



## BUFFALO TALES

Newsletter of the Manitoba Chapter

*The Manitoba Chapter of the American Society of Heating, Refrigerating and Air Conditioning Engineers was chartered in September 1935. It is the second oldest ASHRAE Chapter in Canada. ASHRAE Manitoba is part of ASHRAE Region XI and covers ASHRAE members in Manitoba and Northwest Ontario.*



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**ASHRAE Supper Meeting**  
***Victoria Inn, 1808 Wellington Avenue***  
***Thursday December 9, 2010***

**Research Promotion**  
**Membership Promotion**  
**ASHRAE Manitoba Cribbage Tournament**

5:00 pm - Cocktails  
6:00 pm - Dinner  
7:00 pm – Research and Membership Promotion Presentation  
7:30 pm - Cribbage Tournament

ASHRAE Manitoba tradition continues with the annual cribbage tournament on Thursday, December 9th, 2010. The Chapter's History records revealed our first cribbage tournament was held on March 20, 1979. Members have participated in this event for over 30 years!

The Chapter would greatly appreciate any prize donations for this enjoyable event. Prize donations (please include your business card) may be dropped off or delivered to Peter Gryc c/o SMS Engineering Ltd., 770 Bradford Street, phone 775-0291. Delivery of prize donations by December 6th, 2010, would be greatly appreciated.

For further information please contact our Special Events Chair, Gary Bailley, at 360-5156, or [GBailley@hydro.mb.ca](mailto:GBailley@hydro.mb.ca)

**Thanks in advance from Manitoba ASHRAE Chapter - Special Events Committee**

***CONFIRM YOUR ATTENDANCE*** by December 6, 2010 by emailing Stephen Norsworthy at [stephen.norsworthy@snclavalin.com](mailto:stephen.norsworthy@snclavalin.com). Indicate any special meal requirements (vegetarian, allergies, etc.)

ASHRAE dinner meetings are open to all. The cost to non members is \$45. The cost for a first time guests accompanied by an ASHRAE Manitoba member is \$25. Pre-registration is required. To pre-register or to get information on the cost of ASHRAE events, e-mail [stephen.norsworthy@snclavalin.com](mailto:stephen.norsworthy@snclavalin.com) or visit [www.ashraemanitoba.ca](http://www.ashraemanitoba.ca).

## President's Message – Jesse Sandhu

The title of John Steinbeck's 1937 novella "Of Mice and Men" was taken from the line "The best laid schemes o' mice an' men / Gang aft agley." (The best laid schemes of mice and men / Go oft awry) in Robert Burns's poem "To a Mouse". I think it expresses a sentiment that is pertinent to all of our lives at some time or the other, and it has defined the first few months of my term as President of the Manitoba Chapter of ASHRAE. Time pressures and commitments on a variety of fronts have kept me scrambling. Three months into my term, sees my first Presidential message and it is brief.

Thanks to the ASHRAE Manitoba Board and Committee members that have been taken care of any details I have missed; I hope to see you all at the cribbage tournament on December 9; and a sincere wish that that you all enjoy health and happiness and anything which has been awry in your lives will become un-awry in the New Year.

## Coming Events

**ASHRAE Manitoba Supper Meetings for 2011** – January 13 – we celebrate Young Engineers in ASHRAE; February 10 Student Night with **ASHRAE Distinguished Lecturer Tim McGinn** speaking about *European Technologies and their Application in North America*; March 10 and April 14. Mark you calendar so you keep these dates open.

**January 29 to February 2, 2011 - ASHRAE Winter Meeting and AHR Expo/Trade Show** in Las Vegas, aka Lost Wages, a city that never sleeps, home of the grandest hotels, the biggest stars in entertainment, the most oogleable dancehall dolls, the brightest lights and for keen HVAC professionals, outshining all that will be the world's biggest HVAC Expo. ASHRAE's Winter Conference theme is **A Safe Bet: Zero-Energy Design**. The focus of the Conference Technical Program is net-zero energy design. A range of programs and papers will address the real cost of net-zero energy design, the efficient use of energy, the greening of the industrial base and other topics related to design, standards, codes and professional skills. For the specifying engineer, the AHR Expo/trade show is always a sure bet.



Go to <http://www.ashrae.org/events/page/2650> for details and to register.

