



THE HERRING CHOKER ASHRAE NB/PEI CHAPTER

May 2023

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Chapter Announcements

1. Lucy's Engineering Adventure (Fundraiser)

Fellow ASHRAE members I am writing you today to ask for your support on an initiative that the executive committee has come up with. ASHRAE society has recently published a children's book called <u>Lucy's Engineering Adventure</u>, its target audience is the K-5 age range. Here is a description as published by ASHRAE:

"This rhyming picture book introduces children to building and HVAC engineering through a young girl's visit to an unfinished building, where her father uses a metaphor of the human body to explain the building's beams and columns, electrical system, and HVAC ducts. Lucy's curiosity is encouraged by her father throughout. This is ASHRAE's first picture book and was developed by ASHRAE's Student Activities Committee as part of their goal to promote and encourage engineering and HVAC&R careers."

The initiative that the executive committee is proposing is to provide a copy of this book to every English K-5 school in New Brunswick and Prince Edward Island; the territories that we serve. We are targeting the English schools for now because it has not been translated to French just yet, but that is in the works along with several other languages! In order for us to be able to do this we need to raise the funds required to do this. Our goal is to raise \$2,500 to be able to purchase the books. Donations can be mailed to:

ASHRAE NB/PEI CHAPTER

P.O. Box 1629 Moncton New Brunswick E1C9X4 Please note on the envelope "Lucy's Engineering Adventure" somewhere on the mailed donation.

Alternately we can accept e-transfers at treasurerashraenbpei@gmail.com and again in the email please note Lucy's Engineering Adventure.

Any donation large or small will help to get us to this goal. We appreciate your support!

Kevin Clannon, CET President ASHRAE NB/PEI Chapter

*May 4th, 2023 Update: We have raised \$50

2. Request for Assistance: Heat Pump Technology (HPT) Research Study through Annex 60

National Resources Canada are involved with Annex 60, a collaborative program with the IEA, which studies retrofit heat pump systems in non-residential buildings. The outcome of Annex 60 will be to provide high-level guidance for building owners and decision makers to implement heat pump technologies in their own buildings based on the successes and feedback of the industry.

This phase of research is titled "Task 2 - Case Studies of Existing Projects" and is looking for volunteers to simply fill out a high-level case study log on any buildings that meet the criteria. The submissions will be reviewed and those that are identified by Annex 60 as suitable projects will be contacted for more details.

More information can be found at the following links:

Annex 60 website

Research Summary (pdf)

Case Study Log (excel sheet)

If you are interested in participating or have other questions please reach out to frederic.genest@NRCan-RNCan.gc.ca

3. Did you know we're on social media?!

Follow us on LinkedIn and Facebook to find out about events when they're announced (click the icons below or at the bottom of the newsletter).







BOG Meeting & Presentation

May 9th, 4:00PM - 8:00PM AST

TOPIC: Optimizing Heating/Hydronic Systems with Low Temperature

This presentation provides an overview of several solutions (Units and terminal units) to design low temperature heating/hydronic systems. New technologies are now available on the market and it is important to understand how to integrate all these components to optimize your system. In other words, this presentation will explain the advantages and benefits of designing such systems at low temperature.

This presentation will also address different key elements including the "tricks and tips" to design a low temperature heating system. These tricks and tips can be applied to the design of new systems or to mechanical retrofits.

Key takeaways and Learning Objectives from the session:

- Understand what a low temperature heating/hydronic system.
- Address the different regulations that will be in effect to better design our low temperature systems (GWP & NRCAN Amendment 15)
- Understand the testing methodologies of the different components of the system (boilers, heating cabinet, etc.) and understand their impact.

Recommended audience: Engineers, architects, contractors, facility managers, educators, students, sustainability coordinators

About the Presenter: Emilie Boyer, ing (Master Group)

A Graduate of École Polytechnique de Montréal, Emilie Boyer began her career working for two (2) consulting engineering firms: Stantec and Martin Roy & Associates. Since 2015, she has been working for the Master Group and, since 2017, she holds the position of Heating Product Director. Since then, her role has grown within the company, and she is now National Product Director for Applied Hydronics products. Emilie is an active member in the engineering community. She is a part of CA of several associations including the ASPE and the CIPH.



