



Shaping Tomorrow's Global
Built Environment Today

MINUTES

GOVERNMENT AFFAIRS COMMITTEE ANNUAL CONFERENCE MEETING

**FRIDAY, JUNE 20, 2025
1:00 PM – 5:00 PM MST**

**Sheraton Phoenix Downtown
Valley of the Sun D (Level 2)**

Or virtually through Teams: [Virtual Meeting Link](#)

Minutes approved by the GAC on October 23, 2025.

1. Call to Order, Welcome, and Roll Call – Sheila Hayter called the meeting to order at 1:00 p.m. MST and welcomed the meeting attendees. Attendance was taken (see below). A quorum was present.

ATTENDANCE

Members Present

Sheila Hayter, Chair
Meghan McNulty, Vice Chair
Keith Reihl
Heather Schopplein
Megan Tosh
PJ Johnston
Andy Persily*
Tim Wentz
Adrienne Mitani
Patrick Adams Villaume
Weston Hockaday
Victor Niño
Doug Cage*
Eleazar Rivera
Peter Koneck-Wilwerding
Tracey Jumper
Geoff Jenks
Luis Alvarado

Members Absent

Artorius Reyes
Will Fisher
Adam Doubblestein

Incoming Members

Absent
None

Guests

Georgios Pantelidis,
GTIC
Tobi Showunmi
Mike Nerozzi
William Bahnfleth
Thomas Kolpasky
Blake Ellis
Matthew Archey
Leigh Lain Walker
Darryl Boyce
Caroline Kelty
Doug Cochrane
Wade Conlan
Kazukiyo Kumagai –
CA Dept of Health
Brittany Swan - AMCA
Chris Ruch – SMART
Dwayne Taylor

Staff

Alice Yates
Bryce Causey
Neil Gavigan
Jacob Karson
Chris Miller
Emily Porcari
Jeff Littleton

Members Present (continued)

Syed Mubarak*
Ioan Dobosi
Varun Jain
Ahmed Bolbol
Sonya Pouncy
Bryan Holcomb
Sarah Maston

Incoming Members Present

Mick Schwedler
Dennis Knight
Harrison Kesling
Jessica Renner
Alexander Armstrong
Abdallah Mahmoud*
Brad Lentz
Rob Craddock
Ashish Rakheja

Guests (continued)

Scott West
Tanmay Rakheja
Walt Vernon
Linda Lee
Peter Luttik
Douglas Fick
Colin Laisure-Pool
Chris Seeton
Martin Luymes* - HRAI
Catherine Brown*

*Indicates Remote Participation

2. Guest Introductions – Sheila Hayter asked the guests in the room to introduce themselves.
3. ASHRAE Value Statement –Hayter read the value statement and referenced the hyperlinks.

ASHRAE Value Statement

In ASHRAE meetings, we will act with honesty, fairness, courtesy, competence, inclusiveness and respect for others, which exemplify our core values of excellence, commitment, integrity, collaboration, volunteerism and diversity, and shall avoid all real or perceived conflicts of interest. Our culture is one of inclusiveness, acknowledging the inherent value and dignity of each individual. We celebrate diverse and inclusive communities, understanding that doing so fuels better, more creative and more thoughtful ideas, solutions and strategies for the Society and the communities our Society serves. We respect and welcome all.

Code of Ethics - <https://www.ashrae.org/about/governance/code-of-ethics>

Core Values - <https://www.ashrae.org/about/ashrae-s-core-values>

Diversity Statement - <https://www.ashrae.org/about/diversity-equity-and-inclusion-dei>

4. Review of Agenda –Hayter reviewed the agenda, and it was accepted as written.
5. Approval of Minutes from April 24, 2025 Meeting –Hayter asked for a vote to approve the minutes from the spring meeting (See Attachment).

MOTION: To approve the minutes of the April 24, 2025 GAC Meeting. Motion made by Keith Reihl and Seconded by Meghan Tosh.

MOTION PASSED: Approved By Voice Vote (CNV). No Objections. No abstentions.

6. Update on Action Items – Alice Yates reviewed the action items (See Attachment), noting that all except #13 were complete, which is scheduled to be completed by the time of the Fall CRCs which start on July 24.
7. Report from ASHRAE Government Affairs Office – Staff provided a presentation (See Attachment), highlighting how staff can support GAC efforts and reviewing policy trends and opportunities for engagement in the current political environment. The presentation also included a brief review of GOEs, policy outcomes, and legislative wins in SY24-25.
8. Subcommittee Reports and MBO Status Reports (See Attachment)
 - a. Executive Subcommittee – Hayter gave updates from the Executive Subcommittee.
 - i. MBO Update – Hayter reported that MBO #8 was complete, and that one of the recommendations is being operationalized in agenda item #8-ii-2 below.
 - ii. Manual of Procedures (MOP) Revisions
 1. Motion regarding Changes to Membership on Subcommittees – Global Affairs and Nominating (see Attachment)
 2. Motion adding time zone direction to the MOP for inclusivity purposes (see Attachment)
 - iii. Resource Manual Revisions
 1. Requiring a Virtual Option be provided at Winter and Annual Conferences (see Attachment)

In the interest of time, Sheila Hayter recommended that three motions above be considered en-bloc.

MOTION: To approve the recommended revisions to the MOP and Resource Manual as written. Motion made by Megan Tosh. (The motion did not need to be seconded the recommended changes were approved by a subcommittee.)

MOTION PASSED: Approved By Voice Vote (CNV). No Objections. One Abstention.¹
 - iv. Proposed Public Policy Priorities (PPPs) for SY2025-2026 (See Attachment) – Hayter briefly reviewed the PPPs for SY2025-2026 and explained that these were updated during the GAC Planning Meeting in May. The key updates from the SY24-25 PPPs are:
 1. Priorities are re-ordered such that Building Decarbonization appears on the second page, and Workforce appears on the first page;

¹ Andy Persily

2. Some cybersecurity references were added;
3. Grid-interactive and smart building tools were added;
4. This sentence was added: “To ensure buildings and their systems are designed properly, ASHRAE supports professional engineering licensure with realistic requirements.”
5. In addition, during the June 20 meeting of the GAC Executive Subcommittee, two additional changes were made in response to comments from ExCom, which:
 - Revised the first PPP to reflect the global nature of ASHRAE; and
 - Revised the second PPP to use “comprehensive thermal comfort” rather than just “temperature and humidity.”

MOTION: To approve the recommended PPPs as presented. Motion made by Geoff Jenks. The motion did not need to be seconded as it had already passed a subcommittee.

MOTION PASSED: Approved By Voice Vote (CNV). No Objections. Two Abstentions.²

- b. Policy and Programs Subcommittee – Andy Persily gave updates from the Policy and Programs Subcommittee.
 - i. MBO Update – Persily summarized the status of the MBOs assigned to his subcommittee, noting that all the Subcommittee’s MBOs were complete except for #3 on the SMEs for GOEs Pilot Program, which will continue through the next Society Year.
 - ii. Public Policy Issue Briefs (PPIBs)
 1. Process Clarification: revisions to MOP and Resource Manual (See Attachment). –Persily summarized the recommended changes to the MOP regarding the timeline for PPIB approval and the Resource Manual regarding PPIB review and approval. Andy Persily then moved to approve the recommended changes.

MOTION: To approve the recommended revisions to the MOP and Resource Manual as written. Motion made by Persily. The motion did not need to be seconded as it passed a subcommittee.

MOTION PASSED: Approved By Voice Vote (CNV). No Objections. No abstentions.
 2. Revisions on PPIBs in response to Tech Council comments (See Attachment) –Persily summarized the revisions, saying they were not substantive and would be updated online by July 1.

² Andy Persily, Meghan McNulty

3. New PPIB: Mitigating Risk from Infectious Aerosols (See Attachment) – Persily referenced the new proposed PPIB on infectious aerosols, saying it was not ready yet for a vote.
- iii. Update on SME Program for GOEs (See Attachment) –Persily explained that three sets of SMEs have been selected, and most regions had representation from at least one SME.
- c. Member Mobilization Subcommittee – Ahmed Bolbol gave updates from the Member Mobilization Subcommittee.
 - i. MBO Update – Bolbol provided updates on the MBOs assigned to his subcommittee, stating that #7 was complete, and that #1 and #2 were mostly completed, and that #1 should be continued into the next society year.
 - ii. GOEs –Bolbol briefly spoke regarding GOEs from the past Society Year.
 1. Goals and Status Update (see Attachment) –Bolbol presented data on GOE goals and results, saying that GOEs conducted are 53% greater than the goal, and noted that the number would increase once all GOE data is reported by the end of the society year, potentially showing a 75% increase from the goal of 100.
 2. Year in Review Video – The video on GOEs from this year was shown, which can be found at: <https://www.ashrae.org/about/government-affairs/grassroots-advocacy/government-outreach-events>
- d. Global Affairs Subcommittee – Eleazar Rivera gave updates from the Global Affairs Subcommittee.
 - i. MBO Update – Rivera stated that MBO #6 on document translation was complete and that MBO #5 on avoiding duplication of efforts with Global Technical Interaction Committee (GTIC) was mostly completed.
 - ii. Africa/Middle East Policy Updates and Website – Sonya Pouncy stated that the Africa/Middle East Policy Updates would be presented later in the meeting as part of her Communications Coordinator report.
- e. Nominating – Meghan McNulty said that the nominating subcommittee has completed its work for the year.
9. Reports from Regional Vice Chairs (See Attachments) – Written reports and slides were provided by all RVCs except Will Fisher (Region I). Adam Doubblestien was absent and did not present, although he had submitted his reports and slides ahead of the meeting. Reports and presentations can be found in the attachments.
 - a. Region II – Adrienne Mitani
 - b. Region IV – Weston Hockaday
 - c. Region III – Patrick Villaume
 - d. RAL – Ahmed Bolbol
 - e. Region IX – Peter Koneck-Wilwerding
 - f. Region XIII – Abdul Razaak Syed Mubarak
 - g. Region XII – Luis Alvarado
 - h. Region XIV – Ioan Dobosi
 - i. Region VIII – Eleazar Rivera
 - j. Region X – Tracey Jumper

- k. Region VI – Victor Nino
- l. Region XI – Geoff Jenks
- m. Region XV – Dr. Varun Jain
- n. Region I – Will Fisher
- o. Region V – Adam Doubblestein
- p. Region VII – Douglas Cage

10. Presentation of Dave Palty Outstanding GAC Service Award –Hayter and McNulty highlighted the memory and contributions of the late Dave Palty and presented the Dave Palty Award Outstanding GAC Service Award to **Peter Koneck-Wilwerding** (see attached description of the award and plaque presented).

11. Reports

- a. ExO Report –Bryan Holcomb presented the Leadership Report (See Attachment), highlighting key news including the 2025-2028 Strategic Plan, new directors and regional chairs, fundraising for RP and the ASHRAE foundation, new publications (including those from the CEBD), upcoming conferences, and proposed changes to the membership model and a recommended timeline for implementation.
- b. Communications Coordinator Report –Sonya Pouncy presented a report (See Attachment), highlighting initiatives on improving access to local and regional GAC leadership and increasing information on activities to international chapters (particularly in Africa and the Middle East).
- c. Technology Council Representative Report – Heather Schopplein gave a brief report from Technology Council (her updates are provided in the attachment).
- d. Members Council Representative Report – Keith Reihl gave a brief oral report from Members Council, highlighting the proposed changes to the Membership Model that was included in the ExO report.
- e. Pub-Ed Council Representative Report – Megan Tosh gave a brief report from Pub-Ed Council (her updates are provided in the attachment).

12. Reports from Other Committees

- a. Environmental Health Committee and SSPC 241– Dr. Bill Bahnfleth, Presidential Member, Chair of SSPC 241 and Member of the EHC (and past EHC Chair) gave a brief oral report from the Environmental Health Committee and SSPC 241, mentioning that there has been a shift to focus on indoor air quality (IAQ) since the COVID-19 pandemic and that there is a need to create more operational definitions and universal metrics on harm and discomfort, as they pertain to IAQ. He emphasized that adding more operational definitions and universal metrics would further raise awareness of IAQ issues, improving indoor health.

13. Guest Reports

- a. Air Movement and Control Association (AMCA) - Brittany Swan, Regulatory Affairs Analyst gave an oral report on AMCA’s work on key issues including how state and local regulations will play a larger role in the coming years.

- b. Heating, Refrigeration and Air Conditioning Institute of Canada (HRAI) – Martin Luymes, Vice President, Government and Stakeholder Relations gave a brief oral report on key Canadian HVAC issues including tariffs and mentioned possible outreach to the new federal government in Ottawa soon.
 - c. SMART, the International Association of Sheet Metal, Air, Rail and Transportation Workers – Chris Ruch, Codes & Standards Representative gave a brief oral report on SMART and highlighted the work they have done in Region X, including working with the Los Angeles Unified School District, increasing awareness of key standards such as 62.1.
14. Other Business – no other business was brought before the committee.
 15. Review of New Action Items added at this meeting – Yates stated that no new action items were assigned at this meeting.
 16. Recognition of Outgoing GAC Members –Hayter gave grateful remarks regarding the outgoing members, in addition to presenting each outgoing member a certificate of appreciation.
 17. Remarks from Outgoing Chair –Hayter expressed gratitude to the committee and staff during her time as Chair. Staff presented Hayter with a framed certificate of appreciation (attached) and a card signed by the GAC members and staff.
 18. Remarks from Incoming Chair- Meghan McNulty gave remarks as the incoming Chair.
 - a. SY25-26 Subcommittee Assignments - McNulty showed the SY25-26 Subcommittee Assignments to the GAC (See Attachment).
 - b. MBOs for SY2025-2026 – McNulty briefly reviewed the 10 MBOs for SY2025-2026 (See Attachment).
 - c. Mentor-Mentee Assignments for SY25-26 – McNulty showed Mentor-Mentee assignments (See Attachment).
 19. Next Committee Conference Call – McNulty stated that the next GAC meeting would be sometime in the fall.
 20. Adjourn – Sonya Pouncy moved to adjourn the meeting; it was adjourned at 4:50 PM MST.

Minutes Respectfully Submitted by Alice Yates, Staff Liaison with support from Chris Miller.



Shaping Tomorrow's Global
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DRAFT MINUTES

GOVERNMENT AFFAIRS COMMITTEE

THURSDAY, APRIL 24, 2025

10:00 AM – 12:00 PM EDT

Virtual Meeting

1. Call to Order, Welcome, and Roll Call - Sheila Hayter called the meeting to order at 10:02 a.m. EDT and welcomed the meeting attendees. Attendance was taken (see below). A quorum was present.

Attendance

<u>Present</u>	<u>Absent</u>	<u>Staff</u>	<u>Guests</u>
Sheila Hayter	Keith Reihl	Alice Yates	<i>none</i>
Meghan McNulty	Heather Schopplein	Chris Miller	
Megan Tosh	Artorius Reyes	Emily Porcari	
Tim Wentz	Eleazar Rivera	Jacob Karson	
PJ Johnston	Geoff Jenks	Neil Gavigan	
Andy Persily			
Will Fisher			
Adrienne Mitani			
Patrick Villaume			
Weston Hockaday			
Adam Doubblestein			
Victor Nino			
Doug Cage			
Peter Koneck-Wilwerding			
Tracey Jumper			
Luis Miguel Alvarado			
Syed Mubarak			
Ioan Dobosi			
Ahmed Bolbol			
Sonya Pouncy			
Sarah Maston			
Bryan Holcom			

2. ASHRAE Value Statement – Hayter read the value statement.

ASHRAE Value Statement

In ASHRAE meetings, we will act with honesty, fairness, courtesy, competence, inclusiveness and respect for others, which exemplify our core values of excellence, commitment, integrity, collaboration, volunteerism and diversity, and shall avoid all real or perceived conflicts of interest. Our culture is one of inclusiveness, acknowledging the inherent value and dignity of each individual. We celebrate diverse and inclusive communities, understanding that doing so fuels better, more creative and more thoughtful ideas, solutions and strategies for the Society and the communities our Society serves. We respect and welcome all.

Code of Ethics - <https://www.ashrae.org/about/governance/code-of-ethics>

Core Values - <https://www.ashrae.org/about/ashrae-s-core-values>

Diversity Statement - <https://www.ashrae.org/about/diversity-equity-and-inclusion-dei>

3. Review of Agenda - Hayter reviewed the agenda, and it was accepted as written. Hayter stated she may need to leave briefly at which point Meghan McNulty will chair the meeting; Hayter told McNulty to rearrange things as needed.
4. Approval of Minutes from February 7, 2025 Meeting – Hayter asked for a voice vote to approve the minutes from the February 7, 2025 meeting (See Attachment).

MOTION: To approve the minutes of the February 7, 2025 GAC Meeting. Motion made by Meghan McNulty and Seconded by Will Fisher.

MOTION PASSED: Approved By Voice Vote (CNV). No Objections. No abstentions.

5. Update on Action Items – Yates reviewed the action items, saying all but one are complete. Yates also said a letter has been drafted but not sent as part of Item # 11. Hayter then instructed Yates to send the letter to complete remaining action item.
6. Subcommittee Reports and MBO Status Reports (See Attachment)
 - a. Executive Subcommittee – Hayter gave updates from the Executive Subcommittee.

- i. MBO Update – Hayter noted this MBO is complete. McNulty proposed allowing virtual attendance for any member who is unable to attend in-person. There was considerable discussion of the pros and cons of hybrid meetings. Overall, most members seemed to agree that allowing virtual participation would make ASHRAE more inclusive, even though ASHRAE has a strong preference for in-person participation.

ACTION ITEM: Members Council Rep and GAC ExO will raise the issue of requiring a virtual option for all meetings. Staff will work with Andy Persily, Sheila Hayter and Meghan McNulty on drafting talking points or an email communication for this purpose. **Due Date: Annual Meeting 2025.**

ii. Revisions to the MOP (see Attachment) – Hayter briefly reviewed the recommended revisions: Revisions to address recommendations from the GAC Nominating Subcommittee to include:

- Recommendations for the Communications Coordinator and Council Representatives. Recommendations may also be made for the ExO and CO.
- Revisions to encourage coordination and communication among the GAC Chair (who now is a voting member of Members Council), GAC Vice Chair (who is a voting member of the Members Council PAOE Subcommittee) and the GAC Members Council Representative
- Minor modification to description of Communications Coordinator position.

MOTION: To recommend that Members Council approve the recommended revisions to the GAC MOP (attached). Motion made by Meghan McNulty and Seconded by Ahmed Bolbol.

MOTION PASSED: Approved By Voice Vote (CNV). No Objections. No abstentions.

iii. Streamlining the Resource Manual (see Attachment) – Hayter explained that the recommended revisions were made to streamline and modernize the document. She noted the committee has had nearly a year to review these revisions.

MOTION: To approve the recommended revisions to the GAC Resource Manual. Motion made by Sonya Pouncy and Seconded by Megan Tosh.

MOTION PASSED: Approved By Voice Vote (CNV). No Objections. No abstentions.

b. Policy and Programs Subcommittee - Persily provided updates from the PPSC.

- i. MBO Update – Persily reviewed the status of his subcommittee’s MBOs.
- ii. PPIBs Status Update (See Attachment) - Persily stated the subcommittee has updated 12 PPIBs, one of which was finalized in February (Building Electrification). The remaining 11 have been reviewed by Tech Council and the subcommittee is responding to their comments. Persily also briefly noted the potential new PPIBs, explaining that one has been drafted. Persily noted that the PPIB approval process is not clear, and the subcommittee will be recommending changes to the MOP and/or Resource Manual to clarify the process.
- iii. Update on SME Program for GOEs - Persily noted that the status of this program is detailed in the MBO update table. He explained that they will be making several recommendations for the program. Persily also

reminded the committee that the program is still new and under development.

c. Member Mobilization Subcommittee -Bobol provided updates from the MMSC.

- i. MBO Update- Bolbol stated that the subcommittee continues its efforts making progress on MBOs #1 and #2.
- ii. GOEs – Goals and Status Update (see Attachment) - Bobol reviewed the GOE report, noting that many more GOEs have been held than have been reported. Bolbol had suggestions for encouraging the submission of the GOE reports:

ACTION ITEM: Staff to create video to show how to fill out and submit a GOE form. This video will be imbedded in the CRC GAC Training as well as the GOE training. **Due Date: Summer**

ACTION ITEM: Staff to send reminder to all chapter chairs and presidents regarding submission of GOE forms and PAOE points. **Due Date: ASAP**

- iii. Feedback on VoterVoice Advocacy Tool/“Action Alerts” (see Attachment) - Emily Porcari reviewed how VoterVoice has been used and its impacts. Yates asked if any members are hearing positive or negative feedback (such as too many emails). GAC members had no comment.
- iv. Porcari also mentioned that government outreach to schools can be effective and explained that new schools case studies can be useful for motivating chapters’ involvement in these efforts (See attachment).

d. Global Affairs Subcommittee - Jacob Karson provided GASC updates in lieu of Eleazar Rivera’s absence. Karson reported on the MBOs and congratulated the subcommittee for going above and beyond in its translation efforts. The work the subcommittee is doing on these could be used as a model for other ASHRAE translation efforts conducted by volunteers.

e. Nominating - McNulty reported that the subcommittee completed its work in submitting recommendations to the Appointments Roadmap Committee. She also reported that the subcommittee has done such great work in making recommendations for next year’s subcommittee chairs that she will be canceling the next meeting (April 28).

7. Reports

- a. ExO Report – Holcomb reported that the board has made no changes to the DEI subcommittee in reaction to new US administration. Holcomb explained that the membership ad-hoc committee is still reviewing membership grades. The Board is involved with other efforts, but nothing directly related to the GAC.
- b. Communications Coordinator Report - Pouncy stated that she met with Maston and Yates about developing a webpage with policy updates for Africa and the Middle

East. She will likely be advancing a motion through the GAC GASC to contract with a firm to provide monthly updates for this region, similar to what's provided for Europe.