**April 21, 2011- ASHRAE WebCast - Ground Source Heat Pump Systems – Putting the Earth to Work for You** – noon til 3PM Manitoba time. It has some great speakers and it is free. On-line registration begins March 21, 2011. For details on why you should participate and how to register, go to [www.ashrae.org/GHPwebcast](http://www.ashrae.org/GHPwebcast)

**May 10 - 13, 2011 - The Future of the Building Envelope ... Building Upon Our Past** – the 13th Canadian Conference on Building Science & Technology will be at the Fort Garry Hotel in Winnipeg. For information about this conference including sponsorship opportunities, visit the conference website <http://www.becwinnipeg2011.com/>

## Thank You to Sponsors of ASHRAE Manitoba's 75<sup>th</sup> Anniversary Supper

ASHRAE Manitoba would like to express thanks and gratitude to those companies whose sponsorship helped offset the costs and contributed to the success of the evening of October when we celebrated **ASHRAE Manitoba – 1935 to 2010 - 75 Years of Success** in the Fort Garry Hotel, the venue of ASHRAE Manitoba's first meetings.

**Midwest Engineering - Table Wine**  
**AO Smith/Tom Beggs Agencies – First Drink**  
**Price and E.H.Price Sales – Entertainment**  
**MCW/Age Consultants**  
**R.G. Sales Company Ltd.**

### Standard 90.1-2007 Available as Free Download

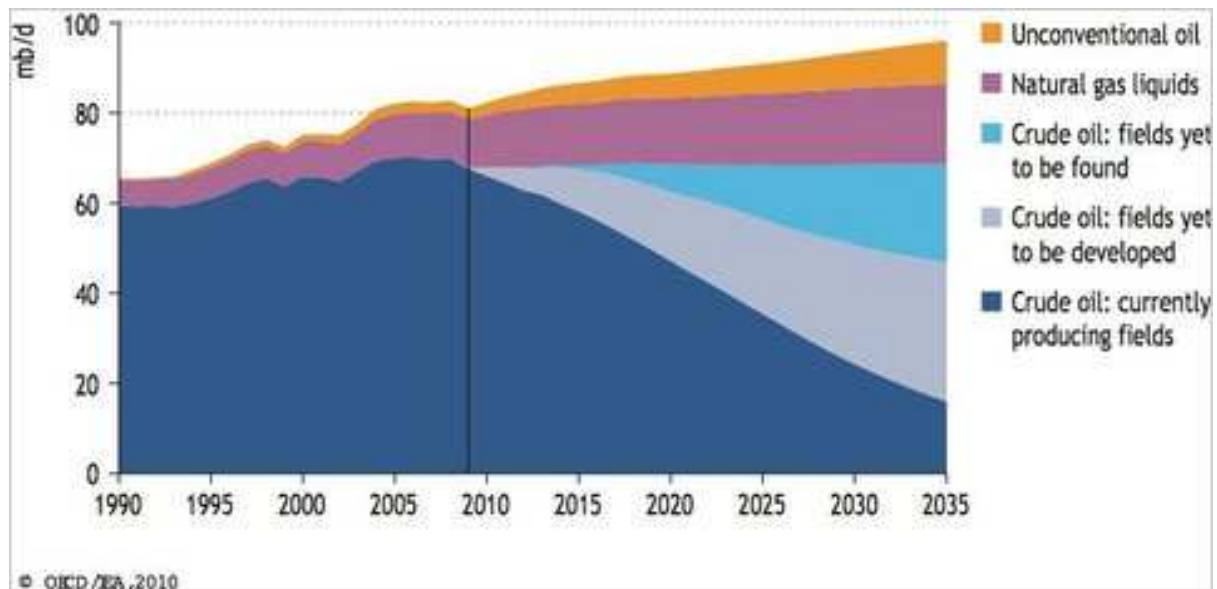
In order to move the industry forward toward more energy efficient design, ASHRAE is making its flagship energy standard, 90.1, available as a free download for a limited time. “Standard 90.1-2007 is widely used throughout the design community, and the download version makes it available to users at their own computers for ready and easy access,” ASHRAE President Lynn G. Bellenger said. “Making the standard available for free ensures that it penetrates the marketplace and reaches owners, contractors and design teams. We appreciate the support of the Department of Energy in reaching a wider audience and extending access to our flagship energy conservation standard.” Copies of the I-P edition of ANSI/ASHRAE/IES Standard 90.1-2007, Energy Standard for Buildings Except Low-Rise Residential Buildings, are free and downloadable as a PDF at [www.ashrae.org/standard901-2007-free](http://www.ashrae.org/standard901-2007-free).

