



Giga-Joule

Greenville
Chapter of
ASHRAE

April 2006

Meeting Announcement

This month's meeting will be a satellite broadcast on Sustainability and the Building Environment held on **Wednesday, April 19, 2006, from 12:30 p.m. to 4:00 p.m.** at the **Trane office (Note change of venue!)** located on 288 Fairforest Way. For directions, please call Trane @ (864) 672-6000, contact Programs Chairman, Eric Scott, by phone at (864) 232-6633 x21, or email at programs@ashrae4greenville.com

A Message from the President

We've had three (3) meetings since the last Giga-Joule. The Greenville chapter would like to thank the Mechanical Contractor's Association, Mona Flowers, and Bill Caldwell for the presentation on the Proposed Changes to the South Carolina State Procurement Code Pre-qualification for Bidding. Our chapter would also like to thank the 2 Distinguished Lecturers: Dan Int-Hout presented on Designing for Occupant Assistance, and Wayne Kirshner presented on Understanding Water Hammer in Steam Systems. We had very good turnouts and excellent presentations.

Next month we are privileged to have another Distinguished Lecturer: Mark Nunnally, P.E., present on Humidity Control for Commercial Buildings on May 16.

We also elected chapter officers and board members for next year. Below are the results:

President - Eric Scott
President Elect - Graham Fizer
Vice President - James Bryan
Secretary - Scott Houston

Treasurer - Dennis O'Keefe
Governor - Karl Counts
Governor - Paul Jensen
Governor - Bill Knight

If you've considered participating in our local chapter and time seems to be a deterrent, don't fret. You can support one of several committees and only spend 1-2 hours per month. If you are interested in serving on a committee, then let me know.

If you or someone you know wants to join ASHRAE, then go to <http://www.ashrae.org> and click the quick link on the left side to "Join ASHRAE". You can fill out an application on-line using the interactive Membership Application Form or fill an application out by hand from a printed pdf format.

Also available at <http://www.ashrae.org/standards> is the ability to review ASHRAE Standards 62.1, 62.2, 90.1 and 90.2. If you agree or disagree with the current standards, then you have an opportunity to express your concerns. The current International code series reference these standards, which in essence make them "the law".

ASHRAE has a new strategic plan. Please visit the following link to learn more:
<http://www.ashrae.org/template/AssetDetail/assetid/50843>

ASHRAE, founded in 1894, is an international organization of 55,000 persons. It is the world's foremost technical society in the fields of heating, ventilation, air conditioning and refrigeration. Through its meetings, research, standards writing, publishing and continuing education, the Society helps keep indoor environments comfortable and productive, deliver healthy food to consumers and preserve the outdoor environment.

If you have any questions or comments, please feel free to contact me.

James Bryan, P.E.
Greenville ASHRAE President
president@ashrae4greenville.com



Chapter Programs

Speaker: ASHRAE

Tentative Agenda & Presentation Topics:

1:00 p.m. – Introduction – Don Rheem, Moderator
1:01 p.m. – Welcome – Lee Burgett, ASHRAE President
1:03 p.m. to 2:15 p.m. – Presentations:



Sustainability: What Does It Mean and Why Is It important?

Hal Levin, Fellow ASHRAE, Research Architect, Building Ecology Research Group, Santa Cruz, California

If it's Not Energy Efficient, It's not Sustainable: How to Ensure Top Energy Performance in Green Buildings

Jean Lupinacci, Director, ENERGY STAR® Commercial and Industrial Branch, Climate Protection Partnerships Division, U.S. Environmental Protection Agency

2:15 p.m. – Q&A (Don Rheem and Presenters)
2:30 p.m. – Break
2:40 p.m. – 3:35 p.m. – Presentations

Integrated Design for Sustainability

Malcolm Lewis, Ph.D., P.E., President, CTG Energetics, Irvine, California

Better by Design – Project Studies

Kevin Hydes, P.E., P. Eng., Vice President – Sustainable Practice, Stantec, Montreal, Canada; Chair, USGBC

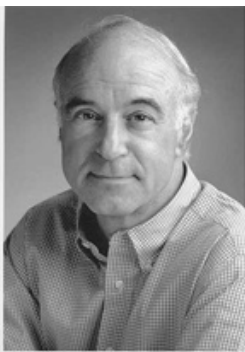
Green Buildings and Sustainable Communities – A Developer's Perspective