- c. Technology Council Representative Report - Heather Schopplein was absent and had no report.
 - d. Members Council Representative Report – While Keith Reihl was absent from the meeting, he provided a report to include in the meeting minutes:
 - A couple chapters that were in RAL and migrated to the new region asked to go back, which Members Council granted. One issue was political (i.e., you couldn't travel between countries). Keith noted that ASHRAE should consider political issues as new chapters are established and assigned to regions.
 - Reihl raised some questions about GAC training that were discussed in MMSC.
 - Reihl has a draft of the PAOE for next year. Contact him if you'd like to see an advance copy before it is distributed in June.
 - e. Pub-Ed Council Representative Report – Tosh had nothing to report.
- 8. Other Business - Hayter asked if there was any other business. None came up.
 - 9. Review of New Action Items added at this meeting- Yates reviewed new action items from the meeting (see Attachment).
 - 10. Next Meeting – Hayter stated that meeting would occur at the Annual Conference in Phoenix on Friday, June 20, from 1pm-5pm MST.
 - 11. Adjourn – Bolbol moved to adjourn the meeting; it was adjourned at 11:29 EDT.

Minutes Respectfully Submitted by Alice Yates, Staff Liaison



**ACTION ITEMS
GOVERNMENT AFFAIRS COMMITTEE
SY 2024-2025**

Last Updated: June 13, 2025

#	Action	Assigned To	Due Date	Status	C/O
<i>Added at 06-21-2024 Annual meeting</i>					
1	Organize informal gathering at the 2025 Winter meeting to discuss advocacy and ASHRAE positions. Target date would be Saturday.	Karson	December 2024	Karson is scheduling this meeting – targeting for Sat. Feb. 8.	C
<i>Added at 10-30-2024 Annual meeting</i>					
2	Review the redline of the Resource Manual and provide comments to Jacob Karson (jkarson@ashrae.org) (Redline is available on Basecamp)	All GAC Members	November 30	11/07 – Persily provided Jacob sent out an email to the GAC on 11/22 asking for any comments/feedback from the GAC members; only comment received was “this looks good.” 2/7 – vote deferred to give members more time to review	C
3	Submit PAOE recommendations to GAC Vice Chair (Meghan McNulty at meghan.k.mculty@pnnl.gov)	Chairs of PPSC, MMSC, and GASC	November 30		C
4	Review the Manual of Chapter Operations GAC Sections and provide comments/edits as needed. Please send to Sheila & Alice (sheila.hayter@nrel.gov and ayates@ashrae.org) (Note that the GAC Sections of the Manual of Chapter Operations is available on Basecamp)	All GAC Members	Nov. 15	Responses provided by Hayter, Persily, Johnston, Rivera. Suggestions sent to Members Council on November 26, 2024.	C
5	Share feedback on the GAC mentoring program to Sheila Hayter (sheila.hayter@nrel.gov)	All GAC Members	December 31		C



#	Action	Assigned To	Due Date	Status	C/O
6	Send an email to the RVCs explaining the new legislative alert system that staff will use.	Karson	ASAP	Email sent Nov. 5.	C
<i>Added at 02-07-2025 Winter Meeting</i>					
7	Send thank you notes to government officials who participated on the GAC Advisory Board	Staff	ASAP	Neil sent the notes via email.	C
8	Prepare one slide on how to request complimentary copies of ASHRAE Standards (question came from Dr. Varun Jain)	Staff	ASAP	Slide has been incorporated into the CRC and GAC trainings	C
9	Ask if the DL list can be categorized by PPPs (question came from Dr. Varun Jain)	Staff	ASAP	The staff liaison for CTTC explained that the DL Working Group is in the process of categorizing DLs. If the GAC has any additional topics to include, we can communicate that to CTTC. ¹	C

¹ The categories being discussed are:

ASHRAE Standards & Guidelines

Decarbonization and Net Zero

Ethics / DEI

Refrigeration & Refrigerants

Smart Buildings and Smart Grids

IEQ

Resilience in Building Design

Commissioning and Quality Control

Energy Efficiency and Sustainability

Leadership and Professional Development

Emerging Technologies

Health and Safety

Green Building Certifications

Fundamentals



#	Action	Assigned To	Due Date	Status	C/O
10	Review new training slides from agenda item #15-a and consider modifying the language	Staff	ASAP	Financial risk management training slides for Chapter treasurers has been revised with softened language, and including the statement, “the vast majority of chapters will not need to report any expenses because very few chapters expend money related to such activities”	C
11	Ask Honors and Awards Committee if something can be given to nominees for the Society Award, such as a certificate or if not possible than a letter (“special mention”) and to the RVC who submitted the nomination	Staff	ASAP	Either a letter or a certificate can be distributed. Letters have been written and distributed.	C
<i>Added at 04-24-2025 Spring Meeting</i>					
12	Members Council Rep and GAC ExO will raise the issue of requiring a virtual option for all meetings at the Winter and Annual conferences. Staff will work with Andy Persily, Sheila Hayter and Meghan McNulty on drafting talking points or an email communication for this purpose.	Reihl Holcomb Hayter McNulty Persily Staff	June 30	4/24/2025 – Yates emailed draft talking points to Persily, and Persily provided edits. 4/25/2025 – Yates sent these to Holcomb and Reihl.	C
13	Create video to show how to fill out and submit a GOE form. This video will be imbedded in the CRC GAC Training as well as the GOE training.	Staff (Karson)	Summer 2025	Will target getting this done in time for the first “Fall” CRC, which takes place July 24-26.	O
14	Send reminder to all chapter chairs and presidents regarding submission of GOE forms and PAOE points.	Staff (Karson)	ASAP	Multiple emails have been sent out.	C
15	Upload new resource manual to basecamp and the website.	Staff	ASAP	5/15 – Karson uploaded to basecamp and emailed the GAC members.	C
16	Send GAC-recommended revisions of MOP to Members Council for their consideration at their next MC meeting.	Staff	ASAP	4/24/2025 – Yates emailed a motion and the revised MOP to Members Council. Note that Members Council wants this motion to be included in the GAC Report to Members Council at the Annual Meeting in Phoenix.	C



Staff Report: Government Outlook and Opportunities for Engagement

Annual Conference – June 2025

Alice Yates, Director of Government Affairs

Emily Porcari, Manager of State and Local Government Affairs

Jacob Karson, Manager of Government Outreach and Engagement

Bryce Causey, Manager of Federal Government Affairs

Neil Gavigan, Legislative and Policy Analyst

Chris Miller, Office Manager

Government Affairs Staff: Who Are We?



We have a team that is ready to support you!

Contact all of us at [**GovAffairs@ashrae.org**](mailto:GovAffairs@ashrae.org)



Alice Yates
Director



Jacob Karson
**Outreach
& Engagement**



Emily Porcari
State & Local



Bryce Causey
Federal



Neil Gavigan
Policy Analyst

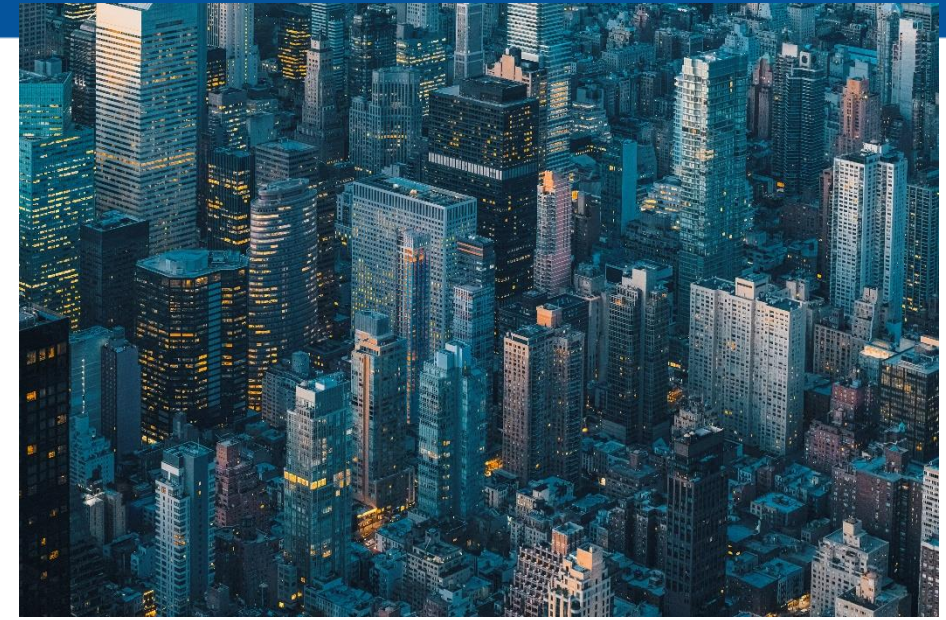


Chris Miller
Office Manager

Global Outlook – Buildings and Construction Sector



- Emissions/energy consumption: **34%**
- Emissions have risen by 5% since 2015 (Paris Agreement goal was to reduce emissions from this sector by 28%)
- Increase in adoption of renewable energy and electrification for heating and cooling
- Adoption and updates of building codes slowed dramatically, with only 3 updates globally in 2024 compared with over 20 in 2023
- Cumulative investments in energy efficiency fall short by **\$1.1 trillion**



The Government Landscape in the U.S.



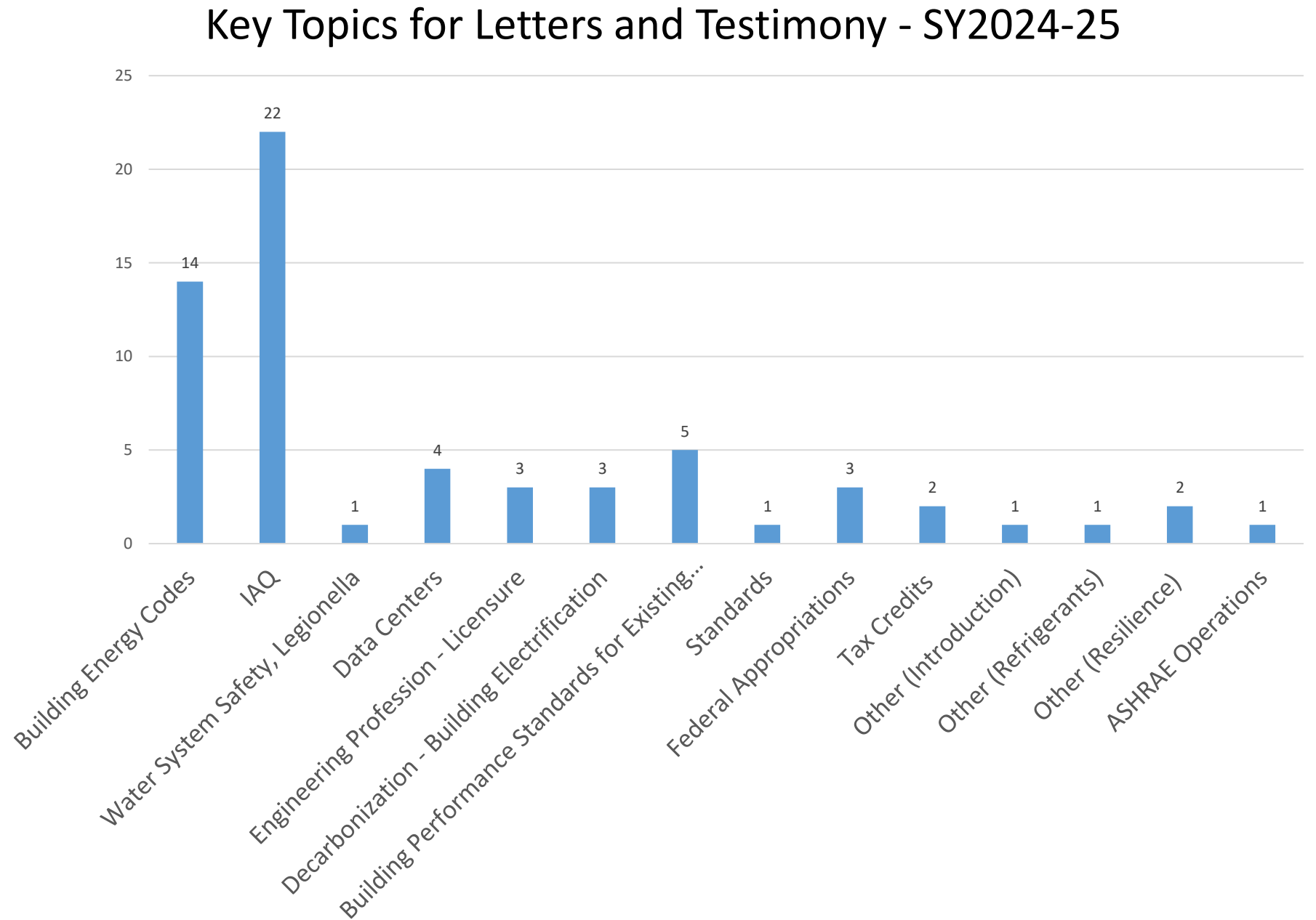
- In 2025, President Trump signed **161 Executive Orders**
- **296** active **legal challenges** to Administration's actions
- Federal vs. State Authority
 - Legal challenges to climate laws, including building electrification
 - Federal funding and elimination of programs impacting local and state policies (e.g., BPS and Energy Star)
- *Significant uncertainty and confusion*

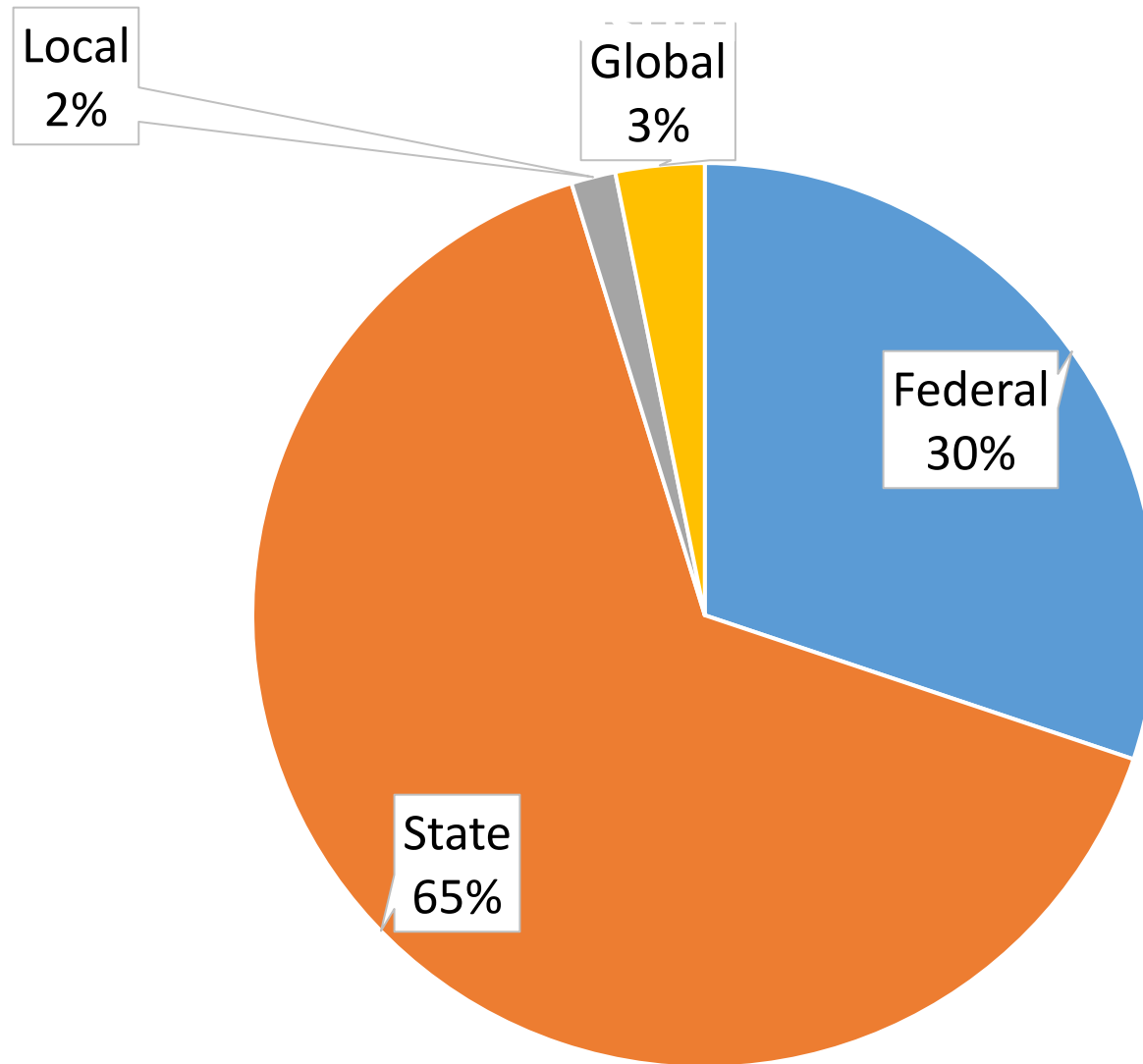




63 letters
sent and
testimony
delivered

*Thanks to
volunteer
members for
showing up!*





■ Federal ■ State ■ Local ■ Global

OUTLOOK and OPPORTUNITIES

Buildings continue to be on the policy and legislative agenda:

- To meet climate and carbon goals
- To provide healthy and safe places to live, work and learn
- To bring resilience to communities

→ **ASHRAE resources and technical expertise continue to be in demand!**

Reconciliation (\$3.4 Trillion Cost over 10 years according to CBO)

- Passed House of Representatives May 21, 2025
- Elimination of tax credits that support HVACAR investments
 - 25C and 45L terminated
 - No changes to 179D
- Rescission of some IRA funds
 - EPA Funds for HFC refrigerant transition
 - GSA funds for low-embodied carbon materials
 - EPA funds for IAQ programs in schools
- Threats to ASHRAE Royalties removed

Presidential Budget Request



- FY26 Budget/Appropriations (Oct. 1, 2025 – Sept. 30, 2024)
 - \$1.7 Trillion Budget Proposal, \$163 billion in cuts
 - Agencies and Major Programs cut
 - \$2.5 billion cut to DOE EERE Office
 - **Zero funding** for Building Codes Program
 - EPA funding cut in **half**
 - **Zero funding** for ENERGY STAR and IAQ research
 - NIST funding reduced by \$325 million
 - **Zero funding** for Mitigation and Resiliency at FEMA - BRIC program
 - September 30, 2025 Government Funding Deadline

2025 State Legislative Sessions

- **4,500** bills reviewed by staff
- **225** bills flagged as relevant to ASHRAE
- Letters sent on **37** pieces of legislation in **20** different state legislatures
- Members have testified on legislation in MA, RI, CO, NE, NH, and DC
- Notable wins include:
 - NJ SB 2188 (Legionella mitigation; cites Standard 188) – became law
 - VA HB 2618 (IAQ improvements in schools; cites ASHRAE) – became law
 - CO HB 25-1245 (IAQ improvements in schools; cites Standards 62.1, 180, 52.2, and 241) – became law
 - Defeated problematic legislation in **HI**, **MO**, **FL**, **WA**, and **ME**
 - Wrote and introduced building energy standard update legislation in NH

- Building Performance Standards
- Resilience / Wildfires
- Workforce – technical training, certification, licensure
- Data centers – generally beyond energy efficiency / 90.4
- Building code updates – attempts at rollbacks or freezes
- Indoor air quality – especially new requirements for schools
- Decarbonization / Electrification – often outside of ASHRAE's scope

Government Outreach and Advocacy: Staff Support for GOEs



- Day on the Hill Events were conducted in **23 states**.
- In addition: **34 global, 9 federal, and 87 state/local** GOEs conducted
- **650+ packets** created and used for GOEs.
- **22 shipments** of collateral material sent to support GOEs.
- **25+ GOE tailored training** sessions held.
- Planned and coordinated **225+ meetings**
- **Led 60+ GOE meetings**

New Advocacy Tool: VOTER VOICE – continued



Ask Congress to Protect Nonprofits in 2025 Tax Bill

The U.S. House of Representatives has begun work on a Budget Reconciliation bill, which aims to extend the 2017 tax cuts, improve border security, and increase military spending. The legislation, commonly known as the “Big Beautiful Bill” contains a provision that would severely harm ASHRAE by taxing royalties ASHRAE receives from the AHR Expo. Like many associations, ASHRAE depends on income from passive royalties to advance its tax-exempt purpose, and changes in this area would have broad and negative ramifications for ASHRAE and our members.

In short, this change would damage the society's continued work to be the foremost source of technical and educational information, and the primary provider of opportunity for professional growth, in the arts and sciences of heating, ventilation, air conditioning and refrigeration.

This legislation is currently being considered at the committee level in the House, which intends to approve the package by Memorial Day. It will then go to the U.S. Senate for consideration.

We need your help to remove this damaging provision!

Review Your Message

- US Senators
- US Representative

Subject

Protect Nonprofits: Remove Sec. 112025 from 1

Message Body

I want to call your attention to a harmful provision in the House Ways and Means Committee portion of the 2025 Budget Reconciliation bill. The provision is in Section 112025, Name and Royalties Treated as Unrelated Business Taxable Income. This provision concerns changes to tax on unrelated business income tax.

Enter Your Info

Your Information

Prefix * First Name * Last Name *

Email *

Home Information

Street Address *

ZIP Code * Enter Zip for **City** and **State**

☒ Yes, sign me up to receive email updates and action alerts from ASHRAE

☒ Remember me

Send Message

- VoterVoice provides ASHRAE members with the capability to quickly and easily send emails to their State and Federal lawmakers.
- Members only need to enter their voting address and name, and VoterVoice automatically sends a pre-written but customizable email to the correct lawmaker.

- Enables ASHRAE members to easily send emails to their constituent lawmakers, amplifying ASHRAE's message
 - **Six** VoterVoice campaigns were conducted in SY 24-25.
 - Nearly **1,000** ASHRAE members became advocates.
 - **2,639 messages** were sent to legislators.
- Broad engagement: message sent by ASHRAE members from 49 different states, Washington, D.C., and Puerto Rico.



Questions?

