



June 2022

THE LONG ISLAND SOUNDER



ASHRAE Long Island Chapter, Region I...Founded in 1957

www.ashraeli.com

American Society of Heating, Refrigerating and Air Conditioning Engineers, Inc.

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President's Message

Hello everyone and welcome to the ASHRAE LI June newsletter.

As you already know, this is our last meeting for the 21/22 ASHRAE year. Thank you for your participation over the course of the year and I hope you had fun and learned a few things! The new BOG will be sworn in at the June meeting as I step down from President. The chapter is in very good hands with the next leadership and I am excited to see what happens in the years to come.

This upcoming meeting is a buffet style party and is free to all members. We will be handing out student scholarships, swearing in new officers, and other ASHRAE activities.

All new committee chairs will be travelling to New Hampshire in August for the 2022 CRC (Chapter Regional Conference) where each chair learns about the in's and out's of their position, what is expected of them, and how to best do their job. We also meet the ASHRAE Society President and learn about his goals for the year.



CHAPTER MONTHLY MEETING

DATE:	Tuesday, June 14, 2022
TIME:	6:00 PM - Cocktails/Dinner 7:00 PM - Dinner Presentation 8:45 PM - Conclusion
LOCATION:	Westbury Manor 1100 Jericho Tpke. Westbury, NY 11590
FEES:	
Members -	FREE FOR ALL MEMBERS & STUDENTS!
Student -	

We are in the middle of our Membership Battle! See details below in our membership promotion segment and help the chapter by promoting membership in your company. Membership has been struggling the last few years in ASHRAE as a whole – although our chapter has been doing well despite the last few years difficulties. Please keep your membership up to date and remind your peers to do the same.

ASHRAE LI has started an Instagram account, @ASHRAE_LI! Please follow us on all social media platforms (Facebook, Instagram, and LinkedIn) as well as the website, www.ashraeli.com, for the most up to date information on monthly presentations, upcoming events, etc.

If anyone is interested in joining a committee, please reach out to anyone on the board of governors. We are always looking for volunteers!

Regards,

Matthew Vitrano
President - Long Island Chapter

Check the ASHRAE Website for Society news and to join/renew membership!
<http://www.ashraeli.com>

Long Island Chapter Officers & Committees

ASHRAE 2020/2021 OFFICERS

POSITION	NAME	PHONE	EMAIL
President	Matthew Vitrano	516.319.9325	c006@ashrae.net
President-Elect	Murat Bayramoglu	631.312.8818	c006pe@ashrae.net
Vice President	Michael Nigro	212.643.9055	c006vp@ashrae.net
Treasurer	Elizabeth Jedrlnic	516.490.1621	c006tr@ashrae.net
Secretary	Matthew Catan	407.489.6684	c006sec@ashrae.net
Board of Governors	Michael Razzano	516.805.3084	c006bog1@ashrae.net
Board of Governors	Zhigang Xu		c006bog2@ashrae.net
Board of Governors	Rich Smith		c006bog3@ashrae.net
Board of Governors	Michael S. Gerazounis	212.643.9055	c006bog4@ashrae.net
Board of Governors	James Hanna	718.269.3768	c006bog5@ashrae.net

ASHRAE 2020/2021 COMMITTEES

COMMITTEE	NAME	PHONE	EMAIL
Programs & Special Events	Murat Bayramoglu	631.312.8818	c006pe@ashrae.net
Membership (MP)	Michael Razzano	516.805.3084	c006mep@ashrae.net
Refrigeration	Andrew Dubel		c006ref@ashrae.net
Chapter Technology Transfer (CTTC)	Murat Bayramoglu	631.312.8818	c006cttc@ashrae.net
Grassroots Government Activities (GGAC)	James Hanna	718.269.3768	c006ggac@ashrae.net
Newsletter Editor	Liset Cordero	212.643.9055	c006ne@ashrae.net
Research Promotion (RP)	Michael Nigro	212.643.9055	c006rp@ashrae.net
Historian	Elizabeth Jedrlnic	516.490.1621	c006his@ashrae.net
Student Activities (SA)	Matthew Catan	407.489.6684	c006sa@ashrae.net
Young Engineers in ASHRAE (YEA)	Michael S. Gerazounis	212.643.9055	c006yea@ashrae.net
Webmaster	Frank Paradiso	631.632.2792	c006web@ashrae.net
Nominating	Michael Gerazounis, PE, LEED AP	212.643.9055	nominating@ashraeli.org
Reception & Attendance	Zhigang Xu / Matt Catan / Michael S. Gerazounis		reception@ashraeli.org
PR & Engineering Joint Council of LI (EJCLI) Liaison	Andrew Manos, LEED AP	631.632.2792	pr@ashraeli.org
Golf Outing	Peter Gerazounis, PE LEED AP	212.643.9055	golf@ashraeli.org
Awards	Brian Simkins	203.261.8100	c006ha@ashrae.net
ASHRAE LI, P.O. Box 79, Commack, NY 11725			