Joe van Belleghem, Partner, Windmill Developments, Victoria, Canada

3:35 p.m. – Q &A (Don Rheem and Presenters)
3:55 p.m. – Closing – Don Rheem, Moderator

Note: Topics and Scheduled Times May Change

Biographical Information:



HAL LEVIN, ASHRAE FELLOW

Building Ecology Research Group, Santa Cruz, CA

Hal Levin is a Research Architect with Building Ecology Research Group, Santa Cruz, California, and formerly Scientist, Indoor Environment Department, Lawrence Berkeley National Laboratory. Mr. Levin has conducted research in the areas of building's impacts on occupant health and comfort as well as on the larger environment. For more than 26 year, he has been involved in research that includes the integration of knowledge about indoor and outdoor air pollution as well as other risk factors into the design residential, educational, and commercial buildings and communities. He has been involved in many efforts to design buildings with minimal negative impacts on occupants or the larger environment from the design of its ventilation, building materials' selection, energy consumption, and total environmental quality. He has been a strong proponent of life-cycle analysis and risk assessment as indicators the sustainability of alternative designs, practices and buildings.

In addition, to his academic and research activities, Mr. Levin has been active in professional education workshops and short courses on topics that include pollution prevention and indoor environmental quality management for schools, offices, and residences. He is a contributor to chapters in several books including the Indoor Air Quality

Handbook (McGraw-Hill, 2001). He is an Associate Editor of the journal *Indoor Air*, and on the Editorial Board of the journal *Building Research and Information*. He was the founding editor of the newsletter *Indoor Air Quality Update* and the founding editor and publisher of the newsletter *Indoor Air Bulletin*. He has been active in technical, professional, and civic organizations and has received numerous awards for his contributions, including ASHRAE Fellow. He served as Vice-President (1997-2000) of the International Society of Indoor Air Quality and Climate and was founding chairman (1984-present) of ASTM Subcommittee D22.05 on Indoor Air. He was also a member of the founding Steering Group of the American Institute of Architects Committee on the Environment. His most recent projects were prepared for the U.S. Environmental Protection Agency and for the World Health Organization Regional Office for Europe.



JEAN LUPINACCI

U.S. Environmental Protection Agency,
Washington, DC

Jean Lupinacci is the Director of the ENERGY STAR Commercial and Industrial Branch in the Climate Protection Partnerships Division at the U.S. Environmental Protection Agency. She has been with EPA for 20 years with primary responsibilities for developing and managing voluntary energy efficiency programs.

During her tenure at EPA, Ms. Lupinacci has lead some of EPA's flagship voluntary partnerships to reduce or eliminate CFCs to protect stratospheric ozone. She was chair of a United Nations Environment Program multi-national committee that evaluated technical options to reduce CFC use in the foam insulation sector from 1989-1994. In 1993, she led EPA's effort to include all greenhouse gases, such as potent HFC and PFC gases, in U.S. Climate policy.

Since directing the efforts of ENERGY STAR in the commercial and industrial markets, Ms. Lupinacci has overseen the successful integration of the Green Lights and Climate Wise programs into Energy Star, the introduction of innovative energy performance metrics for commercial buildings and industrial plants, the extension of the Energy Star label to buildings, as well as the rapid adoption of organization-wide energy management programs by U.S. businesses and institutions.

DR. MALCOLM LEWIS, P.E.
President, CTG Energetics, Inc.,
Irvine, CA

Dr. Lewis is President of CTG Energetics, Inc., one of the leading energy efficiency and sustainability consulting firms in the U.S. He is a registered professional engineer in multiple states in the fields of Mechanical, Electrical, and Civil Engineering, and is a LEED™-Accredited Design Professional. He is the engineer of record for over 25 million square feet of new construction and renovation projects for the public and private sectors. His projects have won numerous awards and energy efficiency and/or sustainability.



Dr. Lewis served on the Board of Directors of the US Green Building Council from 1997 to 2002, and is currently Chair of the LEED™ Technical and Scientific Advisory Committee, as well as a member of the LEED™ Steering Committee. He served for a number of years on the ASHRAE Standard 90 Energy Conservation Standard Committee. He has served on World Bank missions to several countries in South East Asia to advise governments and utilities on energy policy issues.



KEVIN HYDES, P.ENG., P.E.

President & CEO, Keen Engineering Co. Ltd.,
Montreal, Canada

As leader of Canada's leading sustainable engineering firm of 250 professionals, Mr. Hydes makes a personal commitment every day to continue to help Keen improve its environmental performance, both for clients and personally. He recognizes that personal behaviours help communities become better and better examples of sustainable living.

