ASHRAE Philadelphia Chapter



QUAKER CITY CLIMATE

October 2024
Volume 60, Issue 1

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MEETING COSTS

Fees are based on online reservations and prepayment.

$50 Chapter Member

$50 YEA Member

$50 Student Member

$0 Life Member

$50 Society Member

$60 Non-Member

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Wednesday, October 23, 2024
11:30 AM to 1:30 PM

Lunch Meeting

"Decarbonizing Steam Systems "

Presented By:

Derek Badgley

and

Rob McMichael

Delval Equipment Corporation

Click here to register.

LOCATION

Fogo de Chao
155 Main Street
Suite 160 (Building L)
King of Prussia, PA 19406

For directions and parking, click here

See page 3 for more information.

Save the Date!

Annual Breakfast Meeting
Thursday, December 12, 2024
The Union League of Philadelphia
More information to follow.

2024-2025

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Jason Trefz

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Tyler Holland

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Young Engineers in ASHRAE
Hogan Cuny

President's Message

Chapter Members,

I hope you were able to take time to enjoy the summer season. The seasons you enjoy the most seem to go by more quickly each year. We are now underway in the ASHRAE 2024-25 fiscal year and I look forward to seeing more of our members at the chapter meetings. I would like to thank the 2023-2024 Board of Governors, led by Daniel Brown, for a great year and their dedication to the success of the chapter. I would also like to thank our current board members for their commitment to the current fiscal year.

In August, the ASHRAE Board of Governors attended the annual Region III Chapters' Regional Conference, which was hosted again by the Baltimore Chapter in Baltimore, MD. The conference was well attended by the Mid-Atlantic region. Some common concerns shared among the participants have been attracting more members to the chapter meetings, the viability of virtual meetings, and considering a hybrid meeting program that cycles between virtual and in-person meetings each month. Please share your thoughts and let us know what would work best for you.

We will be sending out a survey, towards the end of October, to better understand what topics most interest our chapter members. When you receive the survey, please take time to respond. In the interim, if there are specific topics you have in mind, please send us a quick email with your proposed topic to include in the survey. The feedback received will be our guide in acquiring our presenters in 2025 as well as in selecting articles to include in the monthly newsletter. We do plan to continue holding our monthly meetings in person. The conversations and exchange of ideas that shared after the dinner and presentation are invaluable. If you haven't attended a meeting, please join us and don't hesitate to introduce yourself to Tyler Holland, our President-Elect, who is managing the events, and myself, Jason Trefz.

Tyler has scheduled a few interesting topics for us over the next few months. We have a lunch meeting lined up for next week, *Decarbonizing Steam Systems*, at Fogo de Chão in King of Prussia, presented by Derek Badgley and Rob McMichael. We also have a joint meeting with SMCA, the Annual Engineer's Night Dinner Meeting, being held on November 7th, which will be a panel discussion focusing on improving the working relationship between engineers and SMCA contractors. The Regional Vice Chair for Membership Promotion and Lehigh's Chapter President, Christine Smith, will be briefly speaking at the event, so we hope to see many of our chapter members attend and help us welcome Christine to our chapter event. In December, we will be holding our annual breakfast meeting at the Union League with a discussion on *Heat Recovery and Heat Pump Chillers*.

In addition to our monthly in-person meetings, the ASHRAE Region will be sharing virtual meetings with Distinguished Lecturers and other presenters on relevant topics that we will make available to our chapter members.

I look forward to seeing our members throughout the year and receiving feedback on the topics that matter to you the most.

Sincerely,
Jason Trefz
Philadelphia Chapter President
c021@ashrae.net

October Lunch Meeting

Wednesday, October 23, 2024
11:30 AM - 1:30 PM

"Decarbonizing Steam Systems "

Click here to register.

Synopsis:

On the path to decarbonization, a significant challenge is reducing or eliminating carbon emissions from existing steam and hydronic fossil fuel fired boiler systems. This presentation will explore strategies and technologies to help achieve carbon footprint reduction. Efficiency upgrades, hydrogen and other alternative fuel utilization, direct electrification, and carbon capture technologies will be discussed. Since there is not a single solution that is best for every facility, the presentation will touch on proper implementation of each technology, as well as typical challenges and pitfalls. Economic considerations will be discussed, as well as operational impacts and challenges, and how to achieve the best results from a single or hybrid solution. This presentation will help better prepare engineers, contractors, and owners in the push to reduce greenhouse gas emissions.

