



AMERICAN SOCIETY OF HEATING, REFRIGERATION AND AIR CONDITIONING ENGINEERS INC.

LONDON CANADA CHAPTER #116

<http://LondonCanada.AshraeChapters.org>

Monday Sept 26/2011

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ASHRAE LONDON CANADA SOCIAL EVENT

9 Hole Golf & Dinner
GREENHILLS GOLF AND COUNTRY CLUB
4838 Colonel Talbot Rd.
London (Lambeth) , ON N6P 1H7

2:00pm - Registration & Social
3:00pm to 4:00pm - Golf Tee-Off
6:00pm - Dinner

Golf & Dinner: \$80.00 per person,
\$40.00 golf for meal plan members

Dinner Only: \$45.00 London Chapter member
\$10.00 for students
\$50.00 for others
\$150.00 for meal plan

see registration form - contact: Jamie Kruspel; 519.200.2197
Jamie.kruspel@td.com

Meeting - Mon Sept 26/2011

Greenhills Golf and Country Club
Lambeth

5:30pm Social 6:00pm-Dinner





President's Message

I hope everyone has enjoyed the great summer we just had and the short break from ASHRAE! Now it's that time of year again to start the ASHRAE 2011-2012 year off and we have made a lot of changes to the upcoming years program.

As I mentioned at the dinner from the June golf tourney we were talking about starting the new year off with a 9 hole tourney which some of you may already have heard it's going to be Monday September 26th @ Greenhills golf course and then we will have dinner and a short business session and that will conclude the day so please get signed up today.

We are also going to change locations of some of the meetings and they will be held at Michael on The Thames Restaurant which everyone knows is a high scaled establishment with great food and a great name in the city of London and they have been very accommodating to the chapter so we are very excited to hold some of our chapter meetings there.

We have been talking with the Windsor chapter about getting together with them for more of a social event which we are discussing at this time. The chapter is also discussing having another social function in December where the spouses would be able to join as well. The chapter is looking at having 4-5 social events this year in trying to get some new members to join ASHRAE and also to get some existing chapter members back out to the meetings.

We are also introducing a YEA chapter chair into the mix which will be chaired by Khalid El-Kadri and Mike Pulik will take over as Student chair and helping the two chairs will be Edwin Liou and Jeff Watson. If any companies have anyone wanting to get their feet wet on the Board for ASHRAE please let one of the board members know and we will find a position for that person.

I also want to take this time on behalf of the Board of Governors thank all the companies who support the ASHRAE London Chapter and for those companies who allow their employees to take the time out of their very busy days to do the extra work that is required to keep the chapter going and trust me if it wasn't for these volunteers the chapter could not survive so again thank you to all of you that support the London ASHRAE chapter.

As you can see the chapter is looking forward to the upcoming ASHRAE year and we hope you are too we are going to do our very best to have great speakers, great locations and yes we are going to have some fun!

I look forward to seeing all of you Monday September 26th at Greenhills,

Jason Vandenberghe

ASHRAE London Chapter President

Future Meetings

The future meeting tentative schedule - be sure to watch the web site and sign up for email notices to be advised of future meeting locations, speakers and topics:

Oct 24/2011	UWO - Windermere Manor
Nov 21/2011	Michael's On The Thames
Jan 30/2012	Michael's On The Thames
Feb 27/2012	UWO - Windermere Manor
Mar 26/2012	Michael's On The Thames
Apr 19/2012	ASHRAE Technical Webcast
Apr 30/2012	Tour
June 3/2012	Golf



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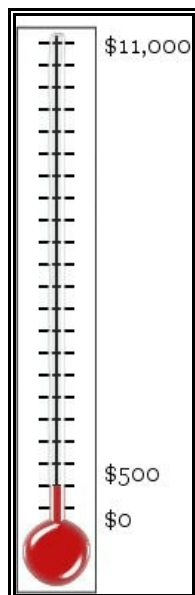
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From the ASHRAE RP Chair:



With the 2010/2011 Research Campaign behind us, the dust is settling, and we are seeing the results of our combined efforts more clearly.

We are working to raise money for all of the 'resources' of ASHRAE:

- Research
- Education (ASHRAE Learning Institute)
- ASHRAE Foundation - Research Endowed Funds
- General Fund - Contributions support special Board approved projects and programs

The 2010/2011 was a successful year for ASHRAE Society – their goal of \$2,000,000.00 set by Society was reached, and surpassed; our local region (Region II) had a target of \$134,000.00 to achieve, and managed to bring in \$136,756.00 by the end of June.

