

# ASHRAE Ottawa Valley Chapter

## Chapter Meeting #1 – 15 September 2015

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Meeting Date:	15 September, 2015		
Location:	Restaurant International, Algonquin College		
Attendance:	Total: 64		
	Members: 49	Guests:13	Students: 2
Theme:	Membership		
Tour:	None		
Tech Session:	None		
Table Top:	Hydro Ottawa, Total HVAC, Trane		
Program:	<b>Hydro Ottawa - saveONenergy</b>		
Speakers:	Shawn Carr		
Prepared by:	Daniel Redmond		

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### **Social** (17:30 – 18:30)

### **Business Session** (18:30 –18:55)

- President Georges Maamari introduced the Board of Governors, Executive and Chairs.
- Daniel Redmond introduced the guests for the evening.
- Celine provided an overview of membership in the area and goal to encourage members to attend. New members were announced.
- Andrew Klassen and Chris Fudge discussed CTTC. Chris discussed Region 2 and CTTC and discussed ASHRAE Technology Awards. Regional Technology Award was presented to Frank Bann for his project “St. Patrick’s Home”.
- Georges Maamari provided an overview of the CRC. Georges presented Steve Moon’s with his award for “Significant Improvement in Membership Attendance, Research Promotion, Education, Chapter Programs and Technology” which was awarded during the CRC. Steve thanked the committee chairs who contributed to the chapter’s success.
- Abbey Saunders congratulated Georges Maamari for last year’s outstanding RP results as Georges raised approximately \$39,000. The 2015-16 RP team has been assembled and the goal for 2015-16 is \$27,000.
- Rod Potter, Regional Historian, put together a video tribute to Lan Chi Nguyen Weekes and presented the tribute to the Chapter. Rod created the digital story in response to requests to make the biographies more interesting. The digital video tribute was very well done and truly interesting.
- Kevin from Hydro Ottawa discussed the Hydro Ottawa table top and provided a brief overview of the incentive programs and strategies that will be the focus of the program meeting tonight.
- Steve Moons presented the Total HVAC table top displaying Aaon and Cimco products.
- Andrew Klassen presented the Trane table top which highlighted a controls based solution for monitoring buildings.
- Georges Maamari advertised that table tops are open for future meetings and let everyone know that Shian is the table top chair.

**Dinner** (18:55 – 19:45)

- Sens tickets raffled off – raised \$700 for ASHRAE RP

**Evening Program** (20:00 – 19:45)

- Georges Maamari introduced the program, saveONenergy which is planned to continue until 2020.
- Shawn Carr provided the following overview of the program:
  1. Transition phase:
    1. ISO just recently launched the new framework (in place until 2020)
    2. Help make projects more attractive to clients
    3. Discussed Hydro Ottawa Conservation Demand Management (CDM)
    4. Introduction to Conservation First Framework (CFF)
    5. Retrofit Program – what, how, why
    6. Case studies
  2. Why Hydro Ottawa:
    1. Conserving power is part of license since 2011
    2. Hydro Ottawa Is largest municipally owned renewable energy provider in the province
  3. Electricity supply mix:
    1. 2014
    2. Future
    3. Hydro Ottawa looking to build renewable capacity
  4. How are we doing:
    1. kwh trends from 2004 to 2011
      1. Daily consumption has reduced steadily over past 10 years
      2. Part due to innovation, technology, rising utility rates
  5. Conservation First Framework:
    1. 6 terrawatts target for province
    2. Hydro Ottawa 400 gigawatt hours within our territory
    3. Framework is open for business
    4. May be some changes, but the participant agreement is available on the website
  6. Team:
    1. 20 people on the team now
    2. Means better support, more support and better overall customer service
  7. Conservation First:
    1. Aug 2015 – 2020
    2. Current programs continue until end of 2015
    3. Province is less concerned with demand, there is not a demand issue
    4. kW incentive will likely go away and kWh incentive will stick