Status Update: MBOs for the GAC SY2024- 2025

Last Updated: June 13, 2025

#	MBO	Subcommittee Assigned	Metric(s)	Status Update
1	MBO #1: Pivot GOE program to focus more on impact and follow-through and relationship-building and continuity after GOEs. Completion date: 6/30/2025 Strategic Plan: Initiative 1, Goals 2a, 1B,3C	Member Mobilization	- Action items from the GOEs were completed in a timely fashion. - Establish a percentage or number of GOEs that have a specific issue focus (related to PPPs), than simply introducing ASHRAE.  Explore 2-5 tools for GOE record continuity at a regional level.	MMSC determined that GOE forms and other recordkeeping did not allow us to track some of the metrics for this MBO. Therefore, MMSC has gathered recommendations to improve the GOE reporting form as well as overall record-keeping, and these will be considered by the MMSC in the next SY. MMSC recommends revising the PAOE points to include points for sending a reply/follow up to govt official after GOE. This will be considered by MMSC in the next SY to potentially be advanced to Members Council. <i>It is recommended that this MBO be continued into next SY.</i>
2	MBO #2: Increase awareness of the Government Affairs Award Completion date: 6/30/2025 Strategic Plan: Initiative 2, Goals 2a, 1b	Member Mobilization	 Develop additional training for GAC Chapter chairs  Make recommendation to increase the PAOE points for GA6 & GA11	MMSC provided recommendations on SY25-26 PAOEs to the Vice Chair. While additional training has not been developed, MMSC has made recommendations for this training: - Providing an example application; - Creating a demonstration in video format that could be used at CRCs; and - Creating a video of a demonstration on how to fill out the GOE reporting form; MMSC also recommends encouraging every region to have at least one nominee. <i>This MBO is essentially complete.</i>

#	MBO	Subcommittee Assigned	Metric(s)	Status Update
3	MBO #3: Implement new SMEs for GOEs pilot program. Completion date: 6/30/2025 Strategic Plan: Initiative 4, Goals 1b, 2b	Policy & Programs	 Define schedule and methodology for soliciting SME applicants. • Connect appropriate subject expertise with government needs • Schedule 3 government engagements employing ASHRAE SMEs. • Develop evaluation approach to assess effectiveness of initial engagements and prepare summary report. • If continuation of the program is advised, recommend updates to GAC guiding documents to support continuation of the SME program.	The SMEs for GOEs pilot program has made significant progress this SY. The task team has approved 17 SMEs and is presently considering seven more SMEs for the program. The approved SMEs represent eight different regions and bring a variety of subject matter expertise. Moving forward, task team will focus more on making members aware that this program is available for their GOEs. The task team is also developing and implementing strategies to keep SMEs actively engaged during their three-year term, improve the application process, and identify and address gaps in subject matter expertise. <i>Significant progress has been made in implementing this pilot program; as the pilot has 2 more years, implementation will continue in the next Society Year.</i>
4	MBO #4: Develop future plan for GAC Advisory Board based on recent efforts of Board and discussions of effectiveness. Review recommendations of board and provide recommendations on how best to enact them. Completion date: 4/18/2025 Strategic Plan: Initiative 3, Goals 1b, 2b, 3a	Policy & Programs	 Recommend whether Advisory Board should be continued.  If it the Advisory Board should continue, then recommend how function of Advisory Board should be changed to meet its intended goals and whether it should be expanded to additional AHJs and other constituents.  If the Advisory Board should not continue, then recommend how the intent of the advisory board could be met in other ways.	PPSC recommended the Advisory Board be discontinued; members of the advisory board were subsequently notified and thanked for their service. PPSC members authored a recommendation on how the intent of the advisory board can be met in other ways. This recommendation will be shared and discussed at the PPSC and GAC meetings in Phoenix. <i>This MBO has been completed.</i>

#	MBO	Subcommittee Assigned	Metric(s)	Status Update
5	MBO #5: Work with Global Technical Interaction Committee (GTIC) to facilitate sharing of information to avoid duplication of efforts, including through improved understanding of market needs and the tracking and adoption of ASHRAE standards and guidelines around the world. Completion date: 6/30/2025 Strategic Plan: Initiative 3, Goal 3b	Global Affairs	✓ Nominate a liaison from GASC to GTIC and send recommendation to GAC Chair at earliest possible opportunity. Each member of GASC to provide a list of ASHRAE standards that have been adopted by various jurisdictions in their regions. ✓ Identify opportunities for ASHRAE Standards adoption, including through scheduling meetings, sharing information about standards, and/or writing advocacy letters for standards adoption.	Eleazar Rivera has been confirmed as the GAC-GTIC Liaison. Coordination with GTIC complete. Protocol for reporting findings to GTIC established. Numerous meetings held with global lawmakers and government officials. <i>The GAC and GTIC have engaged effectively and implementation of this MBO has been a success; GASC will continue this work as an ongoing responsibility.</i>
6	MBO #6:- Provide recommendations to the full committee on priorities for document translation. Completion date: 6/30/2025 Strategic Plan: Initiative 3, Goals 1a, 1b, 2a	Global Affairs	✓ Recommend languages for prioritizing translation. ✓ Recommend documents for prioritizing translation. ✓ Review current translated documents and languages. ✓ Review current international market for translated and untranslated publications with ASHRAE's accounting department.	Outreach to ASHRAE staff regarding data to substantiate recommendations has been completed. Accounting staff informed GASC staff liaison that reviewing sales data would not be helpful for this MBO. GASC members determined that the PPIBs and PPPs should be prioritized for translation into Spanish. Translation work has been completed, and work will be conducted to replicate this workflow for other languages. <i>This MBO has been completed.</i>

#	MBO	Subcommittee Assigned	Metric(s)	Status Update
7	MBO #7: Develop alternative methods for promoting the value and benefits of employee participation in ASHRAE and to encourage sponsorship and support for their employees by end of Q2. Completion date: 12/31/2024 Strategic Plan: Initiative 4, Goals 2a, 2b	Member Mobilization	 Develop 1-2 methods by end of Q2.	MMSC developed several recommendations that it shared with the GAC. <i>This MBO has been completed.</i>
8	MBO #8: Embed into the culture of ASHRAE inclusivity in GAC participation. Completion date: 6/30/2025 Strategic Plan: Initiative 4, Goal 2a	Executive Subcommittee	 Provide 1-2 recommendations to Members Council by end of Q4 of ways to promote inclusion and foster community and networking.	Recommendations developed: • All GAC communication regarding meeting times must include the time zone; this practice is to promote inclusivity of all members and other participants, regardless of their geography. This recommendation will likely be sent to Members Council in the form of a motion if the GAC approves it in Phoenix. • Another recommendation might be to change the use of “par” for PAOE program. McNulty passed along this recommendation to the PAOE Subcommittee, and it was discussed at the Nov 5th meeting. <i>This MBO has been completed.</i>

MOP Motion to Provide Flexibility for GASC Membership

Motion: That the GAC MOP be revised as follows:

d. Global Affairs

The members of Global Affairs Subcommittee are appointed annually by the Chair of the GAC. Membership of the Subcommittee includes the RVCs from Regions 2, 8, 11, 12, 13, 14, 15 and the RAL and in addition, up to 3 additional non-RVC Members with international experience that serve on the GAC, at the discretion of the GAC Chair. **If an RVC from Region 2, 8, 11, 12, 13, 14, 15, and RAL is serving as chair of another subcommittee, an exception should be made and that RVC should not serve as a member of the Global Affairs Subcommittee.** The Chair of the Subcommittee needs to be an RVC with a minimum of 1 year GAC experience and be from the Regions involved.

Background:

If an RVC from an “international region” is appointed to serve as the chair of the Policy and Programs Subcommittee or the Member Mobilization Subcommittee, they automatically also become members of the GAC Executive Subcommittee and the Nominating Subcommittee. If they also have to serve on the Global Affairs Subcommittee (GASC), this would mean that they would be members of **four subcommittees**, which is too much to ask a volunteer member of ASHRAE. By making this change for membership of the GASC, they would only be a member of **three** subcommittees, which should be more manageable, especially since one of those subcommittees (the nominating subcommittee) doesn’t require as much of a time commitment.

Fiscal Impact: None.

Staff Impact: De minimis (change to the MOP and subcommittee spreadsheet)

MOP Motion on Time Zone Communication Requirement

Motion: That the GAC MOP be revised as follows:

2. EXPECTATIONS OF COMMITTEE MEMBERS

Committee members are expected to attend and actively participate in regular meetings, serve on assigned Subcommittees, quickly respond to requests from Government Affairs Office staff and Committee leadership, and engage in constructive dialogue.

All GAC communication regarding meeting times must include the time zone; this practice is to promote inclusivity of all members and other participants, regardless of their geography.

Background:

GAC MBO #8 reads, “Embed into the culture of ASHRAE inclusivity in GAC participation.” Discussions regarding this MBO resulted in this recommendation to add the time zone in all communications regarding meeting times. This will not only promote the inclusion of all members regardless of their geography, but it also is a good communication practice and will improve attendance at meetings.

Fiscal Impact: None.

Staff Impact: De minimis (change to the MOP)

Requiring Virtual Options for GAC Meetings

Motion: That the GAC Resource Manual be revised to add to “Section F: GAC Standing Rules” (page 15) the following rule, which would be listed as item #3.

3. All GAC meetings, including subcommittee meetings, at the Annual and Winter Conferences will be made available for remote attendance by the provision of a virtual option.

Background:

During the GAC Spring meeting (April 24, 2025), there was robust discussion concerning one of the GAC’s MBOs, which is to “Embed into the culture of ASHRAE inclusivity in GAC participation.”

The focus of the discussion concerned whether all GAC meetings – including subcommittee meetings – at the Annual and Winter conferences should be made available through a virtual option. While the GAC members recognized the value of in-person meetings, it was discussed that due to personal or business constraints, travel to meetings is not always possible and to best include everyone in meetings, a virtual option needs to be provided. Otherwise, key individuals would not be able to fully contribute to GAC efforts, which would be inconsistent with the ASHRAE Value Statement call to “celebrate diverse and inclusive communities.”

A culture of inclusiveness needs to allow all members to participate and providing a virtual option is needed to make that happen. This could be done at no or minimal cost to Society, while losing key participants would definitely be a loss to ASHRAE.

Fiscal Impact: Minimal - we don’t think conference attendance will change much due to this new rule.

Staff Impact: Minimal – a virtual option will need to be provided for the meetings.



Draft ASHRAE's Public Policy Priorities: SY 2025-2026

- Advance Design and Construction of Resilient Buildings and Communities

Resiliency is an important societal, economic, and technical issue that will have a major impact on how buildings are designed, renovated, operated, and kept secure. For example, the increasing threat of wildfires has led ASHRAE to produce Guideline 44-2024, *Protecting Building Occupants from Smoke During Wildfire and Prescribed Burn Events*.

A building's ability to recover and be available to occupants following natural and human-induced disasters can have widespread economic and health implications. With respect to cyber-security risks, potential consequences of compromised systems include personal trauma, lengthy power outages, and decreased ability to return facilities to their intended uses following an event. Up-to-date standards including for ventilation, pathogen mitigation, secure building automation systems, and energy conservation are essential elements of resilient buildings. Unfortunately, most states have not adopted the most recent standards and codes that are based on the latest research and technological innovation, which could make building occupants more vulnerable to disasters and disease transmission. This is also the true internationally. ASHRAE's priority is that policies affecting building design and building codes are developed and implemented by qualified engineers and HVAC&R professionals as unbiased technical experts, to advance a built environment that is as safe, efficient and resilient as possible in any part of the world.

- Promote Healthy Buildings and Reduce Disease Risk

Supporting the health and well-being of building occupants is the most important feature of the indoor environment. Providing healthy, safe and comfortable indoor environments are essential building services that must be achieved alongside energy efficiency, sustainability, and resiliency. ASHRAE recommends that policymakers incorporate by reference ASHRAE standards and guidance in legislation and policies to provide healthy levels of indoor air quality (IAQ), comprehensive thermal comfort, and environmental health-temperature and humidity; reduce the risk of airborne pathogen transmission; and decrease hazards in building water systems. At a national or subnational level, model building codes should be developed referencing ASHRAE Standards such as 62.1 (commercial ventilation and IAQ), 62.2 (residential ventilation and IAQ), 170 (ventilation of health care facilities), 241 (control of infectious aerosols), 188 and 514 (water system safety), and 55 (thermal comfort) to support healthy, safe, and comfortable indoor environments.

- Strengthen and Expand the HVAC&R Workforce

Strong education in science, technology, engineering, and mathematics (STEM) to develop the pipeline of engineers, scientists, and technicians is critical to our future well-being and standard of living. ASHRAE supports policies that strengthen STEM at all educational levels, including through use of ASHRAE's extensive educational offerings. Requiring the use of ASHRAE certification programs helps ensure professionals have the skills and knowledge to improve building performance. ASHRAE supports expanding the HVAC&R workforce pipeline by broadening the population from which engineers, scientists, and technicians are recruited, including from disadvantaged and under-resourced communities. For the existing workforce, ASHRAE supports policies to equip them with the technical skills to address the challenges and opportunities for sustainable and healthy built environments that serve humanity. To ensure buildings and their systems are designed properly, ASHRAE supports professional engineering licensure with realistic requirements.



Draft ASHRAE's Public Policy Priorities: SY 2025-2026 (page 2)

- Support Sustainable Building Practices including Building Decarbonization to Mitigate Climate Change
Buildings and their heating, ventilation, air conditioning and refrigeration (HVAC&R) systems directly and indirectly contribute to greenhouse gas (GHG) emissions. Buildings are responsible for more than 35% of global primary energy use, 60% of global electrical energy use, and nearly 40% of energy-related GHG emissions worldwide. Eliminating GHG emissions from the built environment is essential to address climate change. Doing so will require recognizing buildings in the broader context of energy resources and additional demands on the electric grid. ASHRAE is advancing additional tools to support decarbonization across a building's entire life cycle, including building design, construction, operation (including grid-interactive and smart building tools), occupancy, and end of life. ASHRAE addresses emissions from building operation as well as those embodied in building materials and the construction process.

To advance building decarbonization, ASHRAE supports government adoption of robust building standards for new construction such as [ASHRAE Standard 90.1 \(commercial\)](#), [90.2 \(residential\)](#), [90.4 \(data centers\)](#), [189.1/IgCC](#) (high-performance green buildings), and [189.3 \(high-performance health care facilities\)](#). ASHRAE supports the deployment of decarbonization technology such as next generation heat pumps, the adoption of stretch codes, building performance standards ([Standard 100](#)), electric-ready building requirements, and building benchmarking and labeling requirements. ASHRAE also supports the use of decarbonized combustion fuels and on-site carbon capture use and storage, as they become commercially available. ASHRAE recommends governments use and refer to [ASHRAE Standard 228](#) to evaluate whether a building or group of buildings meet a definition of "zero net energy" or "zero net carbon."

- Ensure the Orderly and Safe Phasedown of High-GWP HFC Refrigerants
ASHRAE supports the global phasedown of the production and consumption of Hydrofluorocarbon (HFCs) refrigerants that have high-Global Warming Potential (GWP), including through legislation, regulations, and policy. Governments are mandating the near-term use of lower GWP refrigerants, which can have some flammability. [ASHRAE Standard 15-2022](#), *Safety Standard for Refrigeration Systems*, and [Standard 34-2022](#), *Designation and Classification of Refrigerants* should be adopted quickly to help ensure the safe use of these refrigerants. Where ultra-low GWP refrigerants are being applied, ASHRAE's priority is to ensure the transition to these refrigerants is managed so that they are used safely, efficiently, and cost-effectively. ASHRAE supports research needed to achieve these objectives.
- Support Adoption of the Latest Edition of ASHRAE's Standards
Energy efficiency and resulting cost savings can be improved significantly through the adoption and effective implementation of the most recent version of [Standard 90.1](#), *Energy Standard for Sites and Buildings Except Low-Rise Residential Buildings*, which has provided the minimum requirements for energy-efficient design in the United States for 50 years. Residential buildings and data centers can also achieve improved performance, save energy costs, and reduce climate impacts when jurisdictions adopt [ASHRAE Standard 90.2](#) (residential) and [Standard 90.4](#) (data centers). The incorporation by reference of ASHRAE's most current standards in building codes, rules, regulations, and laws enhances health, efficiency, and safety in the built environment, and should be pursued. Authorities having jurisdiction should be adequately resourced and empowered to adopt and enforce the newest edition of ASHRAE standards.

GAC Manual of Procedures

4.A Exec Subcommittee responsibilities:

6. Review, comment, and approve actions on Public Policy Issue Briefs (PPIBs) ~~developed~~ recommended by a ballot of the Policy and Programs Subcommittee including revisions of existing PPIBs, retirement of existing PPIBS and drafts of new PPIBs.

~~a. Recommendations, if any, for new PPIBs shall be provided to the Policy and Programs Subcommittee.~~

~~b. Recommendations, if any, for the retirement of PPIBs shall be provided to the Policy and Programs Subcommittee.~~

~~c. PPIBs actions approved by the Executive Subcommittee shall be sent to the full Government Affairs Committee for approval.~~

4.B PPSC responsibilities:

6. Review ~~annually~~ existing PPIBs annually and vote to make recommendations to the Executive Subcommittee to reaffirm, revise or retire or update these PPIBs. If an update is recommended, the Policy and Programs Subcommittee shall develop the PPIB and submit to the Executive Subcommittee for review and approval.

~~7. Recommend and develop any new PPIBs, as needed, and vote to recommend approval by the Executive Subcommittee.~~

GAC Resource Manual

Not certain where this new section should go but perhaps it can live in F GAC Standard Rules. I numbered it as 4 accordingly, but I'm neutral on where it is located.

4. Schedule for review and approval of existing PPIBs

The Policy and Programs Subcommittee is responsible for reviewing exiting PPIBs annually and making recommendations to the Executive Subcommittee to reaffirm, revise or retire or update these PPIBs, with GAC subsequently taking actions on these recommendations. A schedule for the review and approval of existing PPIBs is presented below. This schedule is based on existing PPIBs being approved by the end of the Society Year. For PPIBs that have an expiration date other than June, the schedule can be shifted or condensed to complete the required steps by the expiration date. The schedule can be modified as circumstances dictate but it is important to avoid pushing all of the actions and approvals to the end of the Society Year.

Assign PPSC members to review existing PPIBs after 1st PPSC meeting of SY (presumably by early fall). Assigned reviewers share drafts with SMEs outside of GAC such as chairs of related position documents.

November 1: Assigned reviewers consolidate comments to create proposed revision to each existing PPIB. Alternatively, a recommendation to simply reaffirm or withdraw each PPIB is made.

December 1: PPSC chair distributes proposed revisions or recommendations to reaffirm or withdraw to PPSC for review by mid-December.

January 1 – Drafts are revised by PPSC chair and assigned reviewers in preparation for PPSC vote at winter meeting.

Winter meeting timeframe – Proposed revisions or recommendations to reaffirm or withdraw are approved by Executive Subcommittee.

Winter meeting timeframe – Proposed revisions or recommendations to reaffirm or withdraw are approved by GAC.

Early February – Approved draft revisions sent to Tech Council or its designee for review and comment by end of February.

March 1 – Tech Council comments reviewed by PPSC chair and assigned reviewer, and PPIBs are further revised as needed. Responses to Tech Council comments are prepared.

April 1: If no substantive changes, the revised documents are distributed to GAC as an information item and considered ready for posting and distribution.

April 1 thru June 1 – If substantive changes are made to any PPIBs, the revised documents are voted on by PPSC, then Exec, then GAC.

End of Society Year: Revised PPIBs are posted and distributed.

PPIB Topic	Expires	Status	Reviewers	Summary of Tech Council Comments and PPSC Responses
Building Electrification	Feb 2026	Already finalized for SY24-25	Heather	
Building Decarbonization	June 2025	Approved by GAC 2.7.25	Syed	Various editorial suggestions considered and in most cases adopted. Owen comment “How does this advance electrification?” Response: There is a separate PPIB on electrification if that issue arises during discussions of this one. Kulankara comment “should proposed standards be included...” Response: We have listed proposed standards in the past and intend to continue doing so. It is helpful to include these, and we can speak to the development process as necessary. Suggesting substantive changes? No
Building Energy Benchmarking	June 2025	Approved by GAC 2.7.25	Adam	Various editorial suggestions considered and in most cases adopted. Owen comment “Is this correct – sounds wrong to me” RE: “converting energy to carbon” Response: The offending sentence indeed appears to be out of place should be deleted. Suggesting substantive changes? No
Climate Change and the Built Environment	June 2025	Approved by GAC 2.7.25	Adrianne	Various editorial suggestions considered and in most cases adopted. Bahnfleth comment “ It’s also ASHRAE’s view that improving IEQ is important, so perhaps it should be stated that climate change/decarb goals should not be pursued in ways that prevent IEQ goals from being achieved.” Response: For the purposes of this PPIB—explaining this specific policy area to a lawmaker—it may be more helpful to

PPIB Topic	Expires	Status	Reviewers	Summary of Tech Council Comments and PPSC Responses
				avoid considering additional factors. The indoor air quality PPIB is available to make the importance of IEQ clear. Suggesting substantive changes? No
Consensus Standards-Expert Solutions to Meet Global Needs	June 2025	Approved by GAC 2.7.25	Andy	Various editorial suggestions considered and in most cases adopted. Bahnfleth comment “statement needs to be a lot more concise” Response: As with other such larger comments, GAC will consider these during these during the SY25-26 review. Suggesting substantive changes? No
Environmental Tobacco Smoke And Electronic Nicotine Delivery Systems	June 2025	Approved by GAC 2.7.25	Andy	Various editorial suggestions considered and in most cases adopted. Bahnfleth comment “There ought to be a concise statement of the issue. That - vaping is on the rise and laws and policies governing it do not exist.” Response: Additional phrase to clarify but the issue can be reconsidered during the SY25-26 review. Bahnfleth Suggests adding a line on VOC/ozone chemistry. Response: Thanks for pointing this out. This important issue will be considered in the next revision cycle. Bahnfleth comment “this belongs more to the statement of the issue than to ASHRAE’s View” Response: Text moved to an earlier location, which does not constitute a substantive change as the information is not changed. Suggesting substantive changes? No
Indoor Air Quality	June 2025	Approved by GAC 2.7.25	Andy	Various editorial suggestions considered and in most cases adopted. Bahnfleth comment “Codes do not adopt the O&M requirements of standards. There should be a “view” about the need

PPIB Topic	Expires	Status	Reviewers	Summary of Tech Council Comments and PPSC Responses
				for standards and regulations that apply to operation.” Response: Another important issue to consider in the FY25-26 cycle. Suggesting substantive changes? No
Refrigerants and Their Responsible Use	June 2025	Approved by GAC 2.7.25	Heather	Various editorial suggestions considered and in most cases adopted. Suggesting substantive changes? No
Resiliency in the Built Environment	June 2025	Approved by GAC 2.7.25	Tim	Various editorial suggestions considered and in most cases adopted. Bahnfleth comments “resilience vs resiliency” He prefers “resilience” Response: “Resiliency” is used in the position document, and therefore we are using it here as well. This issue can be revisited in the SY25-26 cycle. Bahnfleth comment “This list does not do enough to clarify what kinds of events require resilience. Easy examples are IAQ emergencies like wildfire smoke events or airborne disease outbreaks. What is a political event or hazard that requires building resilience?” It should clarify that resilience considerations apply to IEQ environment.” Response: Valid points that will be considered in the SY25-26 cycle. Bahnfleth comment “would prefer to see high-performance” here. Response: Valid point that will be considered in the SY25-26 cycle. Suggesting substantive changes? No
STEM Education & Workforce	June 2024	Approved by GAC 2.7.25	Adam, Peter	Various editorial suggestions considered and in most cases adopted. Bahnfleth comment “Double over what period?”