### Where Is ‘Peak Oil’? By [JOHN COLLINS RUDOLF](#)

Peak oil is not here — it's behind us already.

The International Energy Agency, the Paris-based organization that provides energy analysis to 28 industrialized nations, in its latest [annual report](#), projects production of *conventional crude oil* — the black liquid stuff that rigs pump out of the ground — probably topped out for good in 2006, at about 70 million barrels a day and production from currently producing oil fields will drop sharply in coming decades.

The agency does not see energy doom on the horizon, however. By its estimation, after a short dip in production, crude production will reach an “undulating plateau” of about 68 million barrels a day between 2020 and 2035.



International Energy Agency Projections of the world's liquid energy sources to 2035.

Yet strong [demand growth from China](#), which the report estimates is now the world's largest energy user, and elsewhere will require liquid energy supplies to not just hold steady, but to climb by more than 20 percent. Meeting this additional demand will fall entirely on unconventional oil sources like Canada's tar sands as well as increased production of natural gas liquids. A major boost in these energy sources should be able to meet demand, but that is far from certain, Nobuo Tanaka, the agency's executive director, [told reporters in London](#), according to the Associated Press.

"Recent events have cast a veil of uncertainty over our energy future," Mr. Tanaka said. The I.E.A.'s stance that 2006 will be the year global supplies of conventional oil reached their ultimate peak is a more pessimistic take than its previous assessments. In 2008, the organization projected that conventional oil production would continue to slowly climb for several more decades.

Its current estimate that enough new oil will be found to keep the oil supply roughly steady for the next 25 years is hardly ironclad, however, a point the report acknowledges in the executive summary. "Will peak oil be a guest or the spectre at the feast?" its authors ask. "The size of ultimately recoverable resources of both conventional and unconventional oil is a major source of uncertainty for the long-term outlook for world oil production," it concludes.

Over all, oil prices should [continue to climb](#) in coming decades, reaching \$135 a barrel by 2035, a price level that some economists believe contributed to the global economic collapse of 2008.

Some experts found the report's projections troubling. "It's a perfect storm headed our way — a steady rise in global demand for oil crashing up against an increasingly limited supply of economically recoverable oil," William Chameides, professor of environmental science at Duke University, wrote [on his blog](#).



## **ASHRAE Holds All the Sustainability Cards at the Winter Conference in Las Vegas**

ASHRAE's Winter Conference theme will highlight the importance of finding the balance in design. The 2011 Winter Conference is January 29-February 2 at the Las Vegas Hilton. The International Air-Conditioning, Heating, Refrigerating Expo will run January 31-February 2 at the Las Vegas Convention Center, a short distance from the Hilton. The Winter Conference offers over 200 Professional Development Credits, as well as Continuing Education Units, which can be applied toward a Professional Engineering license.

The technical program features more than 90 programs and 300 speakers addressing the efficient use of energy in new and existing buildings, refrigeration updates, applications including data centers, laboratories, healthcare facilities, the real cost of zero-energy design and other topics related to design, standards, codes and professional skills. Nearly all of the technical program sessions will be approved by USGBC for GBCI CE hours for LEED professionals.

The **Las Vegas Virtual Conference** is included with paid attendees' registrations and is also available to non-attendees. So, even if you can't spare the time to go to Vegas for the conference, you can participate in the conference on-line, for a fee.

Six Professional Development Seminars and 14 Short Courses are offered to help industry professionals stay up-to-date on industry trends. ALI offers a new course on building energy modeling that focuses on HVAC&R systems as well as update courses which reflect changes in the 2010 versions of Standards 62.1 and 90.1. ASHRAE will launch its sixth certification program at the 2011 Winter Conference – this one targets Energy Assessors/Energy Auditors and is appropriate for those individuals who perform energy assessments or audits for commercial, industrial or residential buildings. More information can be found at [www.ashrae.org/certification](http://www.ashrae.org/certification).

Technical tours spotlight how technology developed by ASHRAE members is practically applied to buildings including the central plant at Planet Hollywood and MGM Center and Springs Preserve. As well, there are general tours such as the Hoover Dam, Springs Preserve, the Venetian Grand Canal Shops, the Bodies and Titanic exhibits and the Las Vegas Strip. Early-bird registration (i.e., before December 31) can save you up to \$195. Complete information is available at [www.ashrae.org/lasvegas](http://www.ashrae.org/lasvegas).