8. What is the Retrofit program:
  1. Pays up to 50% of an energy efficiency project
  2. CFF retrofit program remains largely unchanged
  3. Three tracks remain (prescriptive, engineered, custom) for maximum flexibility
  4. Opportunities
    1. Lighting
    2. Hvac
    3. Motors
    4. Vfds
    5. Controls
    6. etc
    7. virtually anything that will save energy
  5. lighting retrofits make up majority
  6. recently more emphasis on hvac
    1. vfds
      - help address oversizing issues
  7. trends – what are owners investing in
    1. clients that retrofitted to t8 are now going led
    2. interior and exterior lighting incentives are big
    3. opportunity and trends in next few years in BAS and controls
  8. what will incent all changes (schedules, any improved controllability that reduces energy)
  9. retrocommissioning also an area seeing more
  10. energy audit with elements of RCx
  11. focus on low and no cost operational improvements
9. How to participate:
  1. How to go through the process
  2. Website – abundance of info
  3. If don't have a saveONenergy account, take the few minutes to get one
  4. Hydro Ottawa can also act as the applicant's rep to get incentive
    1. Preparing business case, etc
  5. Earlier that we can get HydroOttawa involved, the better
10. There is some information that is required (steps to participate):
  1. Scope of project
  2. Info regarding equipment removed
  3. Info regarding proposed equipment
    1. Spec sheets, schedules
  4. Approx. project cost
    1. Will incent up to 50% of project cost
  5. Who are the players in the project (owner, etc)
  6. Tips
    1. Take pictures of existing when preparing bids
    2. Engage HydroOttawa before equipment is purchased
  7. Need invoices (ideally that highlight scope of work)
    1. Confirmation of payment, etc, disposal,
  8. Goal for cheques to be delivered 30-60 days after everything is received

#### 11. Recap:

1. Submit application with quote, spec, worksheet (before) equipment is purchased
2. Receive a pre-approval
3. Complete project
4. Submit invoice, proof of payments/disposal within 1250 days
5. Cheque issued within 60 days

#### 12. Audit funding:

1. Find energy-savings opportunities
2. Up to 50% cost
3. Building level or system level funding available
4. Programs are currently under review, but this is what HydroOttawa wants to see move forward

#### 13. Why participate:

1. Competitive advantage (or disadvantage)
2. Reducing energy is a key strategy for many owners
  1. Energy performance as a proxy for green
  2. Disclosure
  3. Green building certification
  4. Benchmarking
    1. If not measuring, can't manage
    2. NRCan's energystar portfolio manager
  5. Energy management systems
    - Owners want visibility and be able to manage ongoing improvements
  6. Energy assessments
3. Pressure on existing building market to keep up with new buildings (green buildings)
4. Province may implement a mandatory energy performance (energy, water and ghg) – many US jurisdictions have implemented similar disclosure requirements

#### 14. Case Studies:

1. Canadian Tire Centre
  1. Base case vs project case
  2. Major lighting retrofit
  3. Annual saved = 898043 kwh
  4. Incentive \$150k
  5. Annual savings \$110k
  6. %PC used = 22%
  7. Other non-financial benefits
    - Improving customer experience
    - Less glare on ice
    - Lighting show is more flexible (controls)
    - Reduced cooling demand (heat from old metal halide lights)
    - Reduced load on roof – allow more flexibility to hang more equipment for shows

2. Sun Life Financial centre cooling plant replacement (99 Bank / 50 oconnor)
  1. Annual kwh saved = 1,340,000
  2. Incentive paid = \$536k
  3. Annual savings \$185k
  4. % PC used = 27%
  5. Role of incentives
    - Audit funding program incented studies
    - Retrofit program finded samings from
      - Chiller replacement
      - Cooling tower replacement
      - Free cooling
      - VFDs on pumps
      - More efficient motores
3. G. Best Building, 411 Legget Drive (pre-approved only)
  1. BAS upgrade
  2. Projected annual kwh saved = 1,923,845 kwh
  3. Incentive preapproved = \$110k
  4. Annual savings = \$230k
  5. % of PC used = 50%

15. Summary:

1. There is a contribution that exists for basically any energy efficiency upgrades
2. If not sure then call HydroOttawa
3. There is an opportunity to take advantage
4. Building stock burden for future generations
5. Better overall value to clients
6. Big team on standby
  1. want to understand what the pain points are for users
7. Call if ANY questions – HydroOttawa is there to be used
8. More flexibility within LDC to implement program
9. HydroOttawa will manage the application process for us

- Georges Maamari thanked Mr. Carr for the presentation

Next meeting October 20<sup>th</sup>

Meeting adjourned 8:53