PPIB Topic	Expires	Status	Reviewers	Summary of Tech Council Comments and PPSC Responses
				Response: The wording has been clarified as the doubling was with reference to other occupations, not time. Bahnfleth comment “this reads like issue stuff” Response: This point will be considered in the SY25-26 cycle. Suggesting substantive changes? No
Indoor Carbon Dioxide	June 2025	Approved by GAC 2.7.25	Andy	Various editorial suggestions considered and in most cases adopted. Owen comment “Is this intended to mean that the 62s don’t use CO2 or that they use CO2 based on something else? Also, the underlining seems a bit odd here - the whole document is supposed to be the items that need to be highlighted.” Response: Yes, that is the intent. The 62s do not have CO2 limits for IAQ. The underlining here indicates a sentence that was added. Owen comment “Does this sentence say anything different from the one before? Can the point of it be made clearer?” Response: Yes, it does say something different. Perhaps it can be clarified in the next cycle. Owen comment “Put this in the first paragraph. I think it is big and makes the point” Response: Perhaps, but let’s reconsider in the next cycle. Suggesting substantive changes? No
Wildfires and Indoor Environmental Health	June 2025	Approved by GAC 2.7.25	Andy	Various editorial suggestions considered and in most cases adopted.



Shaping Tomorrow's Global
Built Environment Today

BUILDING DECARBONIZATION

THE ISSUE

Buildings benefit society but have a significant worldwide environmental impact including the effects of their greenhouse gas (GHG) emissions. Buildings account for roughly 40 percent of global GHGs and the global building stock is expected to double by 2060 due to urbanization, population growth, and related economic trends. The standard metric used to quantify GHGs is carbon dioxide equivalent (CO₂e). Using a common metric helps to evaluate different sources of GHGs in terms of their potential to impact the atmosphere -- also referred to as their global warming potential. As governmental bodies and jurisdictions across the planet confront climate change, the term “decarbonization” describes practices or policies that reduce GHG emissions. Building decarbonization may encompass a building's entire life cycle, including building design, construction, operation, occupancy, and end of life.

Many governmental bodies and jurisdictions are requiring new buildings to be low carbon or net-zero energy in the near term, and other policies are requiring retrofits of existing building stock to decarbonize in the medium to long term. Some decarbonization policies also advance building electrification when coupled with renewable electricity source or other low-carbon technologies. Decarbonization will require large public and private sector investments, leading to job creation and business opportunities in the HVAC&R, construction materials, and design sectors.

ASHRAE's ROLE

ASHRAE stands at the forefront in providing standards, guidance, technical resources, and education for building systems design, manufacturing, installation, and operation. With respect to building decarbonization, ASHRAE's historical focus has been on energy efficiency, which has resulted in significant GHG emission reductions. ASHRAE is expanding its technical resources, education and training and other initiatives so that they address building decarbonization. ASHRAE's Center of Excellence for Building Decarbonization is advancing numerous resources and making them available at www.ashrae.org/decarb

ASHRAE's consensus-based standards that address building decarbonization include:¹

- Standard 90.1-2022, *Energy Standard for Buildings Except Low-Rise Residential Buildings*
- Standard 100-2024, *Energy and Emissions Building Performance for Existing Buildings*
- Standard 105-2021, *Standard Methods for Determining, Expressing and Comparing Building Energy Performance and Greenhouse Gas Emissions*
- Standard 189.1-2023, *Standard for the Design of High-Performance Green Buildings Except Low-Rise Residential Buildings*

¹ The most up-to-date list can be found at: <https://www.ashrae.org/about/cebd-technical-resources>

- Standard 228-2023, *Standard Method of Evaluating Zero Net Energy and Zero Net Carbon Building Performance*
- Proposed Standard 240P, *Evaluating Greenhouse Gas (GHG) and Carbon Emissions in Building Design, Construction and Operation* – for full building lifecycle analysis
- Proposed Standard 242P, *Standard Method for Calculation of Building Operational Greenhouse Gas Emissions*

ASHRAE's VIEW

ASHRAE's position is that eliminating GHG emissions from the built environment is essential to addressing climate change. To do this, it is ASHRAE's position that:

- Decarbonizing buildings and their systems must be based on a holistic analysis including healthy, safe, and comfortable environments; energy efficiency; environmental impacts; sustainability; operational security; and economics.
- By 2030, the global built environment must at least halve its 2015 GHG emissions, requiring that:
 - all new buildings are net-zero GHG emissions in operation;
 - widespread energy efficiency retrofit of existing assets is well underway, and
 - embodied carbon of new construction is reduced by at least 40 percent.
- By 2050, at the latest, all new and existing assets must be net zero GHG emissions across the whole building life cycle.
- Building decarbonization provides benefits beyond reducing GHGs, including improved indoor and outdoor air quality, improved energy savings, improved community health and wellbeing, enhanced social responsibility, and increased property valuation.
- Operational energy-related GHG emissions can be reduced by implementing efficiency measures and building electrification; improving O&M; using lower-GWP refrigerants and minimizing refrigerant volume while maintaining energy efficiency; improving refrigerant management; safe disposal of refrigerants; and increasing use of renewable energy sources both on site and off site, energy storage, and building-grid integration.
- Building design and operations should be able to respond to real-time signals from the power grid to reduce GHG emissions.
- Increasing adoption of current energy codes and their effective implementation are critical for decarbonization.
- Whole-building life-cycle assessment must be considered in future building codes to reduce embodied and operational GHG emissions related to buildings and their HVAC&R systems.
- Building performance standards (BPS) should be considered as a policy tool to improve energy efficiency and reduce emissions in existing buildings.
- Decarbonization policies should consider and mitigate impacts such as increased costs on disadvantaged communities and less-developed nations.
- Development of community energy systems, district heating and cooling, and other collaborative approaches that contribute to lower carbon emissions across entire neighborhoods or districts through integrated urban planning such as smart and sustainable cities.

- Collaboration with global organizations, governments, and industry bodies to harmonize standards and policies drive decarbonization across the building sector.
- Training, certification, resources, and tools are needed for building professionals to implement low-carbon design and operations, supporting the workforce transition to sustainable practices.
- Investing in research to support new decarbonization technologies and methodologies, including advancements in renewable energy systems, low-GWP refrigerants, and innovative HVAC design.



Shaping Tomorrow's Global
Built Environment Today

CLIMATE CHANGE AND THE BUILT ENVIRONMENT

THE ISSUE

Worldwide concern for changes in the global climate has escalated as scientific evidence has become more definitive, linking increased concentrations of atmospheric greenhouse gases (GHGs) and consequent global warming to human activities. As a response, ASHRAE is increasing its attention to standards, regulations, legislation and policies that involve GHGs.

When developing policies to address climate change, it is important to consider that buildings and their heating, ventilating, air conditioning, and refrigeration (HVAC&R) systems directly and indirectly contribute to GHG emissions. Buildings are responsible for 34% of global final energy use and 37% of energy-related emissions worldwide.¹ These emissions are associated with construction and the energy needed to operate buildings and building systems, and to a lesser extent through the release of refrigerants and other GHGs, in particular if they are not properly managed. According to the United Nations Intergovernmental Panel on Climate Change (IPCC), “buildings offer immediately available, highly cost-effective opportunities to reduce energy demand, while contributing to meeting other key sustainable development goals including poverty alleviation, energy security and improved employment.”² Improving the energy efficiency and the ongoing efficient performance of building systems provide a significant opportunity for climate change mitigation.

ASHRAE's ROLE

ASHRAE is the leading source of information and research for HVAC&R systems and building performance. ASHRAE's technical resources help address buildings' contribution to climate change including through these standards:

- Standard 90.1-2022, *Energy Efficiency Standard for Sites and Buildings Except Low-Rise Residential Buildings*
- Standard 90.2-2024, *High-Performance Energy Design of Low-Rise Residential Buildings*
- Standard 90.4-2022, *Energy Standard for Data Centers*
- Standard 100-2024, *Energy and Emissions Building Performance Standard for Existing Buildings*
- Standard 189.1-2023, *Standard for the Design of High-Performance Green Buildings Except Low-Rise Residential Buildings*
- Standard 189.3-2021 *Design, Construction, and Operation of Sustainable High-Performance Health Care Facilities*

¹ United Nations Environment Programme (2024), “Global Status Report for Buildings and Construction: Beyond foundations: Mainstreaming sustainable solutions to cut emissions from the buildings sector.” Nairobi. <https://doi.org/10.59117/20.500.11822/45095>.

² Lucon, Oswaldo, and Diana Ürge-Vorsatz. “AR5 Synthesis Report: Climate Change 2014.” *Chapter 9: Buildings*, United Nations Intergovernmental Panel on Climate Change, 2014, https://www.ipcc.ch/site/assets/uploads/2018/02/ipcc_wg3_ar5_chapter9.pdf. ³ For more information, see www.ashrae.org/technical-resources/aedgs.

- Standard 105-2021, *Standard Methods for Determining, Expressing, and Comparing Building Energy Performance and Greenhouse Gas Emissions*
- Standard 228-2023, *Standard Method of Evaluating Zero Net Energy and Zero Net Carbon Building Performance*
- Proposed Standard 240P, *Quantification of Life Cycle Greenhouse Gas Emissions of Buildings*
- Proposed Standard 242P, *Standard Method for Calculation of Building Operational Greenhouse Gas Emissions*

Other ASHRAE resources for addressing climate change include:

- ASHRAE and its partners have published several free-to-download [Advanced Energy Design Guides](#) (including Zero Energy Building Guides for K-12 Schools and Offices), which provide educational guidance to reduce energy consumption while achieving acceptable IEQ conditions.

ASHRAE's VIEW

ASHRAE is committed to a leadership role in reducing climate change associated with building systems and responding to climate change experienced in the built environment.

ASHRAE recommends:

- States adopt the most recent version of ANSI/ASHRAE/IES Standard 100 for existing buildings and ANSI/ASHRAE/IES Standard 90.1 for new buildings.
- A full evaluation of new and existing buildings' climate impacts, carbon balance, and energy performance.
- Funding for research that improves energy efficiency/utilization in HVAC&R technology to minimize GHG emissions.
- Funding for building science research leading to improved
 - advanced equipment and systems
 - grid-interactive designs
 - ability to load-shift
 - integration of the Internet of Things (IoT)
 - net metering
 - building based energy storage systems and demand response technology
- Promotion of carbon and energy life-cycle analysis to building owners to encourage sustainable building construction, operation and renewal.



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CONSENSUS STANDARDS: EXPERT SOLUTIONS TO MEET GLOBAL NEEDS

THE ISSUE

Voluntary consensus technical standards developed by private organizations are essential for a productive global economy and to facilitate global commerce. Standards foster safe and effective building technology innovation by providing a transparent baseline and needed metrics for assessing how that technology can impact building design, performance, and occupants. They are necessary for comparing technologies in the expanding global marketplace and facilitating cross-border collaboration. Governments and model code bodies recognize the value of voluntary consensus standards and adopt them for use in building codes and regulations.

Voluntary consensus technical standards are developed through the participation of qualified, interested, and affected stakeholders including manufacturers, consumers, users, advocacy organizations, and representatives of government and academia. Standards accreditors such as the American National Standards Institute (ANSI), the International Organization for Standardization (ISO) and the International Electrotechnical Commission (IEC) follow several principles such as consensus, balance, transparency, due process, and technical expertise.

Copyright protection of voluntary consensus technical standards is critical to the continued development and maintenance of standards. Governments at all levels benefit from the application of standards by private organizations who rely on copyright protection to continue the maintenance of existing standards and development of future standards. Without copyright protection, standards development organizations will be challenged to provide the public with the benefit of rigorous, science-backed standards.

In the United States, policymakers have considered voluntary consensus standards so critical that federal law (the National Technology Transfer and Advancement Act of 1995), supplemented by OMB Circular A-119, directs federal agencies to use voluntary consensus standards wherever possible in their procurement and regulatory activities in lieu of expending public resources developing government-unique standards. Current policy recognizes that reliance on voluntary consensus standards protects public health and safety, saves taxpayers money, encourages long-term growth for U.S. businesses, and promotes the global competitiveness of American enterprises.

ASHRAE's ROLE

ASHRAE develops and publishes robust consensus technical standards; many of which are adopted directly by governments or into building codes. ASHRAE standards establish requirements in the areas of heating and cooling, indoor air quality, energy efficiency and management, building water systems, high-performance buildings, safe refrigerant use, and others. ASHRAE's standard development process is rigorous; ASHRAE is one of only six standards-developing organizations in the U.S. that can self-certify that its standards have followed ANSI's procedures.

ASHRAE also serves on U.S. Technical Advisory Groups (TAGS) for ISO Committees and in the role of international secretariat for ISO Technical Committees to help ensure that ASHRAE views are represented. These standards are supported by technical committees that develop publications and educational materials to assist in the application of ASHRAE standards. ASHRAE standards are developed by experts from around the globe under strict ethical and non-commercialism guidelines.

ASHRAE's VIEW

Use of voluntary consensus standards at all levels of government are a benefit to society. For this reason:

- Government entities should continue to support voluntary consensus standard development, use, and adoption in laws and regulations, which can protect public health and safety, improve commerce, and save taxpayers money.
- Agencies should work with standards developers and industry experts to identify situations where societal interests could be addressed with voluntary consensus standards.
- Governments should continue to foster and support the unique character and strengths of the public-private partnership in standards development as they pursue trade and other international agreements, regulatory harmonization, and legislative and regulatory approaches.
- Governments should support policies, both domestically and internationally, which ensure the continued ownership and control of the copyrights and trademarks of standards developers.
- Policy makers should participate in the development of voluntary consensus standards and government officials should encourage their staff who are subject matter experts to participate through work release time and reimbursement of expenses incurred.
- Governments need to regularly update regulations and policies to reference the latest versions of standards to reflect the latest technical advances, which can help protect public health, improve resiliency and sustainability.



Shaping Tomorrow's Global
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BUILDING ENERGY BENCHMARKING, ASSESSMENTS, AND PERFORMANCE TARGETS

THE ISSUE

Heating, ventilation, air conditioning, and refrigeration (HVAC&R) account for 61% of commercial building site energy use.¹ While new buildings have realized improved energy performance, existing buildings represent the greatest opportunity for energy and greenhouse gas (GHG) emissions reductions. Improving the energy performance of existing buildings requires a robust building energy database. Without understanding a building's true performance, identifying effective improvements in energy efficiency is challenging. As the saying goes, "you can't manage what you don't measure."

To address this concern, building energy benchmarking has become a critical tool for quantifying and evaluating building operational energy use patterns. Benchmarking data can inform public policies that focus on the most effective ways to reduce energy use in a city or state's building stock. Benchmarking data can also be used to develop local energy and GHG emissions performance targets appropriate to local climate and building types.

Over 40 U.S. and Canadian cities have building energy benchmarking programs.² Some jurisdictions require actions beyond benchmarking, such as performing energy assessments (audits, tune-ups, or retrocommissioning) or meeting performance targets (maximum energy use or GHG emissions). Cities such as Boston, Denver, New York City, Vancouver, and Washington DC have set aggressive GHG emissions reduction goals for existing buildings that will require accurate benchmarking to determine emissions and energy savings.

ASHRAE's ROLE

ASHRAE develops standards, guidance and educational resources informed by robust data on the actual energy performance of buildings and offers evidence-based best practices and technical information for use by municipalities and professionals across the building sector as follows.

- **Benchmarking:**
 - ASHRAE Standard 105-2021, *Standard Methods of Determining, Expressing, and Comparing Building Energy Performance and Greenhouse Gas Emissions* provides a method for determining and comparing building energy performance and greenhouse gas emissions.
 - ASHRAE Standard 214-2017, *Standard for Determining and Expressing Building Energy Performance in a Rating Program* provides uniformity in the building energy labeling and disclosure process.
 - ASHRAE Standard 228-2023, *Standard Method of Evaluating Zero Net Energy*

¹ Includes water heating; 2012 Commercial Building Energy Consumption Survey: Energy Usage Summary. U.S. Energy Information Administration, 18 March 2016, <https://www.eia.gov/consumption/commercial/reports/2012/energyusage/>

² Comparison of U.S. Commercial Building Energy Benchmarking and Transparency Policies. Institute for Market Transformation, July 2022, <https://www.imt.org/resources/comparison-of-commercial-building-benchmarking-policies/>

and Zero Net Carbon Building Performance provides consistent method definitions of “zero net energy” and “zero net carbon” for both the design of new buildings and the operation of existing buildings.

- ASHRAE Standard 240P, *Evaluating Greenhouse Gas (GHG) and Carbon Emissions in Building Design, Construction and Operation* will provide a whole life carbon approach to support emissions reductions in buildings.
- **Energy audits and assessments:**
 - ASHRAE Standard 211-2018, *Standard for Commercial Building Energy Audits* establishes consistent practices for conducting and reporting energy audits for commercial buildings. *Referenced by ordinances in Atlanta, GA; Boulder, CO; Los Angeles, CA; New York, NY; and San Francisco, CA.*
 - *Commercial Buildings Energy Audits Reference Manual* is a reference that defines best practices for energy survey and analysis for purchasers and providers of energy audit services and serves as a reference for Standard 211.
- **Building performance targets:**
 - *Building Performance Standards: A Technical Resource* provides technical basis and resources to policymakers, building owners, facility managers, design professionals and ASHRAE members when developing and implementing a Building Performance Standard (BPS).
 - ASHRAE Standard 100-2024, *Energy and Emissions Building Performance Standard for Existing Buildings* sets energy use intensity (EUI) benchmarks for existing buildings in the commercial and residential sector and establishes methods for determining opportunities for improvement in EUI leading to compliance with the standard benchmarks. *Referenced by Washington State’s Clean Buildings Act of 2019.* Future revisions will incorporate setting GHG emissions targets.
 - ASHRAE’s Building EQ³ program calculates a building’s energy performance in relation to other similar buildings, identifies the gap between “as designed” potential and actual performance in operation, and provides recommendations to reduce energy use. Building EQ can be used to publicly display building energy use and comply with disclosure requirements.

ASHRAE certification programs exist to meet the industry needs of today and provide value to thousands of built-environment professionals, employers, and building owners. Certifications like Building Commissioning Professional (BCxP) and Building Energy Assessment Professional (BEAP) are recognized by the U.S. Department of Energy (DOE) as meeting the Better Buildings Workforce Guidelines (BBWG) and are used frequently by local jurisdictions to designate who is qualified to perform benchmarking and energy assessments.

ASHRAE’s VIEW

Energy metrics that are widely accepted, robust, and validated are critical to achieving policy objectives. Standardized procedures for energy performance assessments ensure an appropriate level of rigor and scope of work. Within a building owner’s portfolio or across a city’s building stock, decision-makers need consistent language, metrics, and procedures to effectively communicate goals, evaluate potential investments, and measure success. ASHRAE remains dedicated to sharing technical resources with policymakers to support legislative and regulatory solutions that improve building energy efficiency and reduce GHG emissions.

³ For more information, see <https://www.ashrae.org/technical-resources/building-eq>
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ENVIRONMENTAL TOBACCO SMOKE AND ELECTRONIC NICOTINE DELIVERY SYSTEMS

THE ISSUE

While indoor smoking has become less common in recent years in many countries, the use of Electronic Nicotine Delivery Systems (ENDS) has significantly increased and policies that respond to these increases are still being developed. Both smoking and the use of ENDS negatively affect indoor air quality, and each has inherent health risks.

Exposure to Environmental Tobacco Smoke (ETS) continues to have considerable health and cost impacts. Researchers have investigated the health and irritant effects among non-smokers exposed to tobacco smoke in indoor environments. Such exposure is also known as passive smoking and as exposure to secondhand smoke. A number of national and global health research groups and agencies have concluded, based on the preponderance of evidence, that exposure of non-smokers to tobacco smoke causes specific diseases and other adverse effects to human health, most significantly cardiovascular disease and lung cancer. No cognizant authorities have identified an acceptable level of ETS exposure to non-smokers, or expectation that further research will identify such a level.

Simultaneously with the decline of tobacco smoking, the use of Electronic Nicotine Delivery Systems (ENDS) including vape pens, electronic cigarettes, and other devices that convert nicotine into an inhalable aerosol without combustion has rapidly increased. The aerosol emitted from these devices contains varying amounts of nicotine dissolved in propylene glycol, or glycerol along with volatile compounds (VOCs).¹² Unique to the use of ENDS is the concentration and type of compounds that may deposit and remain on indoor surfaces. These deposits represent a unique source of contamination in buildings that varies depending on indoor climate, airflow and surface area and may require specialized cleaning, HVAC maintenance, and other operational practices.³ In addition, limited studies have been performed to evaluate the chemical reactions and health interactions that may occur between ENDS emissions and other airborne contaminants commonly found indoors. Effects of secondary involuntary exposure to ENDS have not been thoroughly studied by the scientific community, in part because these devices are new, evolving, diverse and customizable. However, because ENDS have become so prevalent, indoor building components and occupants are being passively exposed to their emissions.

Despite the well-documented benefits of smoking bans, many locations worldwide still lack laws and policies that provide sufficient protection. Still fewer bans prohibit the use of ENDS. In many locations, laws and policies are only partially protective, permitting smoking and ENDS usage in certain areas of buildings or specific building types including casino, entertainment and multifamily housing.

¹ Offermann 2015. F.J. Offermann, "Chemical Emissions from E-Cigarettes: Direct and Indirect Passive Exposures," *Building and Environment*, Vol. 93, Part 1, 101-105, November, 2015.