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Chapter Monthly Meeting - Program for 2021/2022

September 14, 2021 * At Westbury Manor ✓ Dinner Presentation – Fan Fundamentals Presenter: Andy Siegelson Refrigeration Night **1 PDH**	March 8, 2022 * At Westbury Manor ✓ Dinner Presentation— HVAC Noise Control Presenter: Dan LaForgia Student Activities Night YEA Night **1 PDH**
October 12, 2021 * At Westbury Manor ✓ Dinner Presentation — PPRCT Pipe and Fitting Systems for HVAC Water Distribution and Compressed Air Distribution Presenter: Jordan Stern **1 PDH**	April 12, 2022 ✓ Dinner Presentation— Load Shifting using Commercial Heat Pump Water Heaters in Multi-Family Buildings Presenter: Ryan Green **1 PDH**
November 9, 2021 * At Westbury Manor ✓ Dinner Presentation— Critical Environment Air Distribution Applications Presenter: Larry Scholl, CEM, LEED AP BD+C Membership Promotion Student Activities Night and YEA Night Resource Promotion Night **1 PDH**	May 2, 2022 * Cherry Valley Club, Garden City, NY ✓ ANNUAL GOLF OUTING
December 14, 2021 * At Westbury Manor ✓ Dinner Presentation— Eliminating the High Cost of Over Pumping Presenter: Rick Smith **1 PDH**	May 10, 2022 ✓ Annual Field Trip
January 11, 2022 * At Westbury Manor ✓ Dinner Presentation— Duct System Acoustics Presenter: Patrick J. Brooks, MBA, P.E. ASHRAE DISTINGUISHED LECTURER **1 PDH**	June 10, 2022 - TBD (4pm-8pm) * Dixie II @ Captree State Park Boat Basin, NY ✓ ANNUAL FISHING TRIP
January 29 - February 2, 2022 ✓ ASHRAE Winter Conference	June 14, 2022 * At Westbury Manor Free Buffet Dinner for Members PAST PRESIDENTS NIGHT & OFFICER INSTALLATION STUDENT SCHOLARSHIPS TO BE AWARDED ASHRAE History Quiz and prize Give-A-Ways
February 8, 2022 * At Westbury Manor ✓ Dinner Presentation— Optimizing IAQ and Energy Efficiency Presenter: Joe Maser Membership Promotion Night Resource Promotion Night **1 PDH**	August 2022 CHAPTERS' REGIONAL CONFERENCE (CRC) REGION I GRANIT STATE
February 20-26, 2022 ✓ NATIONAL ENGINEERS WEEK	

Meeting Program

The Long Island Chapter's Year End Celebration *Past Presidents Night, Student Scholarship Night*



And the Installation of our New Officers

DATE:	TUESDAY, JUNE 14, 2022		
Time:	6:00 PM – Cocktails and Hors D'oeuvres 7:00 PM – Buffet Dinner	Fee:	NO CHARGE FOR ALL ATTENDEES
Location:	WESTBURY MANOR (516) 333-7117 Jericho Tpke (South Side), 3/10 of mile east from Glen Cove Rd., Nassau County, NY. Directions are posted at @ www.ashraeli.org. <i>- Reservations requested but not required. Business attire suggested</i>		
Presentation:	Please join us for our ASHRAE year-end meeting celebrating our past presidents and new officers. There will be no charge for our chapter members, and we have arranged for a special buffet dinner and open bar for the evening. Our past presidents will be asked to talk a little about their ASHRAE experience during their board years and we suspect there will be some interesting stories. We will be having a Long Island Chapter trivia contest with prizes and our historical archives will be on display. The winners of our student scholarships will be present to receive their awards and we will finish off the evening with the installation of our new officers. Please mark your calendar for this special day and join us for some great conversation and excellent food and spirits compliments of the chapter.		