Presenters:



Derek Badgley is a capital equipment sales engineer for Delval Equipment Corporation. Derek assists engineers, contractors, and end users with designing safe, efficient, and sustainable heating solutions. He has been in the HVAC industry as a manufacturers representative for 10 years. He specializes in steam and hydronic boiler system design and implementation, regularly presenting educational sessions to engineers and contractors. Derek graduated with a Bachelor of Science degree in mechanical engineering from Temple University and resides in Philadelphia, Pennsylvania.



Rob McMichael is the Lead Engineer at Delval Equipment Corporation and is a registered professional engineer in multiple states. Rob has spent the majority of his career in the design and manufacturing of rental boiler equipment where he gained experience across the spectrum of steam and hot water uses in various industries, facilities, and processes. Rob regularly hosts webinars, performs training, and writes articles (featured in publications such as Today's Boiler) to share his expertise and knowledge of the boiler industry. As a former Quality Control Manager, overseeing the activities of an ASME S-Stamp and National Board R-Stamp shop, he is intimately familiar with the operation, maintenance, repair, and alteration of boilers and their related components and systems. Rob graduated from Drexel University with a Bachelor of Science degree in mechanical engineering and has worked in the boiler industry for almost 15 years.

We hope you can join us!

Register today!

Our Chapter Digital Directory is now available!

This digital version has replaced the paper versions from years past. This provides flexibility and allows for access anywhere. It's easy to use, highly interactive, and always up to date.

The link to the directory is on our home page on the website, or you may click here to advertise or purchase access to the directory!

2025 ASHRAE WINTER CONFERENCE
ORLANDO, FEB 8-12 | AHR EXPO, FEB 10-12

Registration is open
and Early Bird Rates end October 31!
Click here for more info.

Future City Philadelphia 2025

The Future City Competition, Philadelphia Region, will be held on January 18, 2025, at Archbishop Carroll. They currently have 48 schools registered, which represents introducing over 600 middle school students to the engineering profession. The Philadelphia Region is now celebrating its 30th year of competition.

The theme of this year's competition is Above the Current. The students' challenge is to design a floating city and provide two innovative examples of how their floating city works and keeps its citizens healthy and safe.

They are in need of many volunteers to mentor the schools (engineers preferred), judge and to keep things moving smoothly on Competition Day. Please sign up to volunteer at www.futurecityphilly.org/fcvolops.html.

Please Join Us for the SMCA Annual Engineers Night Dinner Meeting



November 7, 2024

Manor House at Commonwealth

300 Tournament Drive Horsham PA 19044

5:00 pm Cocktail Reception & Vendor Display

6:30 pm Dinner & Panel Discussion

Panel Topic: Bridging the Gap Between Engineers and Contractors

Engineers want Contractors to listen; Contractors want Engineers to understand. Large, complex projects are underway in the Philadelphia area with more expected to begin in the next few years. SMCA Contractors work closely with the Engineering community to bring vision and theory into reality, but too often things seem to get lost in translation between the Engineer's design and what the Contractor sees on the jobsite.

In this year's Panel Discussion, SMCA Contractors and ASHRAE Engineers will cordially help each other understand the different perspectives they have in planning and completing construction projects. With new challenges in the Philadelphia market like renovating area hospitals, navigating the design-build process, and customers' growing desire for energy-efficient "green" energy systems, it has never been more important for Engineers and Contractors to bridge their communication gaps and "get it built."

All registrations are being done through the SMCA website.

Please register online

SMCA Engineers' Night Dinner Meeting-Sheet Metal Contractors Association of Philadelphia & Vicinity

SMCA Website www.smca.org

Deadline to register is October 28, 2024.

SMACNA Contractors, IF Contributors, SMCA Suppliers and Engineers are FREE of charge!

The Philadelphia Chapter
of the
American Society of Heating,
Refrigerating and Air
Conditioning Engineers, Inc.