Mr. Hydes has worked in the building services industry since 1973. Mr. Hydes is considered by many to be a leader in sustainable design and as such, he is in constant demand to share his ideas with the broader design community. He has been a speaker at numerous presentations and discussions regarding sustainable design and green engineering, and he has been on several advisory committees including: City of Seattle Sustainable Region Initiative, the US Federal Dept. of Architectural Energy Conservation & Environmental Initiative.

Mr. Hydes is now based in Montreal, Quebec. He is Chair of the US Green Building Council (USGBC) and Founding Member and Board member of the Canada Green Building Council (CaGBC). He is a faculty member of both the CaGBC and the USGBC Councils. He is an Honorary Member of both the Architectural Institute of B.C. and the Royal Architectural Institute of Canada.

Academic Contributions

- * Adjunct professor at McGill University School of Architecture
- * Chair US Green Building Council (USGBC) LEED
- * Canada Green Building Council (CaGBC) LEED Faculty Member

Professional Affiliations

- * Architectural Institute of British Columbia Honorary Member
- * CIBSE Fellow
- * Association of Professional Engineers and Geoscientists of British Columbia
- * Professional Engineers of Ontario
- * Consulting Engineers of Alberta
- * Texas Board of Professional Engineers
- * Vermont State Board of Professional Engineering

Industry Organizational Work

- * USGBC - Chairman
- * CaGBC - Founder and Director
- * Association of Consulting Engineers of Canada – CaGBC Liaison
- * GBC/SB 05/SB 02 Committee – Team Member
- * Canadian Consulting Engineer Magazine, Editorial Advisor

JOE VAN BELLEGHEM, CA

President, BuildGreen Developments Inc.
Partner, Windmill Development Group Ltd., Victoria, Canada



Mr. Van Belleghem, a chartered accountant, has over 17 years of development and financing experience in all forms of real estate development. He is a partner in Windmill Developments, a triple bottom line development company that focuses solely on Green Building Developments. Windmill currently has several LEED development projects underway. The most significant is Dockside Green in Victoria which is a 1.3 million sq. ft. mixed use brownfield sustainable community redevelopment with LEED platinum commitments.

Mr. Van Belleghem through its subsidiary, BuildGreen Consulting, consults with all levels of government on LEED projects and sustainable community design.

He is on the board of directors for the United States Green Building Council, the Canadian Brownfield Network Board and an Advisory Board Member to the BC Sustainable Energy Association. He is also the Vice Chair and one of the founders of the Canada Green Building Council.

Mr. Van Belleghem is a LEED accredited professional and advanced LEED faculty member for both the CaGBC and the USGBC. He has provided presentations around the globe on triple bottom line developments.

Location: ***Trane Upstate Carolina – (See attached for directions)***

Date: **Wednesday, April 19, 2006**

Schedule: 12:15 p.m. Doors Open
12:30 p.m. Lunch served
1:00 p.m. to 4:00 p.m. Main Program (see previous agenda above)

Cost: **\$10/person - Lunch is included & guests are welcome**

RSVP: **REQUIRED TO ENSURE LUNCH.**
Please reply to programs@ashrae4greenville.com

Education: This program qualifies for 3.0 PDH (including NC PE as well)

Eric Scott
Programs Chairman
programs@ashrae4greenville.com

Research Promotion - Spring Golf Tournament !!!



Breakout the new driver you got for Christmas and start practicing! We've got our spring golf outing set for April 28th, at Woodfin Ridge in beautiful Inman, SC. Plan on getting there around 11:00 am, hit a few range balls, and enjoy your box lunch before the noon shotgun start. Price is \$65, which includes golf, range balls, lunch, cart & 2 drink tickets.



I got a lot of feedback about not having the fall golf outing on Friday afternoon, so no excuses this time. Mark your calendars now, tell your friends, coworkers, customers, and anyone who owes you a favor. I expect to fill the place up. Remember people, this is a fundraiser, so rather than play with the ASHRAE members that you always play with, be responsible for a foursome, preferably people who aren't members, and show them what a good time we have.

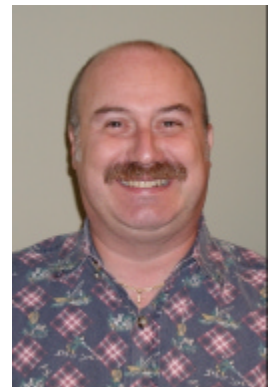
Sponsorships will be doubly important as this place is a little more expensive and they won't let us bring in our own beer. We'll need as many players as possible to help keep the average cost down. If you're trying to decide what to do with your windfall check from your Exxon stock, how about sponsoring the beverage carts.

