

ASHRAE Ottawa Valley Chapter

Chapter Meeting #6 – March 19, 2013 (17:30)



Meeting Date:	19 March 2013
Location:	Travelodge Ottawa Hotel and Conference Centre
Attendance:	Total: 51 - Members: 43 Guests: 5 Students: 3
Theme:	Students
Tour:	NRC Construction (20 March 2013)
Tech Session:	None
Table Top:	None
Program:	Cool Energy Storage in the Era of Sustainability
Speaker:	William P. Bahnfleth
Prepared by:	Abbey Saunders

Social: (17:30 – 18:35)

Business Session (18:35 –18:55)

- President Donald Weekes introduced the Board of Governors and the Executive.
- Abbey Saunders introduced the guests for the evening.
- Steve Moons introduced the new members for the month.
- Bob Kilpatrick reminded everyone of the impending nominations required for next year.
- Student membership chair Richard Cameron discussed the success of the Career Fair.
- Donald Weekes discussed appointments at ASHRAE Society. Three of our local OVC members were appointed.
- Patrick Albert run ASHRAE Research 50-50 Draw, winner Chris Fudge donated winnings back to ASHRAE Research.

Dinner (18:55 – 19:20)

Evening Program (19:15 – 20:45)

- After dinner, the main program event took place, speaker Bill Bahnfleth presentation topic was Cool Energy Storage in the Era of Sustainability.
- Mr. Bahnfleth reminded participants about the general concept of sustainability and how sustainable designs try to balance the quality of life v. environmental footprint
- Mr. Bahnfleth described that the concept of TES in terms of cooling as producing cooling capacity at some time for use at another time. This concept allows production during low load conditions and utilization during peak or excess load conditions.
- TES was a popular technology several years ago in the USA, as it was promoted by monopoly utility providers as a demand-side management tool. However, with the deregulation of the utility providers this increased awareness that the use of TES to decrease demand was not necessarily “green” by rather an unintended side effect of monopoly utility incentive programs, and this contributed to TES gaining somewhat of a bad reputation.
- Mr. Bahnfleth discussed why TES can be considered a sustainable technology. TES can help to reduce site (user) energy consumption which can be attributed to several factors including: favorable day-night condensing temperature changes, a decrease in low load conditions for mechanical cooling equipment and a decrease in standby capacity losses. Source (utility

provider) energy consumption and emissions can be reduced through use of TES via more efficient production and decreased transmission losses as a result of reductions in peak demand.

- In summary: proper operation plays an important role in maximizing cost savings and the overall effectiveness of a TES. TES is a mature technology for load management that has significant potential to contribute to the sustainability of our built environment but the challenge lies with how to integrate this technology properly in our design practices.
- President Donald Weekes thanked Bill Bahnfleth.
- Meeting adjourned 20:45.