## **Why Be an ASHRAE Member?**

**ASHRAE Members** benefit from all the resources ASHRAE provides as the world's leading organization of HVAC&R professionals. These resources include:

- ASHRAE Handbooks, the monthly ASHRAE Journal, the quarterly High Performing Buildings magazine, the ASHRAE Insights newsletter and HVAC Industry News emails
- Access to more than 300 of the industry's leading technical publications.

- Access to online education, satellite broadcasts and professional education classes.
- Professional certification.

Networking at Chapter meetings give you a chance to interact with colleagues from around your city and region. ASHRAE Annual Meeting and the ASHRAE Winter Meeting and AHR Expo which feature short courses, technical sessions and discussions on leading HVAC&R trends and issues with colleagues from around the country and the world.

ASHRAE's professional certification programs assure employers and clients that you have mastered the body of knowledge associated with the respective field. Course formats include on-site lectures, satellite broadcasts and the best in self-directed and online e-learning programs. By participating in one of ASHRAE's more than 115 technical committees, task groups and review groups, you can play a part in establishing guidelines and shaping the future of the HVAC&R industry.

ASHRAE's 50,000 plus members affect public policy in the areas of energy efficiency, safety, security and public health, ultimately making the world a cleaner, safer, greener and more efficient place to live.

For more information on the many benefits of ASHRAE membership contact ASHRAE Manitoba Membership Chair Stephen Norsworthy [Stephen.Norsworthy@snclavalin.com](mailto:Stephen.Norsworthy@snclavalin.com)

## ASHRAE'S BUILDING ENERGY ASSESSMENT PROFESSIONAL CERTIFICATION

# Help Building Owners Improve Energy Efficiency Cost Effectively

*Act now! Save  
50% if you apply  
by Jan. 3rd for the  
Feb. 2nd exam.*

Earning ASHRAE's BEAP certification:

- Establishes you and your firm in this emerging market
- Attracts clients looking to understand the energy usage of each building component
- Sets you apart by adding to your credentials in energy modeling



ASHRAE's Building Energy Assessment Professional (BEAP) program certifies your ability to audit and analyze residential, commercial, and industrial buildings including determining project scope, collecting data, analyzing building performance, interpreting results, evaluating alternatives, submitting recommendations for energy conservation measures, and assisting with the implementation of these recommendations.

ASHRAE developed the Building EnergyAssessment Professional (BEAP) certification program in collaboration with representatives from ASHRAE's Building Energy Quotient (bEQ) program, IES, NIBS, SMACNA, and TABB.

Show building owners that you can help them optimize building design and energy usage.

Visit [www.ashrae.org/BEAP](http://www.ashrae.org/BEAP) to learn more

## ASHRAE Manitoba Chapter Officers

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## ASHRAE Region XI Officers

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	Kevin Marple	Benz Air Engineering	Portland	<a href="mailto:kmarple@benzco.com">kmarple@benzco.com</a>
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**ASHRAE needs you, but more importantly you need ASHRAE.** ASHRAE always has room for more professionals, just like you. For information regarding ASHRAE membership, contact Manitoba Membership Chair Steven Norsworthy [Stephen.Norsworthy@snclavalin.com](mailto:Stephen.Norsworthy@snclavalin.com) or visit ASHRAE Manitoba at [www.ashraemanitoba.ca](http://www.ashraemanitoba.ca)

ASHRAE, founded in 1894, is an international organization of 50,000 persons. Its sole objective is to advance through research, standards writing, publishing and continuing education the arts and sciences of heating, ventilation, air conditioning and refrigeration to serve the evolving needs of the public. Visit ASHRAE at [www.ashrae.org](http://www.ashrae.org).

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# ASHRAE Learning Institute

Seminars & Courses at ASHRAE's Winter Conference in Las Vegas, NV

## 2 WAYS TO REGISTER

Internet: [www.ashrae.org/lasvegascourses](http://www.ashrae.org/lasvegascourses)

Phone: Call 1-800-527-4723 (US and Canada) or 404-636-8400 (worldwide)



### Full Day Professional Development Seminar

\$485/\$395 ASHRAE Member – Earn 6 PDH/6 CEU or 6 AIA LU credits

#### The Commissioning Process in New & Existing Buildings

Saturday, Jan 29 – 8:00 a.m. to 3:00 p.m.

#### Healthcare Facilities: Best Practice Design and Application

Saturday, Jan 29 – 8:00 a.m. to 3:00 p.m.

#### Complying with ASHRAE/IES Standard 90.1-2010

Saturday, Jan 29 – 8:00 a.m. to 3:00 p.m.