CHAPTER MAY NOT ACT FOR SOCIETY

An International Organization

The Long Island Chapter is looking for presenters for the remainder of the year. Please contact us if you are interested in presenting to our membership.

Long Island Chapter - Past Presidents

1958	H. Campbell, Jr. PE	1990	Robert Rabell
1959	Clyde Alston, PE	1991	Gerald Berman
1960	Sidney Walzer, PE	1992	Donald Stahl
1961	Sidney Gayle	1993	Ronald Kilcarr
1962	William Kane	1994	Jerald Griliches
1963	Louis Bloom	1995	Walter Stark
1964	Milton Maxwell	1996	Joe Marino
1965	Will Reichenback	1997	Norm Maxwell, PE
1966	Joseph Minton, PE	1998	Alan Goerke, PE
1967	Irwin Miller	1999	Frank Morgigno
1968	Walter Gilroy	2000	Michael Gerazounis, PE, LEED AP
1969	Charles Henry	2001	Ray Schmitt
1970	William Wright	2002	Steven M. Stein, PE
1971	Louis Lenz	2003	Andrew Braum, PE
1972	Ronald Levine	2004	Claudio Darras, P.E.
1973	Henry Schulman	2005	Craig D. Marshall, P.E.
1974	Myron Goldberg	2006	John Nally
1975	John N. Haarhaus	2007	Peter Gerazounis, PE, LEED AP
1976	Richard K. Ennis	2008	Steven Friedman, PE, HFDP, LEED AP
1977	Kenneth A. Graff	2009	Steven Giammona, P.E., LEED AP
1978	Evans Lizardos, PE, LEED AP	2010	Nancy Román
1979	Albert Edelstein	2011	Carolyn Arote
1980	Ralph Butler	2012	Brian Simkins, LEED AP
1981	Robert Rose, PE	2013	Andrew Manos, LEED AP BD+C
1982	Timothy Murphy, PE	2014	Richard L. Rosner, P.E.
1983	Leon Taub, PE	2015	Thomas J. Fields, P.E., LEED AP
1984	Raymond Combs	2016	Donald Kane, P.E.
1985	Edward W. Hoffmann	2017	Andrew Dubel, P.E., LEED AP
1986	Jerome T. Norris, PE	2018	Richard Halley
1987	Abe Rubenstein, PE	2019	Frank Paradiso
1988	Michael O'Rourke	2020	James Hanna
1989	Mel Deimel		

PAOE POINTS FOR 2021/2022

Chapter Members	Chapter Operations	CTTC	Communi-cations	GGAC	History	Member-ship	Research Promotion	Student Activities	YEA	Chapter PAOE Totals
282	735	1,400	0	0	295	675	1,270	125	1,775	6,275

Research Promotion

I would like to thank the companies who have participated in the annual Product Directory of Manufacturers and their Representatives. The product Directory has been prepared as a service to all its members and as a service to the local HVAC industry. It will be made available to all ASHRAE and non-ASHRAE members at no-cost and can be obtained from our monthly meetings or directly from our website.

This year's overall research promotion goal is \$2,593,341 with many research projects on board. Our chapter is expected to raise \$20,400 towards the overall goal. I am hoping that I can count on the continued support of all our past contributors who have generously supported us over the years. I also look forward to gaining the support of new contributors this coming year.