Event Details:

When:

Tuesday May 9th, 2023

Location:

Alma City Club - 114 Alma St, Moncton, NB

Agenda:

4:00pm - 5:00pm: Board of Governors (BOG) Meeting

5:00pm - 6:00pm: Social Hour

6:00pm - 7:00pm: Presentation

7:00pm: Dinner is Served

Pricing:

ASHRAE Members - \$30 Non-Members - \$55 Student & Retirees - \$20

Meal*:

Pork Tenderloin with Wine Merchant Sauce, Mashed Potatoes, and Vegetables

OR

Salmon with Orange Dill Sauce, Pilaf Rice, and Vegatables

*Meal includes choice of soup or salad, plus blueberry cobbler for dessert

Please RSVP by noon on Monday, May 8th

Click Here to Register



Research Promotion

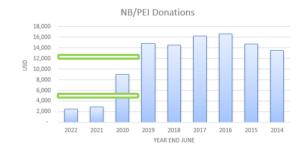
Knowledge is Power

This year's donations will be back up to their usual \$12,000+ (USD) if we on the RP committee have our way. In the past years we have been as high as \$16,656!

Have a look.

Those horizontal bars represent the official target 5,000 and my personal target 12,000.

It should be quite doable since before Covid we were in that ballpark.



Our thanks to the donors and to **Mike Boudreau** for running a very successful campaign in 2016.

The clip posted here was the end fo the year Herring Choker. I got it from the Chapter History Archive which is available to all.

We hope you'll join the RP committee next year!



John G. Willden, Research Promotion Chair 2022-23 JohnWillden@Gmail.ca

Recap of Past Events

In Case You Missed It...

April Presentation

On April 11th we were joined virtually by Mitsubishi's Chris DesRoches. This was our first time trying a hybrid meeting where the attendees were in-person and the speaker was remote and we're happy to say it went exceptionally well!

Chris' presentation gave an overview of traditional hydronic heating systems which commonly use boilers fueled by natural gas, oil, or propane, and went on to explain the dynamics of how we can revamp this design to improve efficiency and reduce emmissions all while maintaining indoor comfort levels. To achieve this balance we can turn to Air-to-Water Heat Pumps (ATWHP) technology of course!

In the ongoing effort to decarbonize and electrify our buildings there's no other bigger hurdle than to shift heating onto an electric source. Electric boilers are certainly an option, but they come with very high demand costs and sometimes unreasonable site electrical requirements. However, with ATWHP's we can leverage the benefits of compressor heating to efficiently maintain our hydronic loop temperatures.

A couple things to consider when retrofitting a hydronic system with an ATWHP or in new construction; you must choose a heat pump built for the application (i.e., can heat in low temp climates, sized adequately to compensate for derates and still output required heating capacity) and you will need to take into consideration that these systems will often generate lower temperatures which should be factored into the terminal zone equipment.

Air-to-water heat pumps are yet another arrow in our quiver as we journey onwards towards a low-carbon future.

Brandon Cosman, Communications Chair, 2022-2023 Brandon.Cosman@PMCEnergy.ca



Bill Hooper, CET Regional Sales Manager Atlantic

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Upcoming Events

The Future is Bright

<u>ASHRAE HVAC Level I & Level II Design Training</u> (<u>Toronto</u>)

June 12-16th, 2023

ASHRAE is hosting 2 HVAC design training courses in Toronto. Each course is 2 days in duration with the first covering HVAC essentials and the second covering applications. All are welcome to register and you may choose both or a single program. Below is a description of each:

HVAC Design: Level I – Essentials provides intensive, practical training ideal for recent technical or engineering school graduates, engineers new to the HVAC field, those who need a refresher in new technologies, and facility managers, sales representatives and others who want to gain a better understanding of HVAC fundamentals, equipment and systems.

HVAC Design Level II – Applications provides instruction in HVAC system design for experienced HVAC engineers and those who have completed the HVAC Design: Level I – Essentials. The training covers the technical aspects of design and allows participants an opportunity to expand their exposure to HVAC systems applications to increase energy savings and improve indoor environmental quality.