² Cooke 2015. Cooke, Andrew, MDa, et. al., "The Electronic Cigarette: The Good, the Bad, and the Ugly," *J Allergy Clin Immunol Practice*, 2015, Vol. 3, 498-505.

³ Schripp 2013. Schripp, et. Al., "Does e-cigarette consumption cause passive vaping?" *Indoor Air* 2013; 23: 25–31

ASHRAE's ROLE

Providing healthy and comfortable indoor environments through the management of indoor air quality is a fundamental goal of building and HVAC design and operation. ASHRAE has long been active in providing engineering technology, standards and design guidance in support of this goal. For example, ANSI/ASHRAE Standards 62.1-2022, *Ventilation and Acceptable Indoor Air Quality* and 62.2-2022, *Ventilation and Acceptable Indoor Air Quality in Residential Buildings* are standards that specify minimum ventilation rates and other measures, including the prohibition of smoking or using ENDS, to manage indoor air quality. Therefore, the health effects of indoor exposure to emissions from tobacco products, and ENDS devices are relevant to ASHRAE.

ASHRAE's VIEW

Exposure to ETS can be reduced through a variety of strategies, but they do not completely eliminate exposure to ETS. Only indoor smoking bans, leading to near zero exposure, have been recognized by health authorities as providing effective control. Many cognizant public health authorities argue that caution should prevail in all situations of human exposure when limited data is available about health impacts. Applying this principle to ENDS argues that involuntary exposure should be banned to keep exposure to airborne emissions as low as possible.

ASHRAE's mission to act for the benefit of the public encourages lawmakers, policymakers and others who exercise control over buildings, to maximize mitigation of secondary involuntary exposure from smoking and ENDS use inside and near buildings. ASHRAE also recommends:

- Building design practitioners work with their clients to define their intent, where smoking and ENDS use is still permitted, for addressing exposure in their facilities and educate and inform their clients of the limits of engineering controls for both ETS and ENDS.
- Multifamily buildings have complete bans on tobacco smoking and ENDS inside and nearby to protect nonsmoking adults and children.
- Further research be conducted by cognizant health authorities on the health effects of involuntary exposure in the indoor environment from smoking cannabis, using hookahs and ENDS. Pending the outcome of that research, cannabis and hookah smoking should be managed as recommended for ETS and ENDS.



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INDOOR AIR QUALITY

THE ISSUE

The average adult breathes about 2,000 gallons (7,570 liters) of air each day, and most people spend around 87% of their time inside buildings – amplifying the importance of indoor air quality (IAQ). The quality of the air inside our buildings has a significant impact on a person's health, performance, and wellbeing. Indoor air is a significant exposure route for airborne contaminants and may contain particles and gases with impacts that range from eye and lung irritation to exposure to infectious pathogens, poisonous compounds, or carcinogens. These contaminants can impact health, comfort, well-being, learning, sleep, and work performance.

The direct connection between health and wellness encourages building designers and operators to prioritize IAQ in buildings. Cost-benefit analyses have estimated the health and economic benefits of improved IAQ to be far greater than the costs of implementing strategies that improve IAQ. There are three widely accepted approaches to improve IAQ: source control, ventilation, and air cleaning. Many strategies exist within these approaches that can help achieve good IAQ efficiently and can be implemented to lower energy use and improve occupant satisfaction.

ASHRAE's ROLE

The critical connection between IAQ and building HVAC systems has made IAQ a fundamental issue for ASHRAE and its members for more than 50 years. ASHRAE provides technical resources, coordinates and funds research, organizes conferences, and educates practitioners about IAQ.

ASHRAE developed and continues to support standards, guidelines, and other resources related to efficiently improving IAQ, such as:

- **Standard 62.1-2022, *Ventilation and Acceptable Indoor Air Quality*** – This standard establishes ventilation and other IAQ requirements for buildings other than residential and health care. Its outdoor air ventilation rate requirements have been adopted into the International Mechanical Code and Uniform Mechanical Code, the two most common model building codes in the US. The standard is also referenced by most green commercial building programs including LEED.
- **Standard 62.2-2022, *Ventilation and Acceptable Indoor Air Quality in Residential Buildings*** – Residential (multifamily to single family homes) ventilation requirements from this standard have been adopted into codes, including California's Title 24, and into LEED for Homes and the U.S. Environmental Protection Agency's (EPA) Indoor airPlus program.
- **Standard 161-2024, *Air Quality within Commercial Aircraft*** - This standard defines the requirements for air quality in air-carrier aircraft and specifies methods for measurement and testing.
- **Standard 170-2021, *Ventilation of Health Care Facilities*** – standard 170 brought together several documents used throughout North America into a single standard. It is now widely used in building codes for ventilation requirements in hospitals and other health

care facilities.

- **Standard 189.1-2023, *Standard for the Design of High- Performance Green Buildings Except Low-Rise Residential Buildings*** – This standard was developed in conjunction with U.S. Green Building Council, the International Code Council, and the Illuminating Engineering Society. It provides IAQ requirements beyond those in Standard 62.1.
- **Standard 241-2023, *Control of Infectious Aerosols*** – This standard defines the amount of equivalent clean airflow necessary to substantially reduce the risk of disease transmission during infection risk management mode. It also sets requirements for air cleaner testing and for assessment, planning, and implementation of infectious aerosol controls.
- **Guideline 42-2023, *Enhanced Indoor Air Quality in Commercial and Institutional Buildings*** – This Guideline recommends measures that exceed the minimum requirements in Standard 62.1 to provide enhanced indoor air quality through the management of indoor contaminant sources, and through enhanced ventilation and air-cleaning-system design, installation, commissioning, and operation and maintenance.
- **Guideline 44-2024, *Protecting Building Occupants from Smoke During Wildfire and Prescribed Burn Events*** – The purpose of this guideline is to recommend building measures to minimize occupant health impacts caused by smoke from wildfire and prescribed burn events.
- **ASHRAE Indoor Air Quality Guide: *Best Practices for Design, Construction, and Commissioning* and *ASHRAE Residential Indoor Air Quality Guide: Best Practices for Acquisition, Design, Construction, Maintenance and Operation*** – These guides present best practices that have proven successful in building projects to achieve good IAQ.
- ***Damp Buildings, Human Health and HVAC Design*** – This report provides a summary of what is understood about dampness-related health risks in buildings as well as suggestions for HVAC system designers that can help avoid such risks.

ASHRAE'S VIEW

ASHRAE's view is that the provision of acceptable IAQ is an essential building service. Improved IAQ brings substantial health and economic benefits from a broad public health perspective, as well as to individual building owners and occupants.

Therefore, ASHRAE recommends that:

- Achieving and maintaining good IAQ should be included in all decisions (including policy decisions) that affect the design and operation of buildings and HVAC systems, including efforts to improve building energy efficiency, sustainability, resiliency, and the management of infectious diseases.
- The importance of IAQ and the fundamentals of achieving good IAQ through building design and operation should be included in education programs for all built environment stakeholders– from developers, owners, and operators to designers, technicians, and consultants.
- The latest versions of ASHRAE's IAQ standards should be adopted by building codes and regulations when they are updated every three years, specifically:
 - Standard 62.1-2022 for commercial buildings
 - Standard 62.2-2022 for residential buildings

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- Standard 170-2021 for healthcare buildings
 - Standard 241-2023 for pathogen mitigation
- Research and standards development should be supported by the government, including consideration for a national model standard, improvement of indoor contaminant monitoring and measurement technologies, approaches to improving IAQ beyond ventilation and filtration (e.g., air cleaning), development of tools to assess the economic valuation of IAQ benefits, and improved understanding of new contaminants of concern and techniques for removing them.



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INDOOR CARBON DIOXIDE, VENTILATION AND INDOOR AIR QUALITY

THE ISSUE

Indoor CO₂ has been considered in the context of building ventilation and indoor air quality (IAQ) for centuries. Most of these discussions have focused on how CO₂ concentrations relate to occupant perceptions of IAQ, and the use of CO₂ to evaluate ventilation rates and control of outdoor air intake rates (demand control ventilation). While these topics have been studied for decades, misinterpretation of CO₂ concentration as an indicator of IAQ and ventilation is common in the HVAC industry, the IAQ research community, and the public.

In addition, recent research has studied the impacts of CO₂ on human performance at commonly observed indoor concentrations. Indoor CO₂ monitoring has also been promoted as a ventilation indicator to help manage the risks of airborne disease transmission. Also, concerns have long existed regarding the accuracy of indoor CO₂ concentration measurements, which are now more common due to the availability of less expensive sensors. Given these factors, as well as increasing calls to monitor CO₂ in buildings, ASHRAE is working to clarify the use of indoor CO₂ measurements as a tool to help improve IAQ and building ventilation.

ASHRAE's ROLE

ASHRAE has long been active in providing engineering technology, standards, and design guidance to support the goal of providing healthy and comfortable indoor environments in an energy-efficient manner. For decades, these efforts have focused on providing effective ventilation in buildings, designing and operating ventilation systems and managing the wide range of air pollutants within buildings. For example, ANSI/ASHRAE Standards 62.1-2022, *Ventilation and Acceptable Indoor Air Quality* and 62.2-2022, *Ventilation and Acceptable Indoor Air Quality in Residential Buildings* are standards that specify minimum ventilation rates and other measures to support the health, comfort and productivity of building occupants; these standards do not include CO₂ limits based on human health and comfort. ASHRAE Standard 62.1 contains CO₂ differential concentration setpoints for the application of demand control ventilation, but they are not intended to be and should not be used as indicators of IAQ.

ASHRAE's VIEW

Monitoring indoor CO₂ can be a useful tool for understanding building ventilation and IAQ, supporting efforts to provide high quality indoor environments and manage the energy needed to do so. Critically, indoor CO₂ measurements should be understood in the context of the built environment to ensure that they are measured and interpreted in a meaningful way. Claims that ASHRAE Standard 62.1 requires indoor CO₂ concentrations below a certain threshold (typically 1000 ppm) for acceptable indoor air quality are *incorrect*¹. ASHRAE's IAQ Standards do not use indoor CO₂ values to determine acceptable indoor air quality, as IAQ is impacted by multiple factors (such as temperature, humidity, particulate matter, gas pollutants, etc.).

¹ Persily, A. 2022. *Development and application of an indoor carbon dioxide metric*. Indoor Air. Volume 32, Issue 7.

Because of ASHRAE's mission to act for the benefit of the public, it encourages building designers, lawmakers, policymakers and others to craft informed recommendations for the measurement of indoor CO₂ concentrations. To that end, ASHRAE stresses that:

- Indoor CO₂ concentrations do not provide an overall indication of IAQ, but they can be useful in IAQ assessments if users understand the limitations in these applications (e.g., number and activity level of occupants compared to the design capacity, length of time a space has been occupied, no combustion or other sources of CO₂ that could impact readings). While CO₂ readings below a threshold value do not assure overall acceptable IAQ, CO₂ readings far above expected ranges likely indicate the ventilation system is not functioning properly.
- Existing evidence for the impacts of CO₂ on health, well-being, learning outcomes and work performance is inconsistent and does not currently justify changes to ventilation and IAQ standards, regulations, and guidelines.² However, CO₂ can be used to verify if ventilation system performance meets existing IAQ standards, regulations, and guidelines.
- The use of indoor CO₂ measurements to evaluate the risk of airborne disease transmission must account for the type of space and its occupancy and the differences in CO₂ and infectious aerosols. For example, CO₂ concentration is unaffected by filtration and most other air-cleaning methods that reduce infectious aerosol concentration, so it should not be used as a *direct* indicator of infection risk.
- Sensor accuracy, location, and calibration are all critical for drawing meaningful inferences from measured indoor CO₂ concentrations.
- Programs or requirements to monitor CO₂ in buildings, when conducted with an understanding of their technical basis, can be helpful, but monitoring CO₂ without such understanding can lead to confusion on the part of building occupants and the public.

² In a 2010 study by J.M. Logue, T.E. McKone, M.H. Sherman, and B.C. Singer of the Berkeley National Laboratory titled, Hazard Assessment of Chemical Air Contaminants Measured in Residents, fifteen pollutants were identified as contaminants of concern for chronic health effects in a large fraction of homes. Nine pollutants were identified as priority hazards: acetaldehyde; acrolein; benzene; 1,3-butadiene; 1,4-dichlorobenzene; formaldehyde; naphthalene; nitrogen dioxide; and PM2.5. Activity-based emissions are shown to pose potential acute health hazards for PM2.5, formaldehyde, CO, chloroform, and NO₂.



Shaping Tomorrow's Global
Built Environment Today

REFRIGERANTS AND THEIR RESPONSIBLE USE

THE ISSUE

Choosing a refrigerant for a given HVAC&R application has become increasingly complex due to direct and indirect environmental impacts, performance, cost-effectiveness and safety for employees and the public. Following the implementation of the Kigali Amendment to the Montreal Protocol in 2019, lower global warming potential (GWP) refrigerants are beginning to replace high-GWP refrigerants. Many of the lower-GWP refrigerants are mildly flammable, which requires the updating of building codes and standards. Ultra-low-GWP refrigerants are also being used and considered for certain applications, and it is important to ensure these refrigerants are used safely, efficiently, and cost-effectively.

ASHRAE's ROLE

With its technical expertise, ASHRAE plays a key role in guiding the selection and analysis of new refrigerants and the potential environmental and societal consequences of their use. ASHRAE contributed to successfully phasing out the use of ozone-depleting refrigerants and is already contributing to reducing high-GWP refrigerant use. ASHRAE develops voluntary technical standards and guidelines governing the classification, application, and use of refrigerants, which are referenced by various codes and regulations, globally.

As lower-GWP refrigerants become more prevalent, ASHRAE commits to their safe application in residential, commercial, and industrial uses as prescribed by Standard 34-2024, *Designation and Classification of Refrigerants*, Standard 15-20224, *Safety Standard for Refrigeration Systems*, and the Standard 15.2-2024, *Safety Standard for Refrigeration Systems in Residential Applications*. Significant updates to these standards were made to address safe use of lower-GWP A2L refrigerants.

ASHRAE's VIEW

ASHRAE supports the classification and use of refrigerants based on safety, performance and environmental impact. As the transition to more climate-friendly alternatives continues, ASHRAE supports reducing emissions from high-GWP refrigerants through research, education, and improvements to design, installation, operation, maintenance, and decommissioning of equipment, including minimization of leakage and accurate accounting and reporting in accordance with applicable standards and policies.

ASHRAE supports the global phasedown of the production and consumption of high-GWP refrigerants and encourages the adoption of the latest standards in order to enable use of lower-GWP refrigerants. ASHRAE continues to update its standards to reflect lower-GWP refrigerants and solutions.

Furthermore, used refrigerants should be safely recovered for reuse, recycle, reclamation, or destruction during service or at the end of the equipment life. Refrigerant inventory and management programs should be implemented to closely track refrigerant use.



Shaping Tomorrow's Global
Built Environment Today

RESILIENCY IN THE BUILT ENVIRONMENT

THE ISSUE

Resiliency in the built environment is a complex subject that involves many disciplines. As defined in the National Academy of Sciences report *Disaster Resilience: A National Imperative*, resiliency is 'the ability to prepare and plan for, absorb, recover from and more successfully adapt to adverse events or threats.' These events or threats may be financial, political, environmental, as well as disaster, conflict, cyber, climate, or health related. Its recent prominence is in part due to increasing concerns over the adequacy of responses to natural or climate-related events around the world, as well as recognition that many such events are likely to increase in frequency and severity.¹ According to the National Oceanic and Atmospheric Administration (NOAA), the U.S. has sustained 400 weather and climate disasters since 1980 where overall damages/costs reached or exceeded \$1 billion (including CPI adjustment to 2024). The total cost of these 400 events exceeds \$2.785 trillion.²

Strengthening the built environment is vital to protecting the public when natural and human-induced events occur. Buildings often serve as the first line of defense and as a result, the built environment and engineered systems in buildings must become more resilient in how they are designed and operated to protect the public. A building's ability to recover and be available to occupants following such an event can have widespread economic and health implications. Additionally, as the built environment becomes more interconnected and operations shift towards automation, building systems will see increased vulnerability to cyber threats.

ASHRAE's ROLE

It is ASHRAE's position that building design and operation must consider resiliency as part of an overall risk assessment and planning approach, and that major new efforts in research, education, standards and guidelines, and guidance documents are required to increase building resiliency. Building resiliency is of such importance that it has been identified as one of four key initiatives in the 2019-2024 ASHRAE Strategic Plan.

ASHRAE also has partnered with CIBSE to release a Joint Position Document on Resiliency in the Built Environment.³ The two societies are committed to taking a leadership role with respect to building resiliency. ASHRAE will be developing and adopting designs, materials, components, systems, and processes that minimize the adverse impacts of extreme events and environmental changes over time. ~~ASHRAE is currently funding over \$10 million in ongoing research projects.~~

¹ IPCC. 2014. Fifth Assessment Report of the Intergovernmental Panel on Climate Change. Geneva, Switzerland: Intergovernmental Panel on Climate Change. www.ipcc.ch/report/ar5/.

² "Billion-Dollar Weather and Climate Disasters: Overview." National Climatic Data Center, National Oceanic and Atmospheric Administration, <https://www.ncei.noaa.gov/access/billions/>. Accessed 18 December 2024.

³ ASHRAE & CIBSE. Position Document on Resiliency in the Built Environment". <https://www.ashrae.org/about/position-documents>

ASHRAE's VIEW

Investing in building resiliency is crucial to saving lives, protecting public property, and reducing the financial strain of post-disaster recovery. For these reasons, ASHRAE sees the need for policy setting entities world-wide to encourage sound, balanced, and innovative actions to address long-range resiliency issues and the specific technical concerns associated with them.

When it comes to strengthening the built environment, building codes and standards, such as those developed by ASHRAE, make our communities more sustainable, more efficient and more resilient. According to a 2020 study released by FEMA, by adopting the most recent building codes, there is an impressive cost-benefit ratio of about \$11 for every \$1 invested towards hazard mitigation. Unfortunately, most jurisdictions have not yet adopted the most recent standards and codes that are based on the latest research and technological innovation. Legislators and other government officials should examine the best ways to assist these jurisdictions with the adoption, implementation and enforcement of the most recent building energy efficiency codes and standards, as high-efficiency buildings rely less on the grid and are thus more resilient. This will help provide a more sustainable future and improve the resilience of the built environment. ASHRAE is committed to being a resource for government with respect to building codes and standards and will continue to publish and maintain consensus-based building standards, guidelines, and Design Guides.

ASHRAE also holds the following positions with respect to resiliency in the built environment:

- Resiliency is an important societal, economical, and technical issue that has a major impact on the built environment as well as how engineered building systems are designed and operated.
- Technical solutions to these challenges are needed, including the application of emerging technologies. These solutions will include research, standard and guideline development, and the production of educational material.
- Policy setting entities need to encourage sound, balanced, and innovative actions to address the broad issues of resiliency and the specific technical concerns associated with them.
- Built environments need to be developed which are both resilient and sustainable.

ASHRAE also recommends that new and continuing research be conducted to guide resilient infrastructure, building systems and community designs. ASHRAE aims to continue collaborating on building resiliency research opportunities with external organizations, national and international government agencies, and foundations.



Shaping Tomorrow's Global
Built Environment Today

STEM EDUCATION AND HVAC&R WORKFORCE DEVELOPMENT

THE ISSUE

Commitment to providing a solid education in science, technology, engineering and mathematics (STEM) to develop the future workforce of technicians, engineers, and scientists is critical to our future well-being and standard of living. Students pursuing non-STEM specialties also need basic knowledge of scientific and technological applications for effective participation in the workforce, success in their personal lives, and responsible citizenship.

Moreover, there has been increased growth in jobs related to STEM that have not been filled due to a workforce shortage. The U.S. Bureau of Labor Statistics projects that employment in architecture and engineering occupations is expected to grow faster than other fields. The workforce shortage has driven salaries in architecture and engineering occupations such that the 2024 median annual wage was \$97,310 compared to \$49,500 across all occupations.¹ Additionally, about 195,000 openings for construction employment are projected each year on average over the next decade.²

The HVAC&R workforce in North America remains a male-dominated employment sector; the share of female workers in engineering and architecture is 14%³ and 5.9% of HVAC&R Technicians.⁴ Additionally, under-represented minority students receive only 24% of the degrees associated with the building and HVAC&R engineering sectors.⁵

ASHRAE's ROLE

As practitioners and educators in various STEM careers, ASHRAE strongly promotes active engagement by members in their local communities and national programs with mentoring and educational opportunities in STEM fields. ASHRAE is actively engaged in the Solar Decathlon, National Engineers Week, and other STEM education efforts worldwide, including through its 440 active student branches.

ASHRAE is also a member of the National STEM Education Coalition, which supports new and innovative initiatives that help improve the content, knowledge, skills, and professional development of the K-12 STEM teacher workforce and informal educators. ASHRAE is dedicated to ensuring quality STEM programs for teachers and students all around the world by encouraging its members to get involved with their local school systems.

ASHRAE's Board of Directors has committed to promoting diversity and inclusion in all levels of the society. This includes efforts to promote STEM education and training to children, schools, and educators, in a way that will attract, train, and retain more women, disabled, LGBTQ, and people of all socioeconomic and ethnic backgrounds to engineering education and employment.

¹ U.S. Bureau of Labor Statistics. 2024. Occupational Outlook Handbook: Architecture and Engineering Occupations.

² U.S. Bureau of Labor Statistics. 2024. Occupational Outlook Handbook: Architecture and Engineering Occupations.

³ U.S. Bureau of Labor Statistics. 2017. Women in architecture and engineering occupation in 2016.

⁴ Zippia, 2022. Heating and Cooling Technician Demographics and Statistics in the US. <https://www.zippia.com/heating-and-cooling-technician-jobs/demographics/>.