Thank you to our contributors:

Individual

John D. Nally
Michael Gerazounis
Matthew K. Bendix
Elizabeth Jedrlinic
Andrew E. Manos
Matthew Vitano
Michael Nigro
Murat Bayramoglu
Michael Steven Gerazounis
Richard W. Smith
Michael H. Razzano
James Hanna
Frank Paradiso
Matthew Catan
Donald Kane
John C. Cronin, Jr
Peter Gerazounis
Steven Benkovsky

Companies

H2M Architects + Engineers	Technical Air Systems
Robert Half	Mitsubishi
Trane	Klima
SRS Enterprises	Gil-bar
Accuspec	Victaulic
Tower Enterprises	Catan Equipment Sales
MV Controls	Rathe Associates
Metro Air Products	Bush Sales
Mason East Inc.	Dagher Engineering
Platsky Company	
GCA Associates	
SMACNA-Long Island	
ADE Group	
Belimo Aircontrols (USA)	
Miller Proctor Nickolas	

CONTRIBUTIONS CAN BE MADE IN THE FOLLOWING WAYS:

1) You can mail your checks, made out to ASHRAE Research Promotion:

Michael Nigro
ASHRAE Research Promotion Chair
PO BOX 79
Commack, NY 11725

2) You can bring your check to any of the meetings and hand to myself or Elizabeth.

3) You can contribute via PayPal from the ASHRAE LONG ISLAND web site, just click on the donate button.

4) You can contribute directly on-line. www.ashrae.org

*** Please make sure you accredit your contribution to the LONG ISLAND CHAPTER 006 ***

Thank you again for all of your support!

Michael Nigro
Research Promotion Chair



History

These days, ductless air conditioning has been taking over the market. Leading ASHRAE and other professional organizations to focus on new standards and guidelines to keep up with its growth and popularity. But have you ever wondered where it all began?

“Since its introduction in the 1970s, the world has become more familiar with the concept of a ductless air conditioning system as an alternative heat source. Between 1954 and 1968, Japanese enterprises Mitsubishi Electric and Toshiba pioneered the technology. It was created as an upgrade from the window unit. The key objective was to offer cooling to houses and buildings where a more extensive, whole-system approach was either impractical because of space or monetary limitations, but subsequently offered far more pleasant cooling technology.



Initially available only as a window air conditioner or a wall-mounted indoor unit option, the ductless air conditioning system provided enhanced performance, higher efficiency, and the ability to regulate separate zones. The possibility to remotely place the system's condensing outdoor unit and therefore relocate the sound-bearing components from the living area was a significant benefit in freeing up window space.

The fact that the small, compact condensing units could be put in various locations, keeping up with the space-restricted Japanese building practices, while being energy efficient, was one of the major elements in the ductless system's early popularity. To this day, the worldwide baseline ductless product is a wall-mounted indoor unit, which accounts for approximately 75% of total global mini split system sales.

Several manufacturers saw opportunities and introduced additional ductless indoor units, such as floor consoles and ceiling-suspended units to their existing HVAC systems. Concealed ducted-style and concealed ceiling cassette units have also been created, giving the ductless mini splits a new application.”

If you are interested in learning more, you can find the full article here:

<https://nordics.ca/ductless-air-conditioning/the-history-of-ductless-air-conditioning/>

Elizabeth Jedrlinic
History Chair

Michael Razzano
History Co-Chair

CTTC

CTTC 2021-2022

Here we come to the end of the fiscal year 2021-2022. The CTTC and the chapter programs successfully organized monthly meetings with interesting topics. For almost about two years, it's been hard to engage with the chapter members due to pandemic lockdowns. In the second half of the year, we have overcome the pandemic impediment and organized in-person meetings at Westbury Manor to improve ASHRAE LI Chapter socialization. Moreover, we have gained new volunteers who are willing to serve in the future.

This year, Thomas DiBenedetto successfully maintained the CTTC tasks as a co-chair be the CTTC chair and will be the CTTC chair next year. I want to congratulate him on being selected as the newest BOG member. Welcome on board, and I wish him a successful year in his work career and at ASHRAE-LI.



The following article from ASHRAE Journal, which gives free access for its members through the ASHRAE website, discusses "High School Addition Achieves Net Zero". So many scientists and engineers worldwide issue their findings from their building science studies and experiments at this Journal. These studies can be an excellent source for engineers trying to solve any issues or find new ways to implement projects.

In the meantime, don't forget to follow upcoming events on Long Island Sounder Newsletter and social media link:

<https://www.linkedin.com/in/ashraeli/>

We have organized the Annual Fishing Tour on Long Island Sound on June 10th. See you on the boat.