I know I can count on the usual suspects for hole sponsorships, but let's take the burden off of them and let your boss know that he/she needs to be sponsoring this event. We need to get on this right away so let me know who can sponsor what. As usual, all donations/prizes/giveaways are appreciated, so if you've got some tees left over from the ASHRAE show, bring 'em. Thanks!

Dennis O'Keefe
Research Promotion Chairman
rp@ashrae4greenville.com

Membership Corner

We have had about **15 new members** sign up this ASHRAE year so far. That is more than we had all of last year. What is so interesting about that is that none of you have claimed any of them for our membership promotion contest. Just think what we could do if we actively promote new membership between now and the summer. Remember that if you have the most new members to join you win the \$100 for our contest. Send the names you claim to me via email specifically saying you claim them and we'll get you on the map.



Attendees at the last meeting were Devon Cortright, Eric Scott, Caroll Suttles, Bob Speer, Karl Counts, Chris Adams, James Bryan, Steve Abernathy, Wade Crow, Ken Clark, Scott Houston, Jim Ridenhour, Terry Wyrick, Lee Capps, Dennis O'Keefe, Dan Rogers, Will Thomason, Graham Fizer, Shane Bulman, Chip Allison, Greg Kyzer, Dan Int-Hout, Kyle Loseke and Jeff Mitchell.

New member applications can be obtained at our regular meetings or call me at (864) 233-7966.

Caroll Suttles
Membership Chairman
membership@ashrae4greenville.com

Greenville Chapter ASHRAE

2004-2005 Chapter Officers

Office	Officer	Company	Phone	Fax	email
President	James Bryan	O'Neal, Inc.	298-2148	298-6330	president@ashrae4greenville.com
Programs/ PE	Eric Scott	Carrier Carolinas	232-6633 x21	242-0290	programs@ashrae4greenville.com
Secretary	Scott Houston	Thermal Resource Sales	250-2822	250-0585	secretary@ashrae4greenville.com
Treasurer	Devon Cortright	H2L	233-8844	232-2679	treasurer@ashrae4greenville.com
Membership	Caroll Suttles	Piedmont Natural Gas	235-5844 x3055	233-6104	membership@ashrae4greenville.com
Resource Prom.	Dennis O'Keefe	Piedmont Natural Gas	250-2822	250-0585	rp@ashrae4greenville.com
CTT	Jamie Porterfield	Waldrop Heating & Air	578-7252	578-3414	ctt@ashrae4greenville.com
Student Activities	Karl Counts	Day & Zimmermann	241-8335	241-6750	sa@ashrae4greenville.com
Historian	Paul Jensen	Trane Upstate Carolina	672-6130	672-6001	history@ashrae4greenville.com
Webmaster	Karl Counts	Day & Zimmermann	241-8335	241-6750	webmaster@ashrae4greenville.com

Tentative Meeting Dates for 2005-2006

Tues 9/20/2005	Radiant Cooling Panels	Dr. Stanley Mumma PhD, PE; Penn State
Tues 10/18/2005	Why Water Source Heat Pumps?	Chris Edmondson PE, James M Pleasants
Tues 11/15/2005	Controls Protocols and Interpretation	Jeff Swiderski, Carrier Controls
Tues 12/13/2005	Interpretation of Mold Analysis	John McNamara CIAQP, AAA Environmental
Tues 1/17/2006	Warehouse and Industrial Heating & Make Up Air	Jamie Fry, Faulkner/Haynes & Associates
Tues 2/21/2006	Ductwork for Pharmaceutical/Biological Facilities	Manuel Del Valle PE, Fluor
Tues 3/7/2006	Joint Meeting with Mechanical Contractors Asso.	Bill Caldwell, Waldrop Heating & Air
Tues 3/21/2006	Designing For Occupant Acceptance	Dan Int-Hout III, Chief Engineer, Krueger
Tues 4/18/2006	Understanding Waterhammer in Steam Systems	Wayne Kirshner PE
Wed 4/19/2006	Green Buildings: Sustainability and the Building Environment	ASHRAE Satellite Broadcast
Tues 5/16/2006	Humidity Control for Commercial Buildings	Mark Nunnely PE, Nunnely & Associates

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Technology for a Better Environment