⁵ U.S. National Science Foundation, 2024. Women, Minorities, and Persons with Disabilities in Science and Engineering. <https://nces.nsf.gov/pubs/nsf21321/report/field-of-degree-minorities>

ASHRAE also supports strengthening the broader HVAC&R workforce, including technicians who install and maintain HVAC&R equipment as well as distributors, contractors, and facility operators and managers. The HVAC&R and buildings industry has been facing a serious shortage of skilled trade employees for several years and has more recently been exacerbated by the overall shortage of U.S. workers. Unfortunately, there is a broadening skills gap as well due to several factors, including: the retirement of the baby boomers, advancements in technology that require new skills, increased job competition in the global marketplace, failure to cultivate and retain skilled talent, a societal focus only on four-year degree programs to the exclusion of technical and technological education, and a lack of emphasis on the necessary skill sets for advanced manufacturing. Of these, the last two are the most critical to ensuring innovative, high-efficiency products can be manufactured and installed properly. Community colleges, training programs, internships, apprenticeships and certification programs can strengthen the pipeline for the HVAC&R workforce.

ASHRAE's VIEW

Future generations need to possess the skills and critical competencies necessary to be successful in a highly competitive, global, and technologically sophisticated economy. We must work cooperatively to ensure that students receive the STEM training essential for future success. ASHRAE encourages policymakers to implement the following recommendations:

- Increase government-funded research to improve teaching and learning of STEM concepts and critical thinking skills.
- Recruit, train, and retain qualified STEM teachers through the development of programs recognizing educators who excel in STEM education and incentives that encourage the best and brightest scientists, engineers, technologists, and technicians to act as role models and teachers to pave the way for future generations.
- Foster partnerships among educational institutions, industry and non-profit organizations and their members to introduce students of all backgrounds to STEM career opportunities, including those careers that do not require a university degree.
- Support and encourage students who choose to enroll in community college, or other career and technical education programs, that prepare and qualify individuals for careers as HVAC&R technologists, technicians, facility operators, and buildings managers by providing these students with affordable tuition options.
- Create opportunities and incentives for women and those of diverse backgrounds to pursue STEM coursework and careers and to stay in them.
- Encourage diversity in STEM education and the HVAC&R workforce.



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WILDFIRE SMOKE FROM WILDFIRES AND PRESCRIBED BURNS: IMPLICATIONS FOR INDOOR ENVIRONMENTAL HEALTH

THE ISSUE

Wildfires are large-scale, uncontrolled fires that occur in forests, grasslands, and other landscapes. In recent years, the frequency and severity of wildfires have increased due to climate change. The smoke from these fires, along with that from prescribed burns, can cause significant air quality issues both outdoors and indoors. Wildfire smoke poses a risk to indoor air quality (IAQ) by introducing hazardous particles and gases into the air. These contaminants can enter buildings through open doors and windows, ventilation systems, or general air leakage. Once inside, they can remain airborne for long periods of time and lead to health symptoms such as eye irritation, coughing, difficulty breathing, headaches, nausea, and dizziness, as well as more severe health risks including heart attacks and strokes, especially among vulnerable populations. The health impacts caused by wildfire smoke make it essential for building owners/operators to take proactive steps towards reducing exposure among occupants wherever possible. While wildfires and prescribed burns are the driving issue, many of the concerns and much of the available knowledge and guidance have wider applicability to other smoke events.

ASHRAE's ROLE

ASHRAE develops consensus standards and guidelines and offers technical resources for managing the effects of wildfires in both commercial and residential buildings. These resources include:

- ASHRAE Guideline 44-2024, *Protecting Building Occupants from Smoke During Wildfire and Prescribed Burn Events* – provides guidance on how to protect building occupants from smoke during wildfire and prescribed burn events. The aim of the guideline is to provide a series of actions to be taken to reduce the risk of smoke infiltration into a building, protect its occupants from smoke, and reduce the need for evacuation. The guideline addresses risk reduction, guidance on selecting appropriate smoke management strategies, and information on air filtration and air-conditioning systems for smoke control. The guideline also addresses building envelope design and construction, and testing and commissioning of smoke management systems.
- [ASHRAE Planning Framework for Protecting Commercial Building Occupants from Smoke During Wildfire Events](#) – provides recommended heating, ventilating, and air conditioning (HVAC) and building measures to minimize occupants' exposures and health impacts from smoke during wildfire and prescribed burns.
- ASHRAE Residential Issue Brief, "[Wildfire Smoke Hazards for Dwelling Occupants](#)," 2021 – provides evidence-based information and guidance to protect residential building occupants from smoke exposure and to help designers create residential buildings and systems to limit smoke entry.

ASHRAE's VIEW

ASHRAE's view is that building owners/operators should take proactive measures to reduce exposure to wildfire smoke to manage negative IAQ impacts. These include reducing outdoor air intake during high levels of wildfire smoke; installing effective filtration and cleaning systems; sealing cracks or gaps where outdoor air smoke can enter the building; monitoring IAQ conditions with reliable instruments; raising awareness among occupants about potential health effects of wildfire smoke exposure; using portable air filtration devices (HEPA or high MERV) when necessary; ensuring proper maintenance of HVAC systems; providing greater access to equipment such as respirators or masks when needed; consulting with local public health officials when necessary; and offering support services for those affected by poor IAQ conditions caused by wildfire smoke.



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Built Environment Today

Proposed New PPIB

MITIGATING RISK FROM INFECTIOUS AEROSOLS

THE ISSUE

Respiratory diseases are among the most common causes of severe illness and death worldwide. Acute respiratory infections are the leading cause of morbidity and mortality from infectious disease in the world. The recent COVID-19 pandemic, caused by the SARS-CoV-2 virus, and the increasing rate of emergent respiratory viral infections in recent years are of great concern, as some of the epidemic-prone respiratory infections may create global public-health emergencies. Infection risk indoors is significantly higher than outdoors.

ASHRAE's ROLE

ASHRAE has long been active in providing engineering technology, standards and design guidance to support the goal of mitigating risks in indoor environments. Efforts to manage the risks of disease transmission from infectious aerosols have focused on providing good indoor air quality through design and operation of building ventilation systems. ANSI/ASHRAE Standards 62.1 and 62.2 specify minimum ventilation rates and other measures to achieve acceptable indoor air quality but do not explicitly address infectious aerosols. Developed in response to the COVID-19 pandemic, ASHRAE Standard 241 is an enforceable standard that establishes minimum requirements to reduce the risk from infectious aerosols using building systems. Standard 241 sets risk-based targets for equivalent clean airflow for infection control (ECAi) based on the number of people and their activity in a space. Combinations of ventilation and air cleaning can be used to meet ECAi targets, allowing flexibility to reduce risk while optimizing energy, cost, and ease of use.

ASHRAE's VIEW

The magnitude of risk from indoor exposure to aerosolized pathogens has become increasingly obvious over the course of years, especially during the COVID-19 pandemic. Consequently, measures should be taken to reduce indoor exposure.

Policymakers must address two operating conditions: normal conditions, with a somewhat consistent level of risks from established pathogens, and times of higher risk. Public health officials, policy makers, building owners, designers, members of the public all need accurate, reliable guidance for appropriate ways to mitigate the risk from these pathogens.

Risk from pathogen spread can be reduced by non-engineering interventions (pharmaceutical interventions, administrative controls, etc.), and engineering controls. The risk of infection from aerosolized pathogens cannot be reduced to zero, but risk can be reduced to acceptably low levels. The goal, therefore, must be to select a collection of strategies, both engineering and non-engineering, that most practically and sustainably minimize risk.



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ASHRAE stresses that:

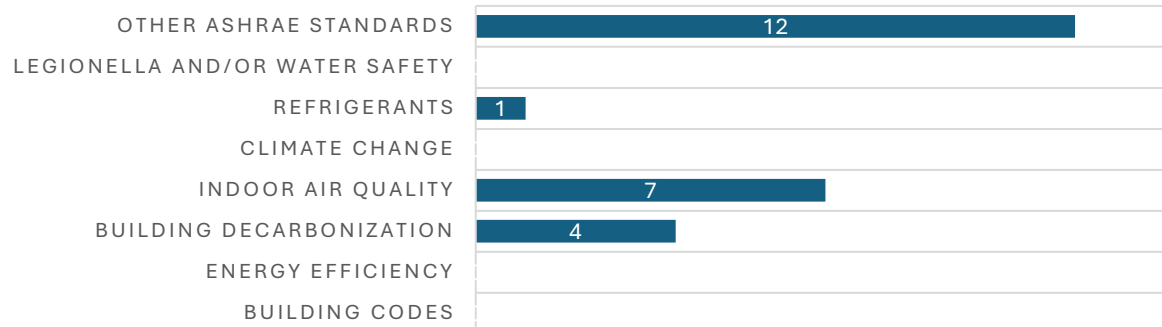
1. Exposure to infectious aerosols is an important factor in the transmission of infections in indoor environments between a source and a susceptible individual.
2. Engineering controls demonstrated to reduce the risk of exposure to infectious aerosols include dilution with outdoor air provided by mechanical or natural ventilation, filtration of indoor air, indoor airflow patterns, and disinfection by germicidal ultraviolet light and other technologies proven to be effective and safe.
3. Strategies using engineering controls for managing the risk from infectious aerosols should focus on reducing exposure to viable infectious aerosols in the breathing zone.
4. Effective design, installation, maintenance, and operation of ventilation controls are critical to achieve needed risk mitigation.
5. Existing evidence for the effects of temperature and humidity on infection risk does not justify changes to ventilation and IAQ standards, regulations, and guidelines at this time.
6. The effectiveness of any one risk mitigation strategy depends on many factors. The use of multiple risk mitigation strategies will usually be more effective than reliance on any single strategy.
7. Risk mitigation measures should be adaptable to levels of risk in a particular space.
8. Combinations of engineering controls and non-engineering controls can be optimized for effectiveness, cost, and energy use.
9. Research on the following topics should be conducted by multi-discipline teams:
 - Controlled intervention studies to quantify impact on infection transmission resulting from various engineering controls considered singly and in combination with other non-engineering controls with respect to infectious aerosols of varying characteristics.
 - Real time detection methodologies for the purpose of improved variable control of HVAC controls responsive to different levels of risk.
 - Methods to reduce the life-cycle cost and carbon emissions of engineering controls in all conditions.
 - Studies to characterize the size-resolved emission rate of infectious aerosols for different pathogens and different respiratory activities and metabolic intensities, determine the relationship between size and risk of transmission, and predict the fate and transport of these aerosol particles in indoor environments.
 - Quantitative infection risk evaluation tools for infectious aerosols (quantitative microbial risk assessment is widely used for water and food, but much less for aerosols).
 - Impact of indoor airflow patterns on the transmission of infectious aerosols and resulting risk of infection.

ASHRAE Government Affairs Office 1255 23rd Street NW, Suite 825, Washington, DC 20037
Tel: 202-833-1830 | [ashrae.org](https://www.ashrae.org)

June 2025

**Expertise Areas and ASHRAE Regions for Individuals Accepted into SMEs for GOEs
Pilot Program: Fall 2024 through Spring 2025 Review Groups**

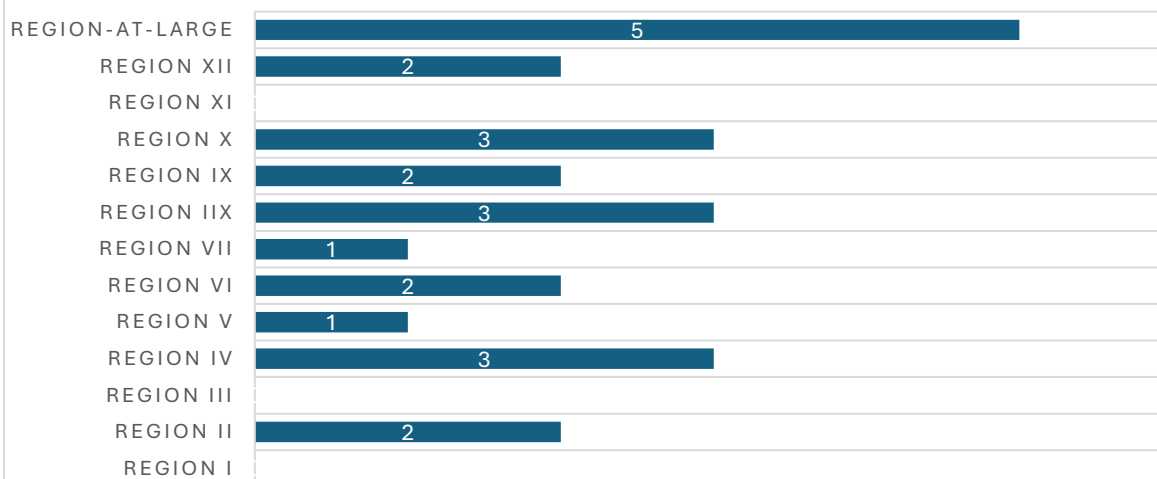
EXPERTISE AREAS IDENTIFIED BY SMES (FALL 2024-SPRING 2025 REVIEW GROUPS)



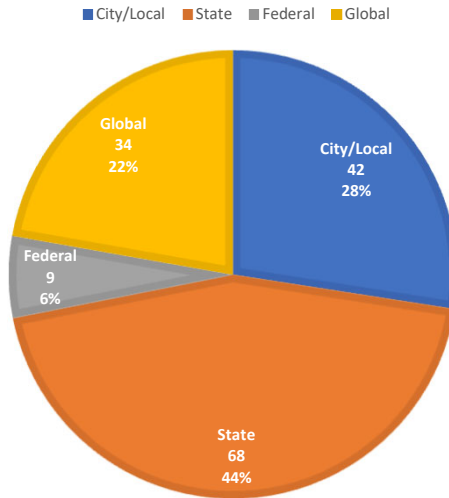
Those who chose “Other ASHRAE Standards” identified areas of expertise including:

- **Indoor environmental quality**
 - Infectious aerosols
 - Infection control
 - Wildfire smoke
 - Acoustics, noise, and vibration
 - moisture
- **Building sciences and operations**
 - Building information and automation
 - Facilities service
 - Grid-building intersection
 - Mission-critical facilities
- **Operations & maintenance**
- **Decarbonization**
 - High performance buildings and sustainability
 - Controls/automation
 - High performance buildings and sustainability
- **Other**
 - Energy tax incentives for designers
 - Standards/ANSI process

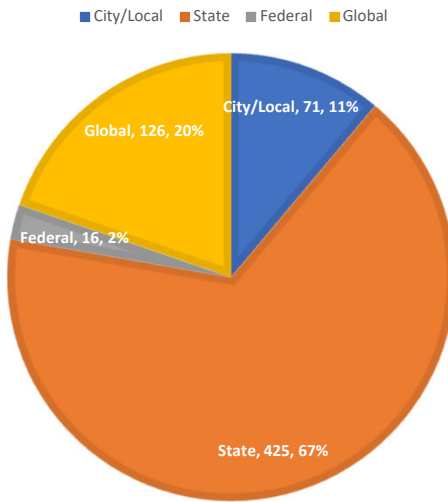
ASHRAE REGIONS REPRESENTED BY SMES (FALL 2024-SPRING 2025 REVIEW GROUPS)



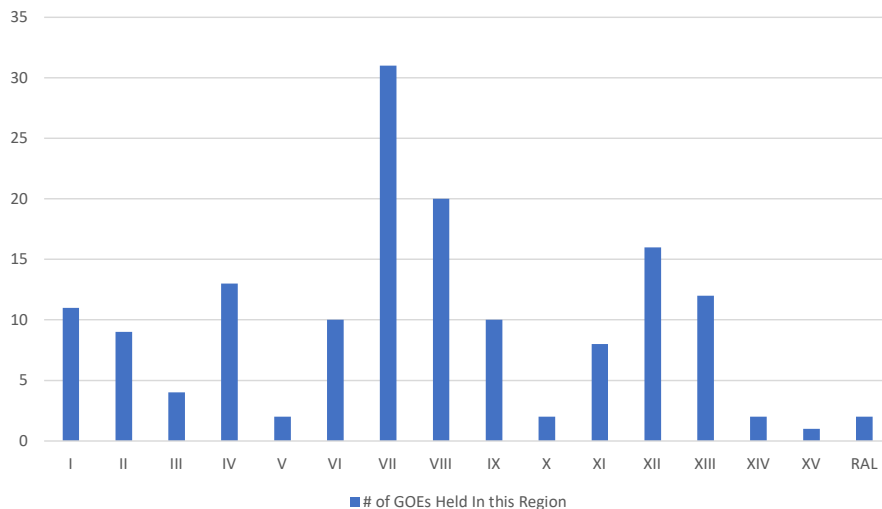
GOEs HELD IN SY 24-24



GOVT ATTENDEES AT GOEs HELD IN SY 24-25



GOEs HELD PER REGION IN SY 24-25



TRACKING GOVERNMENT
OUTREACH EVENTS SY 2024-
2025

PROGRESS CHART:
Government Outreach Events

Note: Delta assumes that ALL
planned and scheduled events
are held (negative indicates
that we are behind the goal).

0

	Target	Held	Scheduled	Planned	Delta	Reporting Forms	Recurring Meetings	# of Government Attendees
City/Local		42	0	0	42	42	2	71
State		68	0	0	68	47	0	425
Federal		9	0	0	9	9	0	16
Global		34	0	0	34	34	1	126
In-Person		128						
Virtual		25						
Total	100	153	0	0	53	132	3	638

Note: Totals may not add up due to rounding

	Number of Attendees (ASHRAE Members)	Number of Meetings	Number of in- person Meetings	Number of virtual meetings
SY24-25 SUMMARY TOTALS (to date):				
Local	133	42	30	12
State	226	335	326	9
Federal	16	15	13	2
Global	129	34	32	2
TOTAL:	504	426	401	25

In Comparison

SY23-24 SUMMARY TOTALS:	Number of Attendees			
	(ASHRAE Members)	Number of Meetings	Number of in-person Meetings	Number of virtual meetings
State	189	172	154	18
Federal	75	44	15	29
Local	10	10	9	1
Global	257	247	42	5
TOTAL:	531	273	220	53

SY 24-25 Regional Comparisons

Region (arabic numeral)	Region	# of GOEs Held In this Region
1	I	11
2	II	9
3	III	4
4	IV	13
5	V	2
6	VI	10
7	VII	31
8	VIII	20
9	IX	10
10	X	2
11	XI	8
12	XII	16
13	XIII	12
14	XIV	2
15	XV	1
RAL	RAL	2

ASHRAE Government Affairs Committee
2025 Annual Meeting
Regional Vice Chair Reports
For Presentation at the 2025 June 20th
Government Affairs Committee Meeting

E: STANDARDIZED RVC/ REPORTING FORMAT

The following information is compiled into a summary spreadsheet showing activity for each region. The spreadsheet is reviewed by GAC at each Society meeting.

RVC Report for Region 2

ACTIVITY	
CRC	
Total number of chapters in region	9
Number of chapters present	8
Number of GA chapter chairs present	7
Percentage of participation	88%
Percentage of GA chapter chair participation	77%
No. of planning sessions held	2
PAOE	
No. of Chapters Reporting PAOE Points:	9
No. of Chapters Making Society Minimum :	9
No. of Chapters Making Society PAR :	6
Highest PAOE Points by a Chapter:	1750
Percentage of chapters reporting	100%
Percentage of chapters making Society Minimum	100%
Percentage of chapters making Society PAR	67%
CHAPTER VISITS	
No. of visits made:	1
No. of visits scheduled:	2
Percentage of chapters visited:	10%
GAC AWARDS	
Government. Affairs Award	N/A
Government Outreach Days	N/A
No. of Chapters Participating	
No. of government officials visited	
No. of ASHRAE members participating	
No. of Chapters reporting	
No. of days duration	



Region II GA Update



Adrianne Mitani – Region II RVC (SY '24-'27)
Global Affairs & Public Policy Sub-Committees
Phoenix June 2025

Chapter Status

Chapter	CRC	Planning	RVC Visit	PAOE (Par = 1000)	Meetings Held
Windsor	Y	Y		1250	1
London	Y			650	
Hamilton	Y	Y		1450	3
Toronto	Y			650	1
Ottawa			Y	1250	1
Montreal	Y			1750	
Quebec	Y			1750	1
Halifax	Y	Y		1300	2
NB / PEI	Y			650	

- CRC featured GAC training.
- 9 meetings held

Accomplishments

- Working on SME Taskforce with PPSC
- Worked with Chairs to determine goals and discussion after
- Regular emails with chairs
 - Lessons learned for more frequent and inclusion of some Presidents for some chapters
- Montreal/Quebec City organized a Letter from M. Dennis Knight to the Quebec Building Board to comments on new ASHRAE Standard 62.1



Chapters / Meetings

- Day on the Hill event – was delayed due to elections for both Federal and Ontario.
- Toronto – Meeting with local MPP, and discussed Provincial day on the hill (Fall 2025)
- Quebec & Montreal joint meeting with UQM (Union des municipalités du Québec)
- Quebec City – Meeting with Building operation director for the City about decarb
 - Meeting with energy efficiency coordinator of the environment minister
- Montreal event with Canada Mortgage and Housing Corporation (CMHC)
- Halifax – September/ GAC themed dinner meeting/ code updates
 - *Meeting with Deputy Minister of Health - Nova Scotia*
 - Collaborated with local government for Build Green Atlantic Event
 - *Presentation at Building Officials Association conference*

Chapters / Meetings

- Hamilton –
 - October / GAC dinner meeting on decarb, Sept on Refrigerant transition
 - *Meeting with Minister of the Health Staff to talk about ASHRAE standard 241*
 - *Meetings with local MP + City of Hamilton about decarbonization*
- Windsor – Themed GAC dinner meeting on Decarb by Ginger Scoggins, attended by local MPP Andrew Dowie.
- Ottawa – Themed GAC dinner meeting presented by GA chair and Greening Government



E: STANDARDIZED RVC/ REPORTING FORMAT

The following information is compiled into a summary spreadsheet showing activity for each region. The spreadsheet is reviewed by GAC at each Society meeting.