High School Addition Achieves Net Zero

About the Authors

Donald Hartdegen, P.E., is director of engineering at Barry Wehmiller Design Group, Atlanta. Asfandiyar Khan, P.E., HBDP, is project engineer for Arco/Murray, Downers Grove, Ill. Sudesh Saraf, P.E., is vice president at Wight & Company, Darien, Ill. All three worked for Wight & Company when the project was completed.

Adlai E. Stevenson High School in Lincolnshire, Ill., prioritized energy efficiency and indoor environmental quality when it added a 51,570 ft² (4791 m²) classroom and lab addition (EBA1) to the existing East Building of the school. The East Building Addition project demonstrates how technological innovation and creative design solutions can be simple, yet effective; energy efficient, yet cost effective and a great teaching tool.



©2022 This excerpt taken from the article of the same name which appeared in ASHRAE Journal, vol. 64, no. 6, June 2022.

CTTC

The facility includes classrooms, physics labs, multipurpose room, living walls, roof garden and a greenhouse. Integration of sustainable design principles was used from the beginning of the project, aiming for an International Living Futures Institute (ILFI) Net Zero Certification. Due to the pursuit of net zero energy, the design necessitated a rigorous system selection process. The design was dictated by energy efficiency, comfort and indoor environmental quality (IEQ). The presence of a strong facility maintenance team allowed us the consideration of more complex systems. However, it was understood that for a system to be efficient not only in design but also in operation it had to be simple. The existing school is equipped with water-cooled chillers and gas-fired condensing boilers, but they were at maximum capacity and could not be used for the new system. The design engineers engaged the school to compare and prioritize various system options that would rank in importance to meet their goals. These criteria include first cost, architectural integrity, operational cost, ease of maintaining the system, health of the occupants and energy consumption, etc. Variable air volume (VAV) was eliminated early on as it did not measure up in energy efficiency and did not conform with the architectural vision for the project since it required more plenum space. The local heat pump option was eliminated to reduce the need for additional maintenance/replacement associated with compressors. In the end variable refrigerant flow/dedicated outdoor air system (VRF/DOAS) was chosen for this project.

Energy Efficiency

Energy efficiency was an important factor in determining the type of system used. The VRF condensing units operate at a part-load efficiency between 22.0 to 22.9 IEER, and locating the units inside a penthouse allowed for COP of over 3. The energy model for the building indicated a 35% improvement over the baseline (ASHRAE/IESNA Standard 90.1-2007 was used for LEED v3). In addition to selecting efficient systems, a key factor in energy savings was the control strategy. A common sequence would have the DOAS provide outdoor air fully dehumidified and then reheated to room-neutral temperature. The design team made use of the dehumidified and cold air to actively cool the space. The VRF setpoint and the VAV setpoints were interlocked so the VRF would come on only when the outside air (OA) cfm, dictated by the CO2 sensor, delivered at approximately 55°F (13°C) could not maintain setpoint. This ensured that the VAVs satisfied the ventilation requirement but also allowed reduced use of VRF cooling.

HVAC System

The all-electric system includes a DOAS unit with VAV boxes that serves the ventilation needs of the building. The 75 ton (264 kW), 11.8 EER, DOAS unit is equipped with DX cooling with variable speed compressors, electric heating with SCR controls, an enthalpy wheel at 74% total effectiveness, MERV 8 pre- and MERV 13 final filters and hot gas reheat. Each space is served by a VAV box, which is controlled by a CO2 sensor located in the space, except for the lab VAVs that are controlled by an occupancy sensor instead. The labs are also equipped with exhaust VAV boxes that are interlocked with the supply VAVs to maintain the space at a negative pressure when occupied. The building has no exhaust fans as all exhaust was routed through the DOAS unit to maximize the benefit of the enthalpy wheel.

Air-cooled heat recovery VRF serves the comfort needs of all the spaces. The condensing units for the VRF system are in a mechanical penthouse in lieu of outside to improve the efficiency in the heating season.

The building has two two-story living walls. They humidify the space in winter, and a dedicated dehumidification unit ensures indoor humidity levels are within the comfort range in summer.