#### Implementing Energy Management in New and Existing Buildings: A Sustainable Activity

Saturday, Jan 29 – 8:00 a.m. to 3:00 p.m.

#### Integrated Building Design

Saturday, Jan 29 – 8:00 a.m. to 3:00 p.m.

#### Energy Modeling Best Practices and Applications: HVAC/Thermal

Tuesday, Feb 1 – 9:00 a.m. - Noon, 2:00 p.m. - 5:00 p.m.

### Half Day Short Courses

\$159/\$119 ASHRAE Member – Earn 3 PDH/3 CEU or 3 AIA LU credits

#### Fundamental Requirements of ASHRAE Standard 62.1-2010

Saturday, Jan 29 – 8:00 a.m. to 11:00 a.m.

#### Understanding Air-to-Air Energy Recovery Technologies and Applications

Sunday, Jan 30 – 2:00 p.m. to 5:00 p.m.

#### Using Standard 90.1 to Meet LEED Requirements

Sunday, Jan 30 – 2:00 p.m. to 5:00 p.m.

#### Determining Energy Savings from Performance Contracting and LEED Projects: M&V

Monday, Jan 31 – 2:30 p.m. to 5:30 p.m.

#### Understanding & Designing Dedicated Outdoor Air Systems (DOAS)

Tuesday, Feb 1 – 9:00 a.m. to Noon

#### Successful Solar Applications for Commercial & Industrial Facilities

Tuesday, Feb 1 – 9:00 a.m. to Noon

#### District Cooling & Heating Systems: Central Plants

Tuesday, Feb 1 – 2:00 p.m. to 5:00 p.m.

#### Application of Standard 62.1-2010: Multiple Spaces Equations & Spreadsheet Calculation

Saturday, Jan 29 – Noon to 3:00 p.m.

#### Chilled Beam Technology for Excellent Indoor Climate in an Energy Efficient Manner

Sunday, Jan 30 – 2:00 p.m. to 5:00 p.m.

#### The Commissioning Process & Guideline 0

Monday, Jan 31 – 2:30 p.m. to 5:30 p.m.

#### Understanding Standard 189.1-2009 for High-Performance Green Buildings

Monday, Jan 31 – 2:30 p.m. to 5:30 p.m.

#### Low Temperature Radiant Heating & High Temperature Radiant Cooling Systems

Tuesday, Feb 1 – 9:00 a.m. to Noon

#### Avoiding IAQ Problems: Using ASHRAE's New IAQ Guide

Tuesday, Feb 1 – 2:00 p.m. to 5:00 p.m.

#### Designing Toward Net Zero Energy Commercial Buildings

Tuesday, Feb 1 – 2:00 p.m. to 5:00 p.m.



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## ASHRAE Certification Programs

Take advantage of ASHRAE's special pencil & paper administration of our certification examinations on Wednesday Feb. 2, 2011, in conjunction with the 2011 ASHRAE Winter Conference.

- Building Energy Assessment Professional (BEAP) **NEW**
- Building Energy Modeling Professional (BEMP)
- Commissioning Process Management Professional (CPMP)
- Healthcare Facility Design Professional (HFDP)
- High-Performance Building Design Professional (HBPD)
- Operations & Performance Management Professional (OPMP)

For more info, visit [www.ashrae.org/lasvegas/certification](http://www.ashrae.org/lasvegas/certification)

## New Publications from ASHRAE

- Standard 189.1-2009: Standard for the Design of High-Performance Green Buildings (A Jurisdictional Compliance Option of the IGCC)*
  - Standard 189.1-2009 User's Manual (A Jurisdictional Compliance Option of the IGCC)*
  - ASHRAE GreenGuide 3<sup>rd</sup> Edition – The Design, Construction, and Operations of Sustainable Buildings*
  - ASHRAE Standard 90.1-2010: Energy Standard for Buildings Except Low-Rise Residential Buildings*
  - ANSI/ASHRAE 55-2010 – Thermal Environmental Conditions for Human Occupancy*
  - ANSI/ASHRAE 62.2-2010 – Ventilation for Acceptable Indoor Air Quality in Low-Rise Residential Buildings*
  - ANSI/ASHRAE 62.1-2010 – Ventilation for Acceptable Indoor Air Quality*
- Package:
- ANSI/ASHRAE 15-2010 – Safety Standard for Refrigeration Systems*
  - ANSI/ASHRAE 34-2010 – Designation and Classification of Refrigerants*

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