All 9 chapters made a valiant effort towards the final number, with 8 of 9 exceeding their targets.

The London Chapter was runner up at the society level for recognition as the highest \$/Member collected this year... Our local Chapter #116 Research target was \$11,000.00 for

2010/2011, and we finished with a High 5 Goal amount at \$12,310.00...

At a future London Chapter dinner meeting, we will be holding a Donor Recognition Night where we will be recognizing our donors for their contributions to ASHRAE Research.

Thank you to all of you who took the time and made an effort to help us achieve our goal in 2010/2011, and we look forward to working together to reach our goal of \$11,000.00 for 2011/2012.

Eric W. Shaw
ASHRAE Region II Research Chair
521 Consortium Court, London, Ontario, N6E 2S8
eshaw@baymarsupply.com

Member Bio:

Edwin Liou

Edwin graduated with distinction from the University of Waterloo with an Honours degree in Mechanical Engineering. He possesses professional work experiences in the fields of hardware design, particle physics research, information technology, and engineering consulting. His areas of expertise include mechanical design, fatigue & fracture analysis, HVAC, heat transfer, and fluid dynamics



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2011 CRC Quebec City Report

The Region 2 CRC was held in Quebec City this year and hats off the Quebec chapter for hosting a great CRC we all had a great time.

The Chapter this year sent 7 board members including Daryl Somers who is RVC chair for Research Promotion and the chapter won the "Meatball Award" given to the chapter who sends the most chapter members x the distance travelled. The chapter also won the Gold Star Award, Special Citation, High Honor Roll and Presidential Award of Excellence.

Next year the 2012 Region 2 CRC will be held in Ottawa and then 2013 Toronto will host the CRC and in 2014 London will host the CRC so we are looking for volunteers now to start planning. The two chairs for the upcoming CRC are Karl Gilroy and Jason Vandenberghe but we need lots of people to help put this together and to be successful. You will notice throughout this upcoming year we will be talking about the 2014 CRC quite a bit so if anyone would like to help out please let one of the board members know.

Jason Vandenberghe
ASHRAE London Chapter President

Online Registration Now Open for ASHRAE's 2012 Winter Conference

ASHRAE's 2012 Winter Conference takes place in January in Chicago. Programs addressing advances in high performance buildings, integrated design and numerous high-intensity HVAC applications have been planned for the Conference, scheduled to take place in Chicago, IL, Jan. 21-25. Preliminary conference information can be found at www.ashrae.org/chicago.

New Cool Tool from ASHRAE - Helps Predict Consistent Thermal Comfort

ATLANTA - An updated tool from ASHRAE provides a user-friendly interface to predict thermal comfort, based on the Society's standard for thermal environmental conditions.

ASHRAE Thermal Comfort Tool, Version 2, maintains consistency with ANSI/ASHRAE Standard 55-2010, Thermal Environmental Conditions for Human Occupancy. The standard specifies the combinations of indoor thermal environmental factors and personal factors that will produce thermal environmental conditions acceptable to a majority of the occupants within the space.

The tool makes thermal comfort predictions using several existing thermal comfort models, including the Adaptive and Predicted Mean Vote (PMV) models. Inclusion of these models can potentially improve occupant comfort by allowing engineers to more easily fine tune their comfort analysis to the particular needs of the occupants in the building.

"The software allows you to calculate the predicted thermal comfort for a human at a point in space," Bill Fleming, volunteer chair of ASHRAE's Publications Committee, said. "All you need to do a comfort analysis is some basic information about the thermal environment you want to model and a few things about the person you want to put in that environment."

The cost of the ASHRAE Thermal Comfort Tool is \$117 (\$99, ASHRAE members). To order, contact ASHRAE Customer Contact Center at 1-800-527-4723 (United States and Canada) or 404-636-8400 (worldwide), fax 404-321-5478, or visit www.ashrae.org/bookstore.

ASHRAE, founded in 1894, is an international organization of some 50,000 persons. ASHRAE fulfills its mission of advancing heating, ventilation, air conditioning and refrigeration to serve humanity and promote a sustainable world through research, standards writing, publishing and continuing education.