The school engaged with Illinois Clean Energy Community Foundation (ICECF) to receive a grant of \$1 million if net zero was achieved. The building was confirmed certified net zero energy by International Living Futures Institute (ILFI), the first building recognized as such in Illinois. One condition was that the project does not use any fossil fuel to operate the system, including natural gas. The operation of the entire project is electric.

The building addition includes educational learning spaces on the roof that included a greenhouse and roof garden. The technology includes sensors in the roofing system that allows students to understand and study the relationship between green roof and R-values. The greenhouse provides education on plant growth. While on the green roof, the students can also view the PV arrays and its impact on energy

CTTC

Indoor Air Quality and Thermal Comfort

IAQ design was based on ASHRAE Standards 62.1-2016 and 55-2010 to meet indoor quality and thermal comfort criteria. The objective was to provide occupants with a comfortable and optimal indoor environment.

The DOAS provides the optimal amount of OA to each space and minimizes the consumed energy. Air effectiveness was considered based on the local VRF fan coil units used to provide comfort cooling to the classrooms.

Common areas, classrooms, conference rooms and other high-density spaces have CO₂ sensors within the breathing zone, which allow ventilation to be modulated according to actual need. The third-level lab requires four air changes per hour (ach) of exhaust air. All labs maintain a negative pressure relative to the corridor to prevent the migration of contaminants.

The IAQ design also looked at contaminant levels in each classroom based on using electronic air filtration provided at all VRF fan coil units to demonstrate that OA levels could be dropped below those recommended by ASHRAE Standard 62.1-2016. The design met the ASHRAE Standard 62.1-2016 OA requirement based on the Ventilation Rate Procedure. The design verified that the project complied with the requirements of ASHRAE Standard 55-2010 and LEED requirements for thermal comfort.

Innovation

To achieve net zero energy, a solar array is designed to produce all the energy consumed on site.

The building is fully submetered, allowing real-time access to data for HVAC, lighting and plug loads.

A revised control strategy for the DOAS operation and locating the VRF air-cooled condensing units indoors allowed for additional energy savings by not having to oversize the equipment to accommodate the cold weather climate. Since most of the cooling and heating season is limited on part-load conditions, we observed that the local VRF fan coil use was limited to peak shaving of cooling and heating loads, and the main cooling in the space was done by the DOAS units.

An automatic control-task tuning lighting system interlocked with the building automation system (BAS) allowed the ability to adjust light levels per space, set time schedules and define limits on maximum light output. High-end trim and task tuning setting throughout the spaces, the corridor and staircase lighting was reduced, and full lighting shutdown during non-operational hours and fully automated lighting system with a computer interface improved the efficiency. During the certification period, the automated lighting control system energy savings was recorded at 54.5% compared to the IECC 2015 baseline calculation. The building is equipped with a central lighting system with daylight sensors throughout all spaces. Lighting for the project showed a 68% energy reduction over baseline.

Operation and Maintenance

During design, the team advocated for involvement of the operation and maintenance personnel to discuss the proposed principles and obtain feedback. Mechanical rooms and air-handling units are set up to provide the required access and space for maintenance. Labs have no ceilings, and most fan coils are installed either in hallway cabinets or local mechanical rooms to facilitate access. A BAS is implemented to automatically control the various building systems and provide operation and maintenance alarms. The building went through a commissioning process to improve the operation of the systems. After start-up, the school operating engineers, the design engineers and the commissioning agent reviewed monthly reports over a one-year span with comments and actions that helped optimize the operation.

CTTC

Cost Effectiveness

Total construction cost for the project was \$23 million. The mechanical system cost including controls was \$1.975 million and the PV arrays cost \$994,000. A total \$1 million grant was awarded to the school from ICECF in obtaining and documenting proof of obtaining net zero use over a consecutive 12-month period. Since the building was able to achieve Net Zero Energy certification, the grant money completely paid for the installation of the PV arrays. Also, all future energy generated by the PV arrays will completely offset the total energy consumption cost during that year. The difference in cost between the baseline mechanical system (based on Standard 90.1-2007) and the system provided for this project was approximately \$300,000. Based on the energy model, the energy savings alone between the baseline system and the system provided yielded a simple payback of 7.8 years. However, since the building has demonstrated net zero energy performance, the simple payback is close to zero years.

