated meter reading system is reducing the number of trips our meter readers have to make by 6,300. That represents a savings of \$99,918 in trip costs alone. Also, in the last year, we have made changes in our employee medical plan to save \$385,329.

Why do all this? So we can continue to provide reliable power at the cheapest price possible. We are excited about the future of Nashville. While we face many challenges, our business plan is sound, and our employees understand the responsibility they have to you - the customer. We are committed to working hard to provide the power needed to build Nashville's future.

***** MOVIE PREMIERE *****

Kilowatt Ours

A PLAN TO RE-ENERGIZE AMERICA

**"One of the most important
yet under-reported stories
of our generation."**

Dave Pelton, Clean Cities Director



Follow filmmaker **Jeff Barrie** on a search for solutions to the most urgent environmental problems of our day: *mountain top removal, global warming, childhood asthma and mercury contamination.*

**THE ANSWERS ARE EASIER THAN
YOU THINK AND THE SOLUTION
CAN SAVE YOU MONEY!**

Come to this exciting event and you will:

- Discover a new vision for American energy usage
- Learn how to dramatically reduce your energy bills
- Find out how to use wind and sun power

SHOWTIME

THURSDAY

October 25 @

6pm, 8:15pm and 10pm

Historic Belcourt Theater

2102 Belcourt Ave.

InfoLine: (615) 340-5005

For more info about the film visit:

KILOWATTOURS.ORG

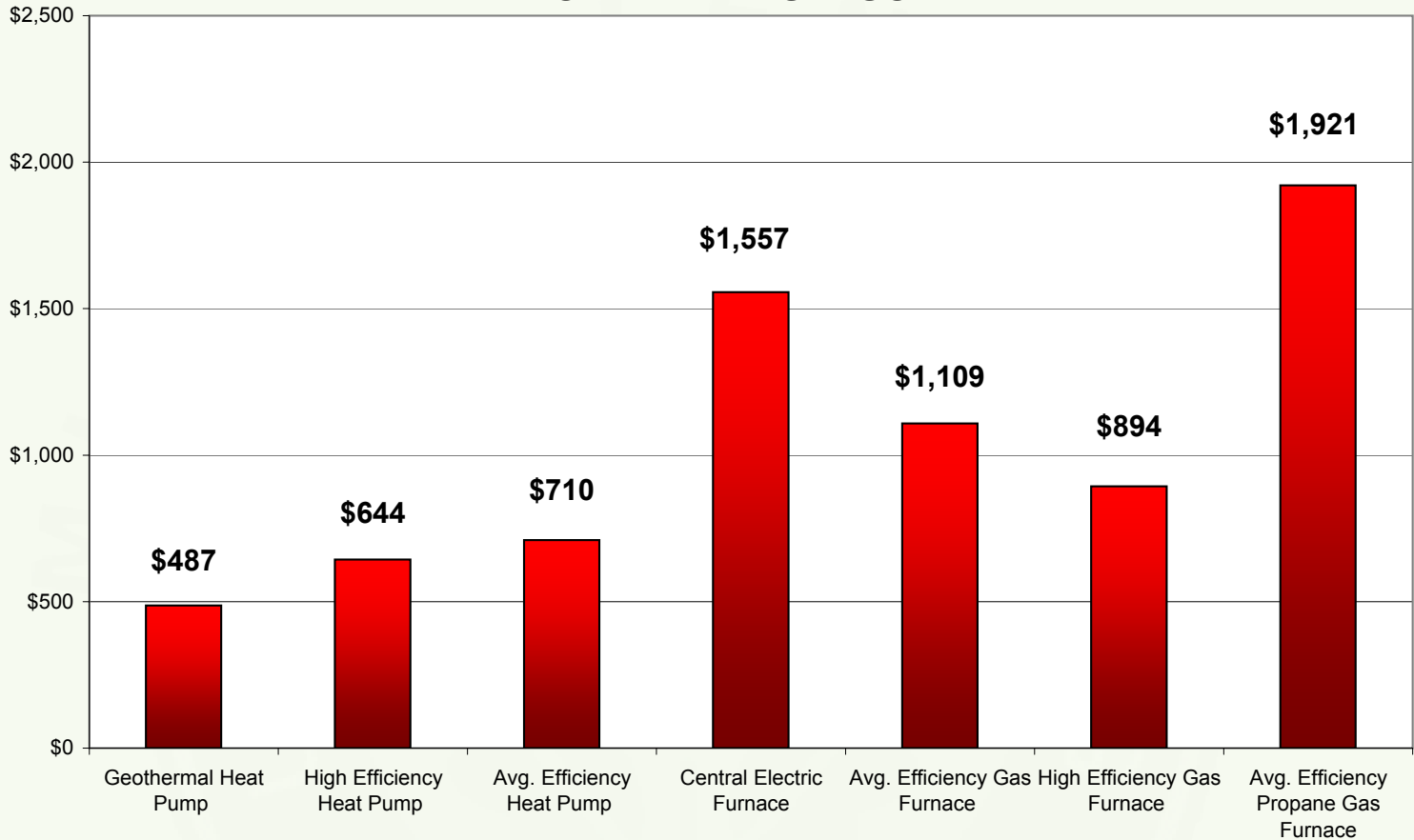




The Cold, Hard Facts About Heating Your Home - Laurie Parker

For most customers, heating your home this winter will be your biggest energy expense all year. But, different heating systems can range drastically in what they'll cost you to operate. The following Home Heating Cost Comparison identifies the most efficient heating source as a heat pump, specifically a geothermal heat pump. The most expensive way to stay warm is by a propane gas furnace. The costs reflect the dollar amount to heat your home during the winter season.

AVERAGE HOME HEATING COSTS FOR WINTER SEASON



An average efficiency heat pump would save you \$400 this winter compared to an average efficiency gas furnace. Federal tax credits to install heat pump systems are available to homeowners. To learn more about these incentives, visit www.nespower.com and look for the Energy Incentives link under Ways to Save.



Registered Tennessee LEED projects (As of April 10)

New Construction	40
Existing Building	2
Commercial Interiors	3
Core and Shell	7





Local Happenings

OCTOBER

Saturday 10/20

What: Green Tie Gala w/ Featured Speaker, Susan S. Szenasy

When: Saturday, October 20, Starts at 6:00 for Entire Evening, 9:30 for Late-Comers

Where: City Hall, 405 12th Ave. South, Nashville, TN

Cost: \$100 for Entire Evening, \$25 for Late-Comers

RSVP: Contact Laura Schroeder at 225-5218

Visit chapters.usgbc.org/middletn or article in this newsletter for more info.

Wednesday 10/24 – Thursday 10/25

What: Southeast Solar Summit

When: Wednesday and Thursday, October 24 and 25

Where: Oak Ridge National Laboratory Conference Room, Oak Ridge, TN

Visit <http://www.ornl.gov/sci/solarsummit/> for more info on registration and agenda.

Thursday 10/25 - Membership Meeting

What: Membership Meeting

Where: The Tennessee Engineering Center in the Adventure Science Center, 800 Fort Negley Blvd.

When: Thursday, October 25, 2007, 11:30 am - 1:00pm

Cost: Chapter Members, \$15; Non-Members, \$20.

RSVP: RSVP's ARE REQUIRED. Please do so by Noon, Tuesday, October 23 to Terah Huber at thuber@tmpartners.com or 377-9773.

Thursday 10/25

What: Kilowatt Ours Movie Premiere

When: Thursday, October 25, at 6 PM, 8:15 PM, and 10 PM

Where: Historic Belcourt Theater, 2102 Belcourt Ave., Nashville

For more info, go to www.kilowattours.org or call (615) 340-5005.

NOVEMBER

Wednesday 11/7 – Friday 11/9

What: Greenbuild Convention

When: Wednesday through Friday, November 7 – 9

Where: McCormick Place, West Building, 2301 S. Lake Shore Drive, Chicago, IL 60616

Cost: Member - \$600, Non-member - \$775

Visit www.greenbuildexpo.org for more info on events, other fee options, and registration.

11/15 – 11/17

What: Summit for a Sustainable Tennessee

When: Thursday and Friday, November 15 and 16, plus a “mini-summit” on November 17

Where: Lipscomb University, Nashville, TN

Cost: early registration discounts available through October 31; entire event, \$100 early/\$135 late; Saturday only, \$15 early/\$15 late

Visit www.sustainabletn.org for more info and to complete a survey about sustainability and conservation efforts in Tennessee.

How Are We Doing?

The newsletter staff is constantly striving to meet the needs of you, our readers, and provide you with information about the U.S. Green Building Council, Sustainability, and Green Buildings, specifically in middle Tennessee. If you have suggestions on improving the newsletter, or if you have a topic you would like to see covered or to write yourself, let us know. Email your suggestions to cdenson@ssr-inc.com.

Would you like to:

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

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