**ASHRAE Conferences Brings Together Industry Professionals**

ATLANTA - Perspectives on design styles and experiences from around the world were shared by nearly 2,000 built environment industry professionals at ASHRAE's 2011 Annual Conference. The theme of the Conference, Sustainability Knows No Borders, highlighted the international reach of ASHRAE's membership.

Some 1,690 people attended the Conference, held June 26-29, in Montreal, Quebec. Attendance was higher than the last three ASHRAE annual conferences, which took place in Albuquerque, Salt Lake City and Louisville.

The ASHRAE Conference offered a technical program with nearly 300 presentations, nine educational courses and numerous social events. The meeting also featured nearly 400 meetings of technical, standards and standing committees, developing guidance for the future of the industry and ASHRAE.

The Plenary session, where nearly 60 members were honored for their service to ASHRAE, also served as the platform for Presidential Member Lynn G. Bellenger's final address to the Society as ASHRAE president.

Technical program highlights included several sessions that provided new applications and current practices, such as: case studies of new buildings without commissioning, using building energy information in a smart grid, selecting fans for minimum energy usage, emerging wireless technologies for HVAC&R applications, improving performance of refrigeration systems, back to basics on airflow in unitary systems, energy recovery issues in dedicated outdoor-air systems, unique applications of photovoltaic systems, applications of high temperature cooling and low temperature heating and HVAC&R design checklists that work. As usual, sessions on ground source heat pumps and radiant cooling systems drew large audiences.

Net zero energy-related sessions were the highest-attended, especially methodologies for determining environmental impacts of buildings, renewable energy technologies for achieving net-zero energy design, challenges in making green buildings a way of life, design strategies for net-zero energy residential buildings, combined heat and power for net zero energy buildings, and alternate heating, cooling and domestic water heating technologies to reduce building energy usage.

Also offered were two Professional Development Seminars and seven short courses from the ASHRAE Learning Institute. The most popular courses were Advanced High-Performance Building Design; Energy Management in New and Existing Buildings; and Basics of High-Performance Building Design.

Top selling publications included Standard 189.1-2009, Standard for the Design of High-Performance, Green Buildings; Standard 62.1-2010, Ventilation for Acceptable Indoor Air Quality; and the 2011 Annual Conference pre-prints CD, which contains all papers presented at the conference.

Ron Jarnagin took office as the Society's 2011-2012 president. His theme for the year, Sustaining ASHRAE through Leadership, focuses on developing future leadership, building the Society's global presence and strengthening the industry.

Additionally, six students from Polytechnique de Montréal, along with members of the Montreal Chapter, are working to improve the quality of life at Accueil Bonneau, a local homeless shelter, as part of ASHRAE's Sustainable Footprint project. The project is intended to leave behind a lasting sustainable footprint in the cities where the Society's conferences are held. The members hope to reduce operating expenses of the shelter through the overall design and commissioning of a domestic water heating solar system which will significantly reduce costs of water heating.

ASHRAE Supports Funding for Important Building Data Survey on the House Floor

ATLANTA—ASHRAE received Congressional support from co-chairs of the High-Performance Buildings Congressional Caucus regarding the Society's call to the federal government to resume work on the 2011 Commercial Buildings Energy Consumption Survey (CBECS).

On July 13, Representatives Judy Biggert (R-Ill.) and Russ Carnahan (D-Mo.) delivered a colloquy on the House floor in strong support of funding and resuming work on the 2011 CBECS. Joining in the colloquy, the chairman and ranking Democrat of the House Energy and Water Development Appropriations Subcommittee, Representatives Rodney Frelinghuysen (R-N.J.) and Peter Visclosky (D-Ind.), also lent their support to the importance of CBECS data.

Carnahan quoted a letter from ASHRAE issued in May, strongly urging Congress to include funding for CBECS in the Fiscal Year 2012 appropriations bills to allow work on the 2011 edition of the Survey to continue. The letter was submitted to the Congressional Record.

"If funding is not provided, work on the 2011 CBECS data will likely not continue, and the government and industry will be forced to rely on data that is nearly a decade old, resulting in potential missed opportunities to increase building efficiency," Carnahan read from the ASHRAE letter on the House floor.

Earlier this year the U.S. Energy Information Administration (EIA) announced it would not be releasing the results of the 2007 CBECS due to data collection errors. As a result of funding reductions, EIA also announced that it would halt work on the 2011 edition of the Survey. Currently, the latest version of CBECS data is from 2003.