ASHRAE JOURNAL ashrae.org JUNE 2022

Murat Bayramoglu
CTTC Chairman

Thomas DiBenedetto
CTTC Co-Chairman

YEA

YEA Scholarship For HVAC Design Essentials Training

Applications are open until June 19th to apply for a scholarship for Level I or II HVAC design training. All YEA ASHRAE members except students are eligible to apply. Additional costs such as airfare and hotels are not covered by this scholarship. For more details and to fill out the application form please check out the ASHRAE website.

<https://www.ashrae.org/communities/young-engineers-in-ashrae-yea/yea-events-and-programs/yea-scholarship-for-hvac-design-essentials-training>

Michael S. Gerazounis
YEA Chair

Rich Smith
YEA Co-Chair



Student Activities

Overview

We are excited for our final chapter meeting of the 2022 year! It has been a very fun and exciting year with many wonderful events and speakers. At our final meeting we will be announcing the winners of the ASHREA Long Island scholarship. We look forward to seeing everyone in attendance!

1. Joke of the Month: The Wedding

Two antennas got married - the wedding was lousy, but the reception was outstanding.



2. #Winning Zone | For Student Competition Information:

2022 Design Competition

The 2022 student competition focuses on a new performing arts building on a university campus located in Sydney, New South Wales, Australia. ASHRAE sponsors these competitions to encourage students to become involved in a profession that is crucial to ensuring a sustainable future for our Earth – the design of energy-efficient HVAC systems.

Link: <https://www.ashrae.org/communities/student-zone/competitions/2022-design-competition>

2022 Applied Engineering Challenge

As the global pandemic rages on, the need for climate-controlled transport containers for vaccine delivery has become a top priority. The 2022 Setty Family Foundation Applied Engineering Challenge (AEC) is focused on designing an ultra-cold refrigeration system that is capable of being transported to all global locations.

Link: <https://www.ashrae.org/communities/student-zone/competitions/2022-applied-engineering-challenge>

2022 Building EQ (Building Energy Quotient) Competition

The Student Activities Committee and Building EQ Committee have collaborated to create a new Building EQ competition. Students will have the opportunity to work evaluate and audit building energy consumption for buildings in operation to give the building a Building EQ score using the ASHRAE Building EQ online tools.

Link: <https://www.ashrae.org/communities/student-zone/competitions/2022-building-eq-building-energy-quotient-competition>

Solar Decathlon

The Solar Decathlon is a collegiate competition that challenges student teams to design and build highly efficient and innovative buildings powered by renewable energy. The combined competition features two tracks, the Design Challenge and the Build Challenge.

Link: <https://www.ashrae.org/communities/student-zone/competitions/solar-decathlon-competition>

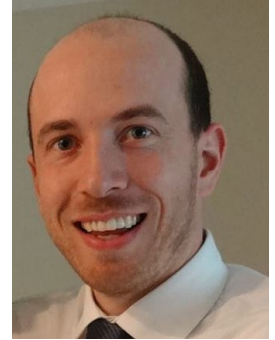
Please reach out for more information If you are interested in participating of any of the above competitions!

Matthew K. Catan

Student Activities Chairman

Grassroots Government Activities Committee (GGAC)

Late last week NY passed legislation that will require the Public Service Commission to direct utilities to develop **District Thermal Heating/Cooling Systems**. Each of the (7) major utilities are required to develop between 1 and 5 pilot projects and their proposals to the PSC are due within 3 months of it being signed into law. This has passed both chambers and will be submitted to the Governor shortly. Below is a copy of the final bill and a summary of the highlights below.