For more information please refer to the link below.

ASHRAE HVAC Design Training

Energizing Efficiency Conference 2023

May 24-25th, 2023

NB Power is hosting their annual energy efficiency conference at the Fredericton Convention Centre. It will span 2 days and cover topics from energy efficiency, energy management and carbon reduction. This conference is a great opportunity to meet others in the industry, share best practices and understand the NB's energy future.

Visit the link below for more details. If you register before April 5th (tomorrow) you can get an early bird discount!

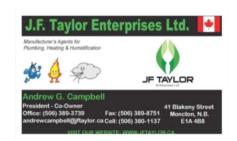
NB Power: Efficiency Lunch & Learns

Various Dates April - May, 2023

NB Power will be free one-hour information sessions on Energy Efficiency Programs for new construction and existing buildings. These sessions will be taking place throughout the province across multiple weeks. See the link below for a full schedule.

Serving Up Efficiency Knowledge





Awards & Scholarships

Step Right Up, Win a Prize!

1. ASHRAE Technology Awards - Chapter Competition

This year, the ASHRAE NB/PEI Chapter will host a Technology Awards Program to recognize innovative projects by Chapter Members.

The ASHRAE Technology Awards recognize members at the Chapter, Regional and Society levels for outstanding design and innovations for effective energy utilization.

The format of competition, deadlines, and judging are determined by the Chapter and will be announced shortly. The short application form (Link: Chapter/Regional Application -- Short Form) may be used for the Chapter competition and the regional competition for projects that move on to the Regional Competition.

Entries can be submitted for each of the following 7 categories:

- Commercial Buildings New, Existing and Existing Building Commissioning (EBCx)
- Institutional Buildings
 - Educational Facilities New, Existing and EBCx
 - Other Institutional New, Existing and EBCx
- Health Care Facilities New, Existing and EBCx

- Industrial Facilities or Processes New, Existing and EBCx
- Public Assembly Facilities New, Existing and EBCx
- Residential Buildings New, Existing and EBCx

The ASHRAE NB/PEI Chapter's first and only Technology Award was awarded to Stephen Tweedie in 1999 for outstanding achievement in energy-efficient building design for the Nova Institution, a Federal women's correctional facility located in Truro, Nova Scotia in the Institutional Buildings category.

ASHRAE Region II, of which the ASHRAE NB/PEI Chapter is a member has a history of winning many Society level awards, and we hope to submit winning projects of our own.

The ASHRAE NB/PEI Chapter will submit one entry for each of the 7 categories listed above to the Regional Competition. See <u>Technology Awards Program (ashrae.org)</u> for more information, or reach out to your Chapter Technology Transfer Committee (CTTC) Chair, yves.savoie@englobecorp.com.



ASHRAE Job Board Jobs, jobs, jobs!

The ASHRAE Job Board offers the following benefits for job-seekers:

- Search and apply for relevant jobs quickly and effectively.
- Set up job alerts for immediate notification of job postings matching skills and interests.
- · Anonymous profiles and resume uploads.
- Useful tips and tools for improving job searching effectiveness.
- Single sign-in for ASHRAE members.

Employers can:

- Put their positions in front of ASHRAE's unique audience of engineering experts.
- Manage jobs and applicant activity on the Job Board site.
- Search the ASHRAE Job Board's candidate database.
- · Limit applicants to only those qualified.
- · Quickly find the right professionals for their positions.

The Job Board can be found at www.ashrae.org/jobs. The Job Board is designed to assist members and other industry professionals along with

ASHRAE's student program, Young Engineers in ASHRAE, education and certification programs.



Volunteering Many Hands Make Light Work!

Are you looking for ways to get involved in your HVAC community? Well look no further! Reach out to any of our BOG members or our Membership Promotion chair and find out how you can get started today! Or better yet come sit in on one of our monthly meetings to get a feel for things and see if it's right for you.