994 Old Eagle School Road
Suite 1019
Wayne, PA 19087-1866
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Visit
our web site at:

www.ashraephilly.org

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Republication of material contained herein is expressly forbidden without official Chapter authorization. The Chapter does not speak or act for the Society. Any member with material to submit for inclusion in the *Climate* can send the information to:

Hope Silverman
P 610-971-2169
hope@mmco1.com

Material can include letters to the editor, member news, upcoming events, comments on chapter programs or issues, etc.

New Philadelphia Chapter Members

New Chapter Members:
Brian Swierk
Moshier Rawy
Lowell Kramer
Brendan McGrath
Thomas Ruggierio
Adarsh Nair
Dave Lazear
Kathleen Mondock

New Society Members:
Ryan Coombs

New Student Members:
Gbenga Samuel Taiwo
Min Lin

What are the benefits of paying Philadelphia Chapter dues* ?

Discounts:

$200 Discount for Basic Class
$150 Discount for 90.1 Seminar
Free access to the Digital Directory
And much more!

* Note that Philadelphia Chapter Membership Dues are $35/year.

To receive discounts, please remit you Chapter dues when renewing online or applying for a new membership. Feel free to upgrade online by clicking here or contact c021@ashrae.net for assistance.

Membership Advancement

If you are currently an ASHRAE Associate Member, becoming a full Member is easier than you think! The following count toward the required **12 points** to advance to full membership status. You must update your ASHRAE online biography and send an email to membership@ashrae.org to advance.

Non-accredited degree = 4 points
PE = 4 points
Accredited degree = 6 points
Industry experience = 1 point/year

CTTC Article

EPA Grants One-Year Extension for VRF Systems Using High-GWP HFCs

The proposed rule is designed to mitigate worries about unsold inventory.

By Joanna R. Turpin, June 21, 2024
www.achrnews.com/articles/154745-epa-grants-one-year-extension-for-vrf-systems-using-high-gwp-hfcs

The Environmental Protection Agency (EPA) has proposed a rule to narrowly amend a provision in the Technology Transitions regulation. Entitled "Phasedown of Hydrofluorocarbons: Restrictions on the Use of HFCs under the AIM Act in the Variable Refrigerant Flow (VRF) Air Conditioning Subsector," the rule proposes allowing one additional year, until January 1, 2027, for the installation of new VRF systems that use HFCs with a GWP of 700 or more, provided the components were manufactured in the U.S. or imported before January 1, 2026.

Specifically, EPA states that this proposed rule "would allow for pre-2026 condensing units, evaporators, and air handlers using R-410A, a blend of two regulated HFCs listed in the AIM Act, or other regulated substances and blends of regulated substances not meeting the 2023 Technology Transitions Rule's restrictions, to be assembled into new systems (i.e., installed), so long as those systems are assembled prior to January 1, 2027."

EPA added that while VRF and VRV technology can be used in air conditioning and heat pump equipment of any size, the 2023 Technology Transitions Rule limits its restrictions to air-source VRF systems with capacities of 65,000 Btuh or more and water-source VRF systems of any capacity.

The 2023 Technology Transitions Rule, published October 23, 2023, initially called for a ban on the installation of new residential heat pumps and air conditioning systems using refrigerants with GWPs higher than 700 as of January 1, 2025, and VRF systems using refrigerants with GWPs higher than 700 as of January 1, 2026. EPA subsequently revised the rule to allow for the installation of higher-GWP HFC equipment manufactured or imported before January 1, 2025, to be installed until January 1, 2026, and said at the time that it intended to consider extending the deadline for VRF systems.

The Agency did so in this proposed rule, stating that, "the existing January 1, 2026, compliance date for the installation of certain VRF systems may result in significant stranded inventory that was intended for new construction." In proposing this rule, EPA is taking action to prevent significant unsold inventory in this sector. EPA stated that, "[w]e recognize that the production and purchase of products or components that are unable to be sold to consumers is an economic and environmental outcome no parties desire, and the proposed rule's forward-looking compliance dates were intended to allow all parties in the market supply chain sufficient time to avoid that outcome."

EPA is accepting public comment on this proposed rule for 30 days after publication in the Federal Register. The official version will appear on www.regulations.gov, Docket No. EPA-HQ-OAR-2021-0643. More information on regulatory actions concerning the Technology Transitions Rule can be found at www.epa.gov/climate-hfcs-reduction/regulatory-actions-technology-transitions.