Utility Thermal Energy Network and Jobs Act - S.9422

- Purpose: Amends Public Service Law, Transportation Law, Labor Law, and Public Authorities' Law in relation to thermal energy networks. Removes legal barriers allowing utilities to develop thermal energy networks and requires the PSC to direct utilities to commence thermal energy pilots in each major utility territory.
- Bill Highlights:
 - ◊ Directs and authorizes PSC to develop a regulatory structure for thermal energy networks
 - ◊ Promotes strong economic deployment of jobs for residents. Requires all contractors /subcontractors to use apprenticeship agreements.
 - ◊ Defines "Thermal Energy" as "Piped Noncombustible fluids used for transferring heat in and out of buildings".
 - ◊ Utilities to build, own, operate and maintain Thermal Energy Networks.
 - ◊ Primary drivers: decarbonization, labor, & workforce development.
 - ◊ PSC shall initiate a proceeding within **three months of effective date**. It shall cover
 - Appropriate ownership
 - Market
 - Rate structures
 - Determination if providing this is within the public interest.
 - ◊ Rules to be developed within 2-years
 - ◊ The 7 largest gas/electric corporations shall submit for review min of 1 and max of 5 Pilot network projects in each utility territory.
 - Min of 1 in disadvantaged community. If utility proposes 4 or more then min of 2 projects shall be located within disadvantaged communities.
 - ◊ Utilities shall coordinate with NYSERDA and consultants that have expertise in development of these networks.
 - ◊ Within 6 months of effective date the Public Service Commission (PSC) shall determine if it's in the public's interest to approve or modify pilot projects

James Hanna
Membership Promotion Chair

Rich Smith
Membership Promotion Co-Chair

Membership

ASHRAE is proud to see its members advance both personally and professionally with your Long Island Chapter being no exception! As another season of ASHRAE nears its end, it is important to take credit for your investment in ASHRAE over the past months. One of the best ways to accomplish this is through membership advancement.

If you are an Associate, this is an excellent time to advance to Member! There is at no additional cost & the advancement entitles you to all of the benefits of ASHRAE.

To advance from Associate to Member, simply [update your ASHRAE bio online](#), and then membership@ashrae.org that you would like to be considered for grade advancement.

Below are the Steps for updating your biography:

1. Log into ashrae.org by selecting 'Join or Login' in the upper right corner.
2. Enter your email address and password then select 'Sign In.'
3. Hover over your name in the upper right-hand corner and select 'My Profile.'
4. Under 'My Profile,' select 'Contact' to edit your contact information & then click 'Biographical Info' to update all your information from employment educational history, relevant professional licenses, and work history.
5. KEY à Confirm that your contact information is current by clicking on 'Contact Info' to take the benefits that you have worked so hard for. Upgrade your membership today!

As we all know we've been running a "Membership Battle" which was based on your percentage growth to the end of the year. The three (3) categories are:

- Small Firms - 15 employees or less
- Medium Firms - 16 to 50 employees
- Large Firms - over 51 employees

Currently, we have the following companies that have been shown the most percentage growth throughout the 2021-2022 year:

- Small Firms - 15 employees or less
Stony Brook Engineering
- Medium Firms - 16 to 50 employees
Klima NY
- Large Firms - over 51 employees
H2M

In the end, we'd like to thank our new members who have considered the benefits of membership and who have decided to join our community. With the continued growth, the Long Island chapter grew in June by three (3) members. Our new members continue to offer a varied skill set that makes them valuable additions to our community. LONG ISLAND WELCOMES YOU!

I would like to informally welcome our new members this month:

1. John Duerr
2. Albert Stark
3. Kyle O'Connor

Looking forward to a great summer and thank you in advance for your support, time & guidance.

Michael H. Razzano
Membership Promotion Chair

Richard Smith
Membership Promotion Co-Chair



ASHRAE CERTIFICATIONS

Certification



ASHRAE, accredited by ANSI under ISO/IEC 17024 for the High-Performance Building Design Professional (HBDP) program, has certified more than 2,000 Built Environmental Professionals.

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- Assure employers and clients of subject mastery
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- Offer an easy-to-apply process

FOR MORE INFORMATION GO TO - <https://www.ashrae.org/education--certification/certification>

Join ASHRAE on Social Media!



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Most Popular Tweets

Does It Cost More To Build Green? Benefits include reduced operating costs & construction waste.

Online Thermal Comfort Compliance Tool Included In New ASHRAE User's Manual.

87% of households in the US have #AC, 5% do in India. India's tough choice on air-conditioning and climate.



The November issue of the Journal is tested for binding strength to see how many times a page can be turned before the binding would fail.

Harvard & SUNY Upstate Medical University find that workers are healthier and happier in certified green buildings.

ASHRAE Standard 90.1 has been redefining energy savings since 1975. A new version is available now.

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