RVC Report for Region 4

ACTIVITY	
CRC	
Total number of chapters in region	7
Number of chapters present	6
Number of GA chapter chairs present	6
Percentage of participation	86%
Percentage of GA chapter chair participation	86%
No. of planning sessions held	6
PAOE	
No. of Chapters Reporting PAOE Points:	7
No. of Chapters Making Society Minimum:	5
No. of Chapters Making Society PAR:	5
Highest PAOE Points by a Chapter:	3700
Percentage of chapters reporting: (vs 100%)	100%
Percentage of chapters making Society Minimum	71%
Percentage of chapters making Society PAR	71%
CHAPTER VISITS	
No. of visits made:	1
No. of visits scheduled:	2
Percentage of chapters visited:	14%
GAC AWARDS	
Government. Affairs Award	1
Government Outreach Days	
No. of Chapters Participating	5
No. of government officials visited	30
No. of ASHRAE members participating	21
No. of Chapters reporting	5
No. of days duration	3



ASHRAE

2025 Annual Conference

Phoenix, Arizona

June 20th, 2025

Government Affairs Update

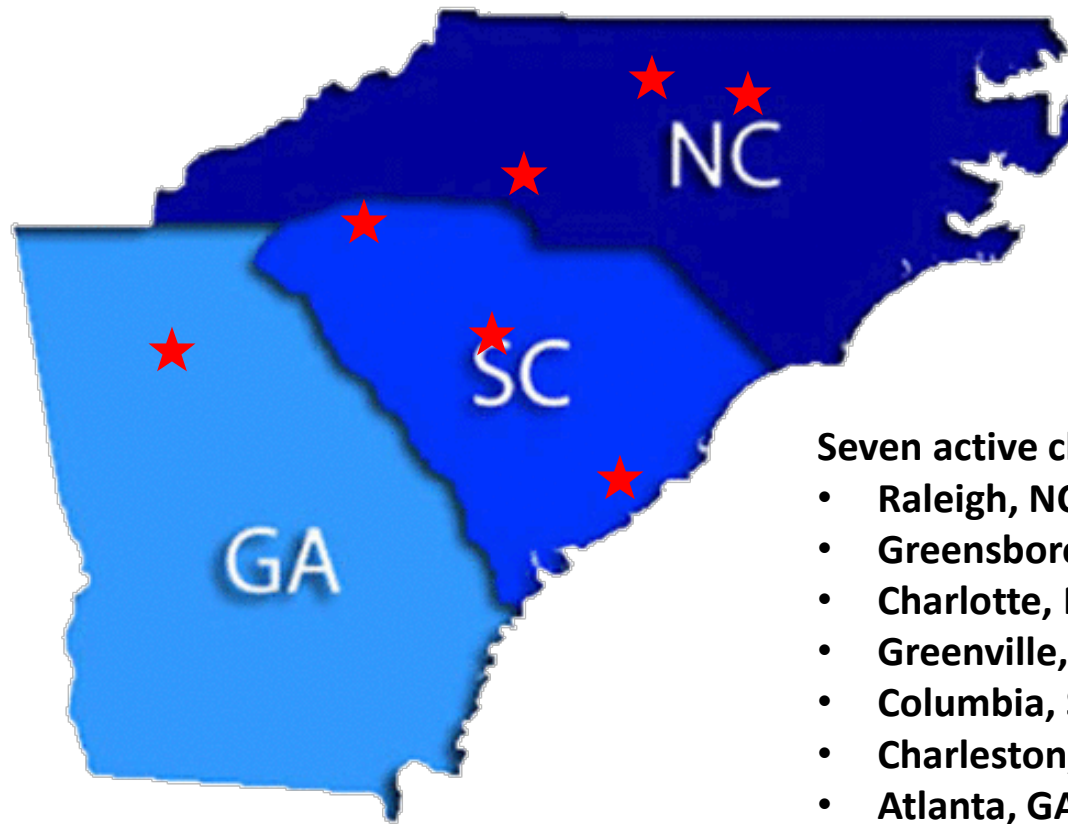


GAC: Region IV Report

Weston Hockaday, GAC RVC



Region IV Overview



Seven active chapters:

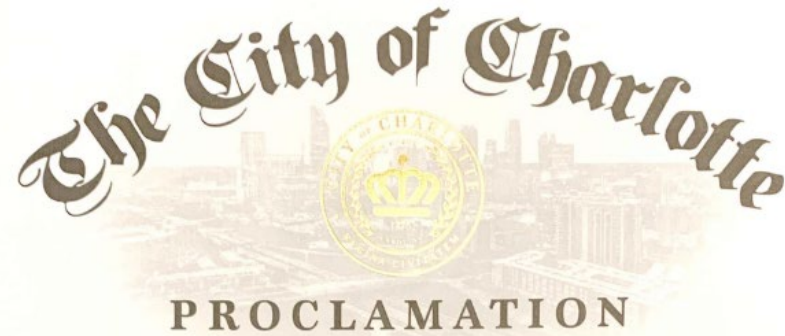
- Raleigh, NC (Triangle)
- Greensboro, NC (North Piedmont)
- Charlotte, NC (Southern Piedmont)
- Greenville, SC
- Columbia, SC
- Charleston, SC
- Atlanta, GA

Our Team

ASHRAE REGION IV 2024-2025 GAC CRC TEAM GAC ROSTER

UPDATED 7/31/24			
NAME	CHAPTER/POSITION	PHONE	EMAIL
Billy Austin	South Piedmont / GAC Chair	704.618.1959	baustin@shultzeg.com
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Chris Norwood	Triangle / GAC Chair	919.845.1960	chrisn@jmpco.com
Michael Davis	Triangle / GAC Chair	919.619.4311	mike.davis@hbtech.com
Weston Hockaday	Triangle / GAC RVC	919.524.3668	whockaday@dewberry.com
James Guignard	South Carolina GAC Chair	803.920.1690	perrin.guignard@jci.com
Sam Harvey	Atlanta / GAC Chair	470-210-6302	sharvey@mingledorffs.com
Matthew Morganti	North Piedmont / GAC Chair	336-316-8000	matthew.morganti@heattransfersales.com
Jim Ridenhour	Greenville / GAC Chair	864-268-1803 (text) 864-434-1416	jfridenhour@yahoo.com
Rodney Hinton	Greenville / GAC Chair	864.303.5722	rhinton@palmettoairbalance.com
Haylee deWeerd	Atlanta / GAC Co-chair	812.350.8071	haylee.deweerd@jci.com
Colby Suits	North Piedmont / GAC Chair		colby.suits@bradyservices.com

Special Mention Activities



WHEREAS, ASHRAE (The American Society of Heating, Refrigerating, and Air Conditioning Engineers) (www.ashrae.org) is an international engineering society whose mission is "To serve humanity by advancing the arts and sciences of heating, ventilation, air conditioning, refrigeration and their allied fields"; and

WHEREAS, on Thursday, February 23, 2025, the local Charlotte Chapter of ASHRAE (called the Southern Piedmont Chapter), represented by Chapter President Erica Powell, will make an official local announcement at its monthly chapter meeting; and

WHEREAS, every February, engineers around the world celebrate National Engineers Week; National Engineers Week was founded by the National Society of Professional Engineers in 1951 and is dedicated to ensuring a diverse and well-educated future engineering workforce by increasing understanding of and interest in engineering and technology careers:

NOW, THEREFORE, I, Vi Alexander Lyles, Mayor of Charlotte, do hereby proclaim the week of February 16 -22, 2025 as

"NATIONAL ENGINEERS WEEK"

in Charlotte and commend its observance to all citizens.

WITNESS MY HAND and the official Seal of the City of Charlotte.

Vi Alexander Lyles
Vi Alexander Lyles
Mayor



Special Mention Activities

BY THE GOVERNOR OF THE STATE OF GEORGIA

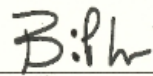
A PROCLAMATION

ENGINEER WEEK

- WHEREAS:** Engineers use their scientific skills and specialized knowledge in creative and innovative ways to fulfill society's needs; and
- WHEREAS:** Engineers help solve major technological challenges of our time - from designing efficient building systems to rebuilding towns devastated by natural disasters; and
- WHEREAS:** Engineering has been called the invisible or stealth profession because things we use every day have been engineered in some way, yet we may not see the engineers behind the scenes or know much about engineering; and
- WHEREAS:** First observed in 1951, National Engineers Week is dedicated to ensuring a diverse and well-educated future engineering workforce by increasing understanding of, and interest in, engineering and technology careers; and
- WHEREAS:** National Engineers Week is a coalition of more than 70 engineering, education, and cultural societies with more than 50 corporations and government agencies dedicated to raising public awareness of engineer's positive contributions to quality of life; and
- WHEREAS:** National Engineers Week promotes recognition among parents, teachers, and students of the importance of a technical education and a high level of math, science and technology literacy, motivating young people to pursue engineering careers to provide a diverse and vigorous engineering workforce; and
- WHEREAS:** The American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) sets standards for the heating, ventilation, air conditioning and refrigeration industry. The State of Georgia joins the Atlanta Chapter of ASHRAE in acknowledging engineers across Georgia, and recognizing the important work they do to build and support our communities; now
- THEREFORE:** I, BRIAN P. KEMP, Governor of the State of Georgia, do hereby proclaim February 16-22, 2025, as ENGINEER WEEK in Georgia.

In witness thereof, I have hereunto set my hand and caused the Seal of the Executive Department to be affixed this 21st day of February in the year of our Lord, Two Thousand and Twenty-Five.




GOVERNOR



Special Mention Activities



PROCLAMATION

WHEREAS, Charlotte is committed to improving the performance of existing and future buildings, through the adoption of best practices, and observe the role of government in advancing the design, construction, and operation of commercial and residential buildings; and

WHEREAS, people spend approximately 90 percent of their time indoors, and buildings are the single largest consumer of energy and water in the United States, resulting in the built environment having a vast impact on virtually all aspects of American life; and

WHEREAS, our confidence in the structural integrity of buildings within our community is achieved through the devotion of committed stewards: architects, engineers, builders, tradespeople, design professionals, laborers, and others in the construction industry who work year-round to ensure our buildings integrate high performance buildings attributes; and

WHEREAS, our nation benefits technologically, economically and environmentally from innovations developed for use in high performance buildings, and provide major contributions to the United States economy while protecting citizens and businesses from the impacts of disasters such as hurricanes, snowstorms, tornadoes, fires, floods and earthquakes; and

WHEREAS, the High Performance Buildings Coalition is comprised of approximately 200 organizations advocating for energy efficiency and indoor air quality and has implemented key activities to expand knowledge of the importance of high performance buildings as integral parts of America's infrastructure; and

WHEREAS, each year, in observance of High Performance Buildings Week, Americans are reminded that high performance buildings are not only attainable, but can improve the quality of our lives and produce a more sustainable world for future generations:

NOW, THEREFORE, I, Vi Alexander Lyles, Mayor of Charlotte, do hereby proclaim the week of June 23, 2025 as

"HIGH PERFORMANCE BUILDINGS WEEK"

and commend its observance to all citizens.

WITNESS MY HAND and the official Seal of the City of Charlotte.

A handwritten signature in black ink, reading "Vi Lyles".



Special Mention Activities

- Wake County GSA Wake County Energy Advisory Commission
 - Ginger Scoggins presented and discussed the design and technologies utilized for the ASHRAE Headquarters to the Wake County Energy Advisory Commission on Tuesday December 10, 2024. The purpose was to share the techniques and technologies implemented for the facility as these may be useful in advancing Wake County Governments new and renovation projects towards net energy and carbon neutral.



Special Mention Activities

- **Combined CRC Training and MBO Planning Sessions**
 - Efficient use of volunteer's time
- **Incorporating ASHRAE staff into planning meetings**
 - Critical for connectivity and they are essential staff to sustaining activity.



CRC and PAOE Status

PAOE Point Summary			
As of 6/11/25			
Chapter	Attended CRC	MBO Goals Meeting	PAOE Points Reported (min=500; par 1250)
Atlanta	YES	YES	2300
Charleston	YES	YES	1950
Greenville	YES	YES	200
North Piedmont	No	No	50
Southern Piedmont	YES	YES	3300
South Carolina	YES	YES	1300
Triangle	YES	YES	3700



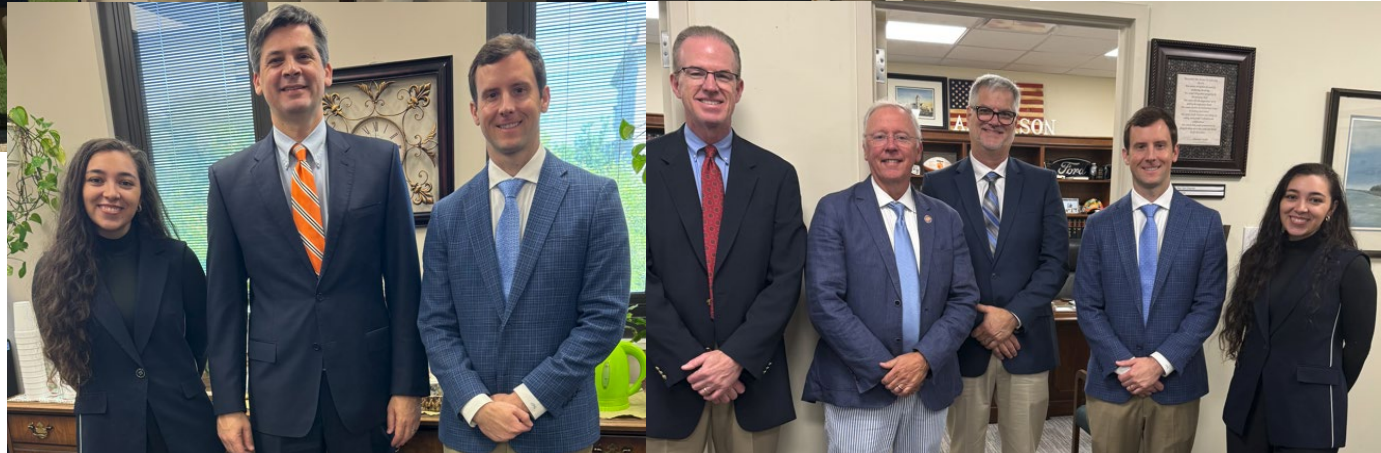
2025 Government Outreach Events

GA DOTH – 2/26/25



2025 Government Outreach Events

SC DOTH – 4/30/25



2025 Government Outreach Events

DC – 05/05/25



2025 Government Outreach Events

NC DOTH – 5/14/25



End of Report



THANKS JACOB!!! FOR ALL YOU
HELP SUPPORTING ME DURING
MY 3 YEARS AS GAC RVC.

OUR VOLUNTEERS OUT THERE ARE
VERY THANKFUL FOR ALL ASHRAE
STAFF SUPPORT – Alice, Emily, and
Christopher (especially on
reminders) as well.



E: STANDARDIZED RVC/ REPORTING FORMAT

The following information is compiled into a summary spreadsheet showing activity for each region. The spreadsheet is reviewed by GAC at each Society meeting.

RVC Report for Region V – June 2025

ACTIVITY	
CRC	July 26-27, 2024 (Cincinnati, OH)
Total number of chapters in region:	12
Number of chapters present:	12
Number of GA chapter chairs present:	3 (Cincinnati, Cleveland, Central IN)
Percentage of participation:	100%
Percentage of GA chapter chair participation:	25%
No. of planning sessions held:	4
PAOE	(As of 6/8/2025)
No. of Chapters Reporting PAOE Points:	9
No. of Chapters Making Society Minimum:	6
No. of Chapters Making Society PAR :	2
Highest PAOE Points by a Chapter:	1560 (Cincinnati)
Percentage of chapters reporting:	75%
Percentage of chapters making Society Minimum:	50%
Percentage of chapters making Society PAR:	17%
CHAPTER VISITS	
No. of visits made:	2
No. of visits scheduled:	3 Planned (Central IN, Columbus, W MI)
Percentage of chapters visited:	17%
GAC AWARDS	
Government. Affairs Award:	None
Government Outreach Days	
No. of Chapters Participating:	5 (Central IN, Columbus, Cincinnati, Cleveland, W. MI)
No. of government officials visited:	21
No. of ASHRAE members participating:	12
No. of Chapters reporting:	4
No. of days duration:	3



Region V

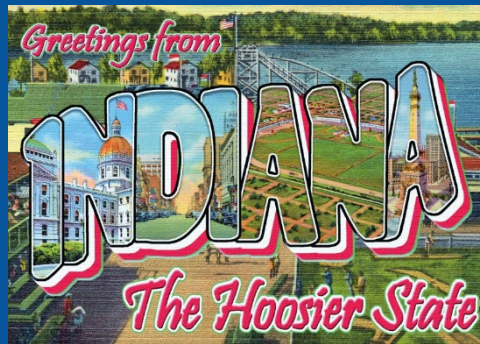
Government Affairs Report June 2025



GAC - Region V RVC

Adam Doubblestein

West Michigan Chapter



Region Summary

Chapter Name	Chapter AAM	CRC	Planning	GOE Events	Member Participation	PAOE: (6/8/25) Minimum 500 PAR 1250
CLEVELAND	332	X	X	1	1	850
COLUMBUS	349		X	1	5	1150
CINCINNATI	257	X	X	1	1	1560
DAYTON	181					500
TOLEDO	113					0
CENTRAL INDIANA	345	X	X	1	3	600
EVANSVILLE	47					0
DETROIT	547					250
WESTERN MICHIGAN	328			1	2	500
AKRON/CANTON	162					50
NORTHERN INDIANA	90					0
FORT WAYNE	68					350

Indiana DOTH – March 4, 2025



Joint Event with AIA

Chapters

Participating:

Central Indiana

Members:

Anthony Schoenlein

Libby West

Akshay Bhargava

Legislators:

(2) Senators



Ohio DOTH – May 21, 2025



Chapters

Participating:

Columbus, Cincinnati,
Cleveland

Members:

Connor Beecroft
Jamie Dennis
Isaac Claypool
Jillian Kish
Jay Meyer
Christian Melson
Rob Laneve

Legislators:

(18) Legislators

Michigan Activities

Events:

AESLC Legislative Day

- Joint meeting with ACEC, AIA

Chapter Meeting with Grand Rapids Code Official

- Mark Griffiee

Chapters Participating:

West Michigan

Members:

Sara Bergakker

Casey Stein

Kelsey Groesbeck

Region V - Challenges

- Chapter Participation – CRC Value Proposition
- Communication
- Active GAC Chairs
- Connecting Society Priorities at Chapter Level

Region V - Successes

- Ohio DOTH was amazing!
- Indiana DOTH was persistent – rescheduled event
- 75% of Chapters are reporting PAOE
- Gov Affairs team has been VERY supportive

Region V

Thank You!

E: STANDARDIZED RVC/ REPORTING FORMAT

The following information is compiled into a summary spreadsheet showing activity for each region. The spreadsheet is reviewed by GAC at each Society meeting.

RVC Report for Region VI

ACTIVITY	
CRC	
Total number of chapters in region	11
Number of chapters present	9
Number of GA chapter chairs present	4
Percentage of participation	82%
Percentage of GA chapter chair participation	36%
No. of planning sessions held	0
PAOE	
No. of Chapters Reporting PAOE Points:	9
No. of Chapters Making Society Minimum :	8
No. of Chapters Making Society PAR :	6
Highest PAOE Points by a Chapter:	2,650
Percentage of chapters reporting	82%
Percentage of chapters making Society Minimum	73%
Percentage of chapters making Society PAR	55%
CHAPTER VISITS	
No. of visits made:	0
No. of visits scheduled:	0
Percentage of chapters visited:	0%
GAC AWARDS	
Government. Affairs Award	No
Government Outreach Days	
No. of Chapters Participating	8
No. of government officials visited	73
No. of ASHRAE members participating	14
No. of Chapters reporting	4
No. of days duration	5

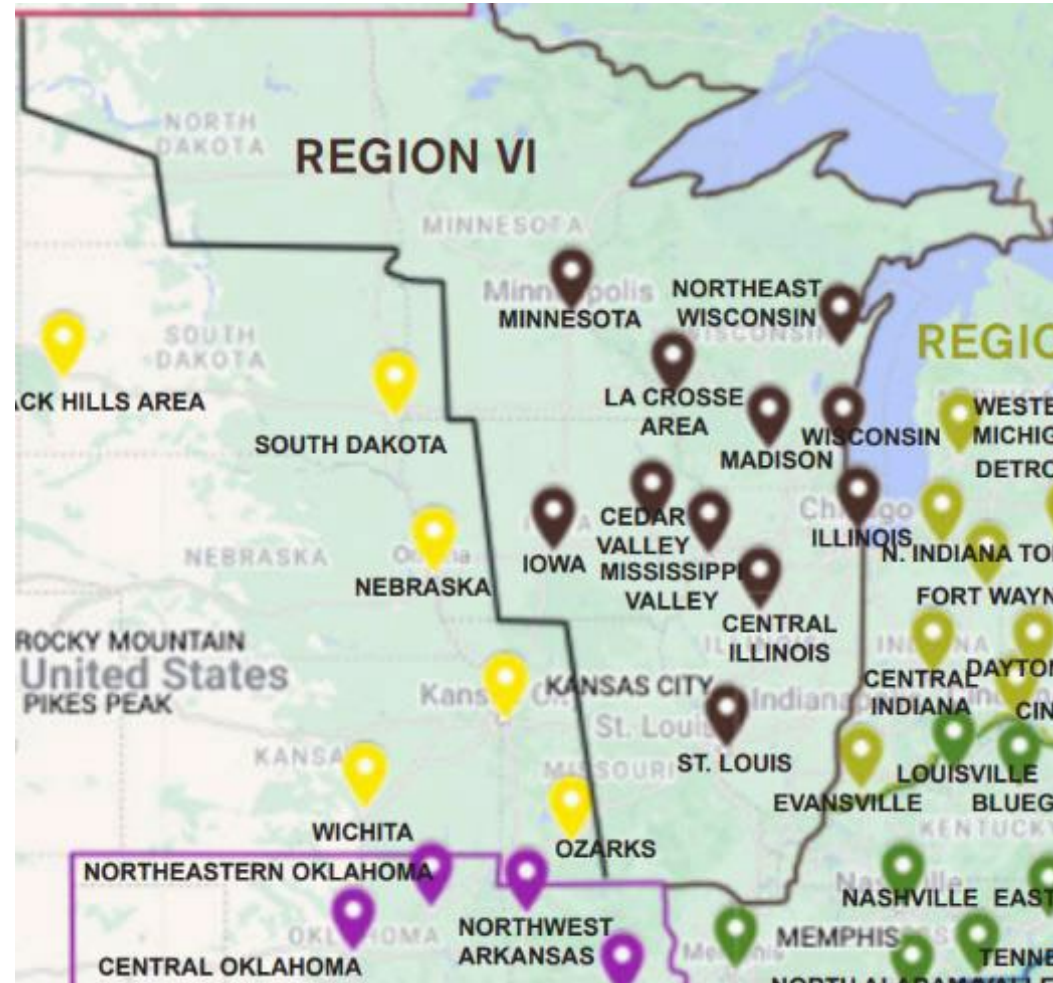


Government Affairs Region VI

2024-2025 ASHRAE
Winter Conference Update

Government Affairs Committee Chairs

- Illinois: **Cory Abramowicz**
- Illinois - Central: **Elizabeth Blankenship**
- Iowa: **Matt Jesson**
- Iowa - Cedar Valley: **Ryan Collins**
- Iowa - Mississippi Valley: **Allen Poppe**
- Minnesota: **Brian Freeman**
- Missouri – St. Louis: **Dan Mareschal**
- Wisconsin: **Victor Niño**
- Wisconsin - La Crosse: [Open position]
- Wisconsin - Madison: **Jason Boatman**
- Wisconsin - Northeast: **Eric Erdman**



Government Outreach

8 chapters participating, 73 government officials visited, 2 sponsored bills



Regional Updates

- Illinois
- Illinois - Central
- Iowa
- Iowa - Cedar Valley
- Iowa - Mississippi Valley
- Missouri – St. Louis
- Minnesota
- Wisconsin
- Wisconsin – La Crosse
- Wisconsin - Madison
- Wisconsin - Northeast

- Illinois:
 - Government Outreach Event held (April 2025)
 - Senator Turner co-sponsored a School IAQ Bill following ASHRAE meetings
- Iowa:
 - Government Outreach Event held (March 2025).
- Minnesota:
 - Multiple meetings with legislators to discuss Building Performance Standards
 - ASHRAE Standard 100 included in proposed state legislation (currently stalled)
- Wisconsin:
 - Government Outreach Event held (March 2025).
 - Commercial Building Code Update: ASHRAE testimony delivered in 2023
 - Rulemaking under review by Wisconsin Supreme Court.
 - ASHRAE member serving on Wisconsin's Building Sustainability Council
 - Milwaukee: Benchmarking ordinance passed. ASHRAE testified (August 2024).
 - Next Step: Building Performance Standards under development (ASHRAE 100)
 - Northeast: Leading state-level advocacy on low-GWP refrigerants.