Our Chapter is always looking for volunteers to take on Chair or Co-Chair positions, collaborate on committees, and share feedback and ideas on how we can strive to be better than we were yesterday. Whether you're a consulting engineer, contractor, equipment supplier, property manager, or student we welcome all. By volunteering with ASHRAE you'll get the satisfaction of contributing to a global organization by making local impacts, you'll get to network with a wide range of fellow members of the community, you'll gain the experience of working with a Board of Governors structured organization, and much more!

Reach out to any member from the BOG or to our Membership Promotion Chair: Matthew Peachman [mpeachman@cbcl.ca] to get started!



2022-2023 Chapter Schedule

Can't make this one? Plan for the next meeting!

2022-2023 ASHRAE NB/PEI PROGRAM

Date	Topic	Presenter	<u>Theme</u>	<u>Venue</u>
September 13, 2022	Decarbonization with Air-	Mike Genin, P.Eng	Government Affairs/	Alma City Club,
	source Heating		Student Night	Moncton
October 11, 2022	Laboratory Control and Isolation	Stephan Riffault,	Student/Gov	Alma City Club,
	Room Control Strategies	P. Eng		Moncton
November 8, 2022	ASHRAE NB/PEI Chapter 50th	President-Elect	Past Presidents	Legend's Lounge,
	Anniversary	Ginger Scoggins		Moncton
December 13, 2022	VRF System Panel Discussion	Discussion Panelists	Refrigeration	Alma City Club,
	VKF System Famer Discussion			Moncton
January 10, 2023	Cybersecurity in Building HVAC	Misty Givens	YEA (Young Engineers In	Alma City Club,
	Systems		ASHRAE)	Moncton
February 16, 2023	New Brunswick Bill 12:	Jeff Delaney	RP (Research Promotion)	Alma City Club,
	Construction Remedies	Jeli Delalley		Moncton
March 14, 2023	Advanced SMR Development:	Chantal Daigle-	Sustainability	Alma City Club,
Wiai Cii 14, 2023	An Update from NB Power	Verrier, Will Higgins		Moncton
April 11, 2023	Fuel Switching with Air-to-	Chris DesRoches,	ТВА	Alma City Club,
	Water Heat Pumps	P. Eng		Moncton
May 9, 2023	Optimizing Heating/Hydronic	Emilie Boyer, Ing	ТВА	Alma City Club,
	Systems with Low Temperature	Linine Boyer, ing		Moncton
June 13, 2023	UPEI Sustainability Tour	UPEI Faculty	Membership/Tour	UPEI, PEI

*On the scheduled dates above, the BOG meeting will typically begin at 4:00pm and the presentation at 6:00pm. Any changes to these times will be communicated in an email and on the website prior to the date.







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Mike Boudreau, P.Tech, GSC Director of Construction T: 506-862-0810 Ext.112 C: 506-233-4260



2022-2023 Board of Governors The Knights of the Roundtable

Role	2022 - 2023 Executive/BOG	
President	Kevin Clannon, CET	Executive
President Elect	Mike Boudreau	Executive
Vice President	John Willden, PE	Executive
Research Promotion Chair	John Willden, PE	Executive
Treasurer	Dan Boudreau	Executive
Secretary	Jennifer Chapman	Executive
Membership Promotion Chair	Matthew Peachman	BOG
Student Activities Chair	Ted White	BOG
Historian	Ryan Gosson	BOG
Chapter Technology Transfer Chair	Yves Savoie	BOG
Newsletter Editor	Brandon Cosman	BOG
Communications Chair	Brandon Cosman	BOG
Grassroots Government Affairs	Zach Thorne	BOG
YEA Chairs	Roch Couturier	BOG
Refrigeration	Harold Gallant	BOG
Golf Tournament Chair	Jason Nelson	BOG
Webmaster	Brandon Cosman	BOG
MEET Liason	Kenneth Martin & Devin Harinarine	BOG
Golf Tournament Chair	Jason Nelson	BOG
BOG	Ryan Butler	BOG
BOG	Chris Ashton	BOG
BOG	Kevin Leger	BOG

Questions, comments, good HVAC jokes?

ASHRAE NB PEI - Contact Us







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