"Many members of the High Performance Building Coalition have come to us to express their concern about an updated CBECS since the latest data is nearly a decade old," Biggert said while addressing the House. "Substantial investments in the commercial building sector have been made since the last CBECS was published in 2003. The updated data is not only valuable to building owners looking to make improvements, but also necessary to inform the Annual Energy Outlook that we, in Congress, rely on."

ASHRAE led the establishment of the HPB Congressional Caucus in 2008 to heighten awareness and inform policymakers about the major impact buildings have on our health, safety and welfare and the opportunities to design, construct and operate high-performance buildings that reflect our concern for these impacts.

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**ASHRAE, DOE Further Working Relationship to Advance Energy Efficiency**

ATLANTA - Building on a long-established working relationship, ASHRAE and the U.S. Department of Energy (DOE) recently signed an updated memorandum of understanding, committing to further improve efficient use of energy.

The agreement was signed at ASHRAE's 2011 Annual Conference in Montreal. It represents an update of an agreement last signed in 2007.

Together ASHRAE and the DOE agree to work cooperatively to improve the efficient use of energy, improve the visible and widespread use of renewable energy sources and to minimize the impact of energy use on the environment.

"By renewing our memorandum of understanding, ASHRAE and DOE pledge to combine our collective energy conservation efforts," ASHRAE President Ron Jarnagin said. "We are committed to leading our country and our world toward a sustainable energy future."

Specifically the agreement notes that ASHRAE and the DOE are committed to working together in the following goals:

- Promote and support the continued development of ASHRAE standards related to energy efficiency, including:
 - ☐ ANSI/ASHRAE/Illuminating Engineering Society (IES) Standard 90.1, Energy Efficient Design of New Buildings Except Low Rise Residential Buildings
 - ☐ ANSI/ASHRAE/IES Standard 90.2, Energy Efficient Design of Low-Rise Residential Buildings
 - ☐ ANSI/ASHRAE Standard 62.1, Ventilation and Acceptable Indoor Air Quality In Commercial, Institutional, Industrial and High-Rise Residential Buildings
 - ☐ ANSI/ASHRAE Standard 62.2, Ventilation and Acceptable Indoor Air Quality in Low-Rise Residential Buildings
 - ☐ ANSI/ASHRAE/IES Standard 100, Energy Efficiency in Existing Buildings
 - ☐ ANSI/ASHRAE Standard 135, BACnet® - A Data Communication Protocol for Building Automation and Control Networks
 - ☐ ANSI/ASHRAE/USGBC/IES Standard 189.1, Standard for the Design of High-Performance Green Buildings Except Low-Rise Residential Buildings, and
 - ☐ Proposed ASHRAE/NEMA Standard 201, Facility Smart Grid Information Model
- Support a goal for the 2013 version of Standard 90.1 to be 50 percent more energy efficient than the 2004 version of Standard 90.1.
- Promote and support Standard 90.1 through training programs, including self-directed learning, building interaction and ASHRAE chapter-oriented training.
- Cooperate in promotion for the adoption of Standard 90.1 in building codes and in the International Standards Organization (ISO) standards.
- Collaborate on the accelerated development and distribution of advanced energy design guidance publications, such as 50 percent Advanced Energy Design Guides, which can be utilized as an alternative to the prescriptive path in Standard 90.1-2013, for a more sustainable built environment.
- Work within the building community and related professions to encourage the interoperability of building related software and integrated solutions among design disciplines, manufacturers, contractors, building owners and operators, to increase energy efficiency, health and productivity in new and existing buildings.
- Provide and support communication of information regarding technology transfers to building owners and management about the interrelationships between mechanical systems and building operating costs, noting energy, indoor environmental quality workplace performance, client satisfaction and public safety.
- Collaborate to increase the impact of the energy hubs created as part of the DOE Energy Efficient Building Systems Regional Innovation Cluster Initiative.
- Support the development and implementation of next-generation refrigerants that achieve Low-global warming potential targets and concurrently improve equipment energy efficiency.

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**What is Energy Use Intensity? ASHRAE Seeks to Define, Educate**

ATLANTA - While the importance of building energy performance metrics to reduce energy use is accepted worldwide, there is no single generally accepted definition of that metric. Currently, proposed relative energy use reduction targets are subject to interpretation and difficult to verify.

Under a new initiative, ASHRAE is working to define one clear, logical metric to move the building industry toward producing net zero energy buildings by 2030. The U.S. Congress has mandated a series of relative fossil fuel energy use reductions in federal buildings ending in a 100 percent reduction of fossil fuel energy by 2030. Congress is considering applying similar relative energy use reductions in all buildings through the use of building energy codes adopted by state and local government.

"We must address buildings as entire living entities," ASHRAE President Ron Jarnagin said. "As such, we need to establish energy targets for building design that provide a total building energy use goal to strive toward that can subsequently drive the development and application of any number of prescriptive solutions."

A forum seeking input on the energy target initiative was held at ASHRAE's 2011 Annual Conference in Montreal, June 25-29. Also, ASHRAE has developed a public policy brief asking Congress to foster collaboration among the U.S. Department of Energy, the National Institute of Standards and Technology and the U.S. Environmental Protection Agency and ASHRAE along with partner organizations to:

- Establish a single objective definition of energy use intensity (EUI) for the design of commercial buildings
- Determine a single objective baseline EUI for design of commercial buildings from which to measure relative energy use reductions
- Create a performance environment that will support reduction in energy consumption associated with all loads in commercial buildings
- Identify a single objective set of commercial building types and simulation models for establishment of target design EUIs
- Produce one set of design target EUIs for the commercial building sector to guide the development of future energy codes and standards and building energy codes adopted by state and local government

"EUIs are very helpful for setting performance-based design goals," Jarnagin said. "The current focus on reduction of energy use in building stock has made the use of EUIs popular by governmental organizations, non-government organizations and building industry groups, including ASHRAE. Given that there is no clear single definition for EUIs, comparing one organization's EUI goals to another's is confusing, particularly since everyone tends to use the same units, kBtu/ft²-yr. Our goal is to develop and promote technical tools to assist the commercial building design and construction industry in moving toward higher performing buildings. Defining design energy use targets is a large part of achieving that goal."

ASHRAE Announces the Seventh International Conference on Cold Climate and Call for Papers

ATLANTA—ASHRAE, along with HVAC&R, architecture, interior design and building construction industry colleagues from around the world, will host the seventh International HVAC Cold Climate Conference, Nov. 12-14, 2012, in Calgary, Alberta, Canada.

Cold Climate HVAC 2012 will provide key elements of a strategy by which scientists, designers, engineers, manufacturers and other decision makers in cold climate regions can achieve good indoor environmental quality (IEQ), with a minimum use of resources and energy.

The range of topics includes energy and sustainability in arctic environments; building technology for people in the arctic; indoor environment and health; challenges for remote areas; cold climate building envelopes and moisture management; HVAC system operation and maintenance; and cold climate standards, codes, regulations and requirements.

The planning committee seeks papers featuring innovations in cold climate HVAC design. This includes new technologies and applications; improved methodologies, improvements to computational models or other design tools; novel methods of management, organization or quality assurance; and novel avenues of research or revised conceptual frameworks for designers.

Submit abstracts no longer than 350 words, which summarize the objectives, approach, results and conclusions of the proposed paper, and five to seven keywords by Dec. 1, 2011. Upon acceptance, papers will be due April 1, 2012. For specific topics, to submit a conference paper abstract or for more information go to www.ashrae.org/ColdClimate. For additional information, contact meetings@ashrae.org.

The Scandinavian Federation of Heating, Ventilation and Sanitary Engineering Associations (SCANVAC) initiated the series of Cold Climate HVAC Conferences. The six previous conferences have been successfully organized in Rovaniemi, Finland in 1994; Reykjavik, Iceland in 1997; Sapporo, Japan in 2000; Trondheim, Norway in 2003; Moscow, Russia in 2006; and Sisimiut, Greenland in 2009.

The series of congresses have earlier been supported by national HVAC societies, the Federation of European Heating, Ventilation and Air Condition Associations (RHEVA) and ASHRAE.

ASHRAE London Chapter

2011-2012 Season Kick-Off

9-Hole Golf & Dinner

Greenhills Golf and Country Club

Monday, September 26, 2011

2:00pm Social
3:00pm to 4:00pm Tee-Off
6:00pm Dinner
7:30pm Speaker

Registration:

Golf & Dinner: \$80 /person, \$40 for Meal Plan Members

Dinner only: \$45



Group Name: _____

(If booking a foursome)

Contact Name: _____

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Proceeds to support ASHRAE London Research Promotion and the
ASHRAE Region II CRC in London 2014

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