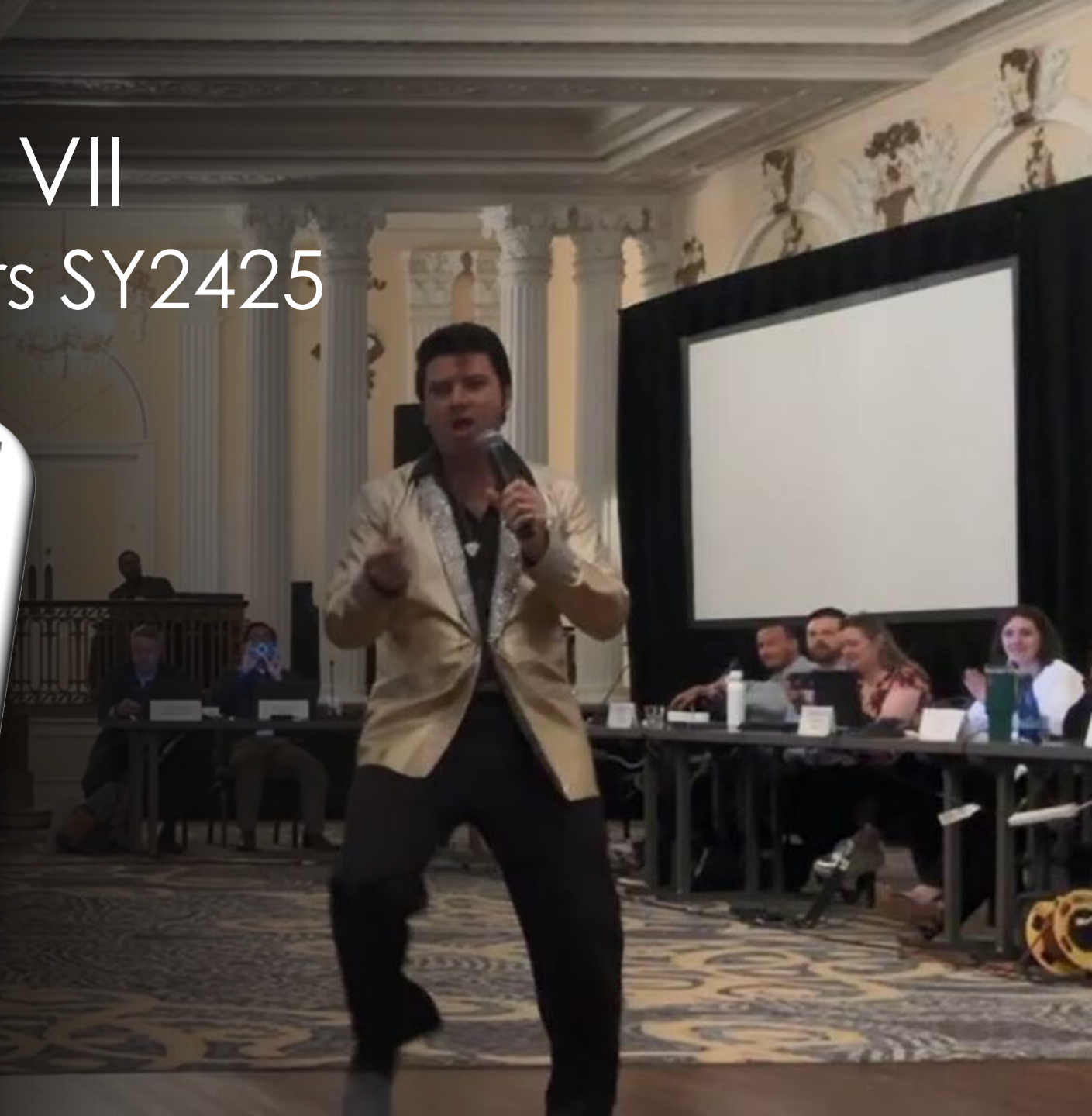
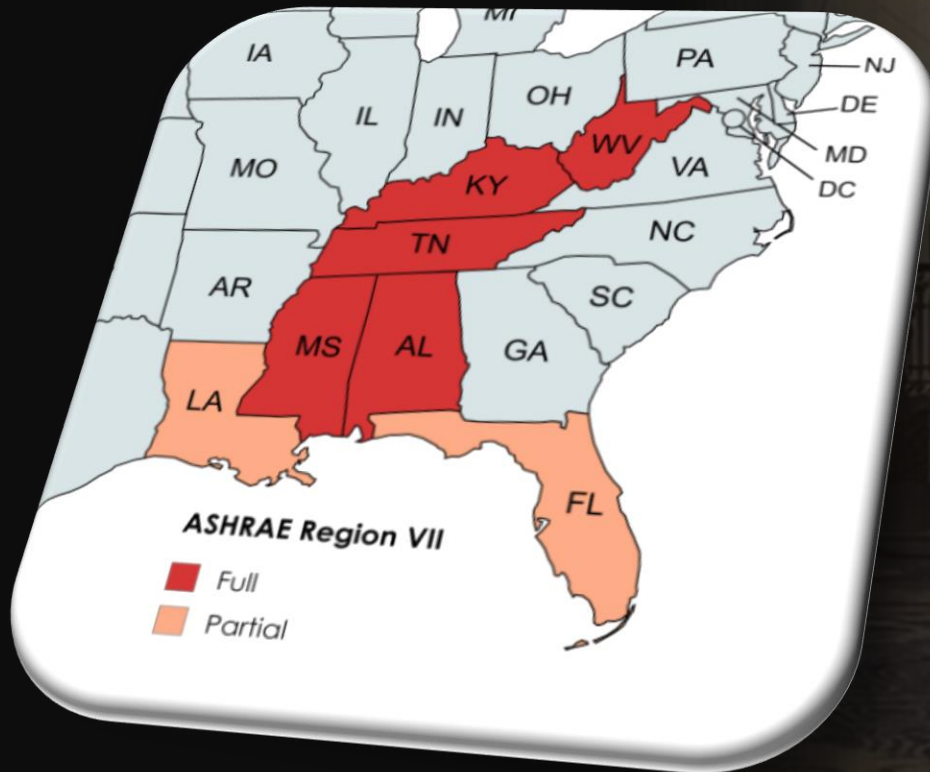


GAC Activities Overview – 2025/2026

- Q1: Host Virtual Training Workshops
- Q2: Support Planning of 2026 Government Outreach Events
- Q3: Execute Government Outreach Events (GOEs)
- Q4: Wrap Up the Year and Report at CRC

ASHRAE Region VII

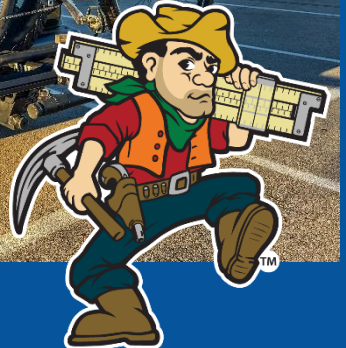
Government Affairs SY2425





Region VII GA RVC

Douglas Cage, PE GPCP ERYT
Senior Engineer / Group Lead
Mason & Hanger – Lexington, KY
ASHRAE circa 1996
Sophomore RVC



RVC Report – Region VII

SY2425 RVC Report for Region VII

RVC: Douglas Cage, PE
11-Jun-2025

ACTIVITY

	2024-25 (Jun 2025)	2023-24 (July 2023)	2022-23 (July 2022)
CRC			
Total number of chapters in region	14	14	14
Number of chapters present	14	13	14
Number of GA chapter chairs present	8	7	4
Percentage of participation	100%	93%	100%
Percentage of GA chapter chair participation	57%	50%	29%
No. of planning sessions held	11	5	7

PAOE

No. of Chapters Reporting PAOE Points:	13	11	14
No. of Chapters Making Society Minimum:	10	9	6
No. of Chapters Making Society PAR:	4	4	3
Highest PAOE Points by a Chapter:	2900	2850	1500
Percentage of chapters reporting	93%	79%	100%
Percentage of chapters making Society Minimum	71%	64%	43%
Percentage of chapters making Society PAR	29%	29%	21%

CHAPTER VISITS

No. of visits made:	14	12	13
No. of visits scheduled:	14	14	14
Percentage of chapters visited:	100%	86%	93%

GAC AWARDS

Government. Affairs Award	0	0	0
---------------------------	---	---	---

Government Outreach

No. of Chapters Participating	3	3	?
No. of government officials visited	44	22	?
No. of ASHRAE members participating	10	10	?
No. of Chapters reporting	3	3	?
No. of days duration	28	15	?



SY2425 RegionVII GAC PAOE Metrics

(as of 11 Jun 2025)

				GA15	GA16	GA17	GA18	GA19		
Chapter	PAOE	President	GA Chair	CRC	Contacts	IssuesRpt	MBO _{sef}	MBO _{met}	Members	.gov
BLUEGRASS	2900	Josh Rice	Doug Cage	yes	16	yes	yes	yes	135	7
NASHVILLE	2750	Ben Buckner	Jim Murphy	yes	24	yes	yes	yes	450	11
TENNESSEE VALLEY	1850	Hailey Capps-Mick	Scott McKenzie	yes	4	yes	yes	yes	104	10
BIRMINGHAM	1450	Bria Poe	Ben Sellers	yes		yes	yes	yes	261	18
MEMPHIS	950	Max Graham	Mike Bilderbeck	no		yes	yes	yes	220	5
MOBILE	800	Rebecca Laughlin	Jacob Harkins	no		yes	yes	yes	54	2
WEST VIRGINIA	650	Terry Hollandsworth	David Cotton	yes		yes	yes	no	87	9
NORTHWEST FLORIDA	650	Shannon Holderfield	Ben Womble	yes		yes	yes	no	77	5
LOUISVILLE	550	Will Spiller	Matthew Lea	yes		no	yes	no	214	5
EAST TENNESSEE	550	Zach Rose	Jose Almonte	yes		no	yes	no	253	51
MISSISSIPPI	520	Shelton Peoples	Ryan Williams	no		yes	yes	yes	95	4
NEW ORLEANS	300	Kristen Kessler	Jacob Alter	no		yes	no	no	153	2
NORTH ALABAMA	100	Nick Iannuzzi	NA	no		yes	no	no	59	3
BATON ROUGE		Robert Larsen	David Bonaventure	no		no	no	no	105	9

totals:	57%	44	79%	79%	50%	2267	141
							6%

Chapter Activities / Issues

Birmingham (Ben Sellers)

- Birmingham Water Works has been incorporated by the state as opposed to a city owned entity. Lawsuits are pending, we are keeping an eye on whether this will have an injunction or stay imposed. New public service commissioner (yet to be named) by governor. Both of these effect water and power utilities which is not directly related to ASHRAE but will impact potential adoption of a 90.1 standard newer than 2013.
- Future Outreach
 - Representative Dale Strong (US Congress - AL 5th District)
 - Representative Terri Sewell (US Congress - AL 7th District)

Bluegrass (Doug Cage)

- 16 Government Contacts!
- HBC Advisory Committee - Code Update Task Force
 - Dick Lord Presentation of Standard 90.1
- LFUCG Technical Focus Group on Stationary Energy to help make our city a better place to live, aiding in overall energy and pollution.
- Booth for Engineer's Day @ University of Kentucky
- GA Chair wasn't active – need to recruit for SY2526

Memphis (Mike Bilderbeck)

- Memphis' Mayor spoke at CRC

Mississippi (KP Peoples - Pres)

- Mississippi Code 57-39-21, which outlines the energy code requirements expires on 7-1-2026. Will stay involved to ensure extension.
- Ongoing Government Outreach
 - Deputy Executive Director is the Mississippi DFA
 - Chair of the Energy Committee

Mobile (Jacob Harkins)

- Added our CTTC chair (Beth Sellers) to the GAC
- Scheduled a chapter meeting regarding decarbonization for this May

Nashville (Jim Murphy)

- 24 Government Contacts!
- Nov 7th meeting with Gov Bill Lee, Dennis Knight, Scott Peach, Ben Buckner, and myself—eWeek proclamation as well.
- Lucy's Engineering Adventure book donation – expanded the donation to Sumner and Dickson Counties, building off the Davidson Co. donation last year. That is about 700 books donated in total the past two years
- Alan Parker PE was the speaker at our October Chapter meeting
- GA articles in our October, November, December, February, and March Nashville chapter newsletter.

New Orleans (Jacob Alter)

- New Orleans has been working with AIA NOLA COTE (committee on the environment) to help the city of New Orleans Department of Safety and Permits steam line the energy code compliance documentation.
- Submitted for a request a proclamation for Engineer's Week to Governor.

North Alabama (Nick Iannuzzi - Pres)

- GA Chair quit in fall - President struggling to build committee

Tennessee Valley (Hailey Mick)

- 4 Government Contacts!
- Promoting Energy Efficiency in Chattanooga Homes.
- Encouraging Building Electrification and Decarbonization in City-Owned Facilities.



[illegible]

-
- # MBOs
- ✓ Facilitate Code & Standard Adoptions
 - 90.1 Evolution to KY Task Force
 - ✓ Outreach to Chapter Chairs/Presidents
 - Office Hours (Teams), Cold Calls
 - Raise Awareness of GA Mission
 - ✓ PAOE Template for GA Chairs
- The screenshot shows a detailed performance plan for the Government Affairs PAOE - Bluegrass Chapter (Region VII). It includes sections for Vision/Mission, Strategic Objectives, Key Results, and a Progress section with a color-coded bar chart.

A black and white photograph of a dog's head and shoulders in profile, looking towards the right. The dog has dark fur around its eyes and ears, and lighter fur on its face. It is wearing a blue collar. In the background, there is a misty or foggy landscape with tall grasses in the foreground and a large, dark building visible through the haze under a bright, hazy sky.

MBOs

- ✓ Facilitate Code & Standard Adoptions
 - 90.1 Evolution to KY Task Force
- ✓ Outreach to Chapter Chairs/Presidents
 - Office Hours (Teams), Cold Calls
 - Raise Awareness of GA Mission
- ✓ PAOE Template for GA Chairs

The screenshot shows a detailed spreadsheet titled "Government Affairs PAOE - Bluegrass Chapter (Region VII)". It includes sections for "PAOE Objectives", "PAOE Activities", and "PAOE Metrics". The "PAOE Objectives" section lists various goals such as "Increase membership", "Improve communication", and "Enhance community engagement". The "PAOE Activities" section lists specific actions like "Host a networking event", "Conduct a survey", and "Attend a conference". The "PAOE Metrics" section uses color-coded bars (red, yellow, green) to indicate progress levels for each objective.

E: STANDARDIZED RVC/ REPORTING FORMAT

The following information is compiled into a summary spreadsheet showing activity for each region. The spreadsheet is reviewed by GAC at each Society meeting.

RVC Report for Region IX

ACTIVITY
CRC
Total number of chapters in region: 13
Number of chapters present: 8
Number of GA chapter chairs present: 6
Percentage of participation: 61.5%
Percentage of GA chapter chair participation: 46%
No. of planning sessions held: 7
PAOE
No. of Chapters Reporting PAOE Points: 9
No. of Chapters Making Society Minimum : 8
No. of Chapters Making Society PAR : 5
Highest PAOE Points by a Chapter: 5,950
Percentage of chapters reporting: 69%
Percentage of chapters making Society Minimum: 61.5%
Percentage of chapters making Society PAR: 38%
CHAPTER VISITS
No. of visits made: 3
No. of visits scheduled: 1
Percentage of chapters visited: 23%
GAC AWARDS
Government. Affairs Award: No submittals
Government Outreach Days: 10 GOEs
No. of Chapters Participating: 4
No. of government officials visited: 71
No. of ASHRAE members participating: 14
No. of Chapters reporting: 4
No. of days duration: 10



Region IX

2025 ASHRAE Annual Conference, Phoenix, AZ

Big Sky



Chapter# 131

Black Hills



Chapter# 127

El Paso



Chapter# 072

New Mexico



Chapter# 077

Ozarks



Chapter# 150

Pikes Peak



Chapter# 148

Idaho



Chapter# 135

Kansas City



Chapter# 053

Nebraska



Chapter# 075

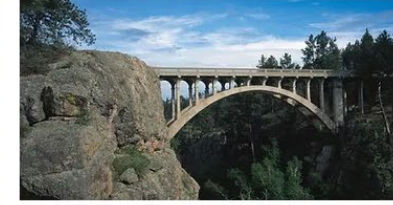


Rocky Mountain



Chapter# 073

South Dakota



Chapter# 093

Utah



Chapter# 074

Wichita



Chapter# 076

Region IX



Region IX RVC Bio.

- Peter Koneck-Wilwerding
- Mechanical Team Lead at HDR
- Omaha, Nebraska, USA
- Nebraska Chapter #75
- GA Chapter Chair
 - 2018/19, 2019/20, 2020/2021
- On BOG for NE (Treasurer)
- Final Year as RVC (of 3-year term)



Region IX Chapter 2024-25

Chapter code	Chapter Name	Chapter AAM	Government Affairs: Minimum 500; PAR 1250	Chapter PAOE point Totals
75	NEBRASKA	384	5,950	15,960
53	KANSAS CITY	602	4,350	19,320
73	ROCKY MOUNTAIN	979	4,100	20,645
135	IDAHO	192	1,850	11,670
93	SOUTH DAKOTA	112	1,450	11,145
74	UTAH	329	1,200	18,898
148	PIKES PEAK	121	800	7,280
76	WICHITA	146	500	7,615
127	BLACK HILLS	50	100	4,315
72	EL PASO	59	0	2,705
77	NEW MEXICO	153	0	4,245
131	BIG SKY	118	0	2,950
150	OZARKS	62	0	2,315

Region IX Discussion

- Kansas City
- Nebraska
- South Dakota
- Idaho
- Utah
- Rocky Mountain





See you later, and thank
you for everything!



Government Affairs Committee Region XV

1st July 2024 to 30th June 2025

Dr. Varun Jain
9810826529
varun@sanelac.in

RVC Bio

ASHRAE GAC Region XV Meeting Schedule

Dr. Varun Jain

Self Employed Consulting Engineer

Sanelac Consultants Pvt Ltd,

New Delhi, India

GA Chapter Chair 2024/2025

Chapter President 2019/2020

First Year of 3 Year GA RVC Team 2024/2025

Total Event : 32 nos.

Government Outreach Event : 03 nos.

S.No.	Date	Meeting Detail	Location
1	20 & 22 Sept 2024	Government Affairs Committee Region XV GAC Training	Udaipur
2	18th Oct 2024	GAC Discussion on Region XV	Online
3	15th Nov 2024	GAC Discussion on Region XV	Online
4	20th Dec 2024	GAC Discussion on Region XV	Online
5	17th Jan 2025	GAC Discussion on Region XV	Online
6	21st Feb 2025	GAC Discussion on Region XV	Online
7	21st Mar 2025	GAC Discussion on Region XV	Online
8	18th April 2025	GAC Discussion on Region XV	Online
9	16th May 2025	GAC Discussion on Region XV	Online
10	20th Jun 2025	GAC Discussion on Region XV	Online



ASHRAE Chandigarh Chapter (7 Events)



Office of Chief Architect Punjab
on 5th July 2024:

Ms. Sapna, Chief Architect
Dr. Varun Jain, RVC GAC
Er. Money Khanna, RVC YEA
Er. P. S. Saini, GAC Chair



Office of Chief Town Planner
Punjab on 5th July 2024

Dr. Varun Jain RVC GAC
Er. P. S. Saini GAC Chair
Er. Money Khanna RVC YEA

Pari Jai®
Every corner needs a plant

ASHRAE
CHANDIGARH

नवोत्थान
BY THE PEOPLE FOR THE PEOPLE

2024 A CONTINUUM...

HVAC & SUSTAINABILITY

20th JULY 24 (Saturday)- 12:30 PM

SPEAKER	SPEAKER	SPEAKER	SPEAKER	MODERATOR
Er. P. S. Saini Retd. Superintending Hospital Engineer	Er. Mukul Grover Senior Manager, Mitsubishi Electric	Er. Anuj Agarwal Owner M/s Ambience	Er. Money Khanna Project Engineer, PEDA	Ar Amit Sharma Secretary ASHRAE CHANDIGARH CHAPTER

VENUE Department of Local Bodies, Punjab, JW Marriot Lane, Sec-35, Chandigarh

More info: 88376 91949, 8727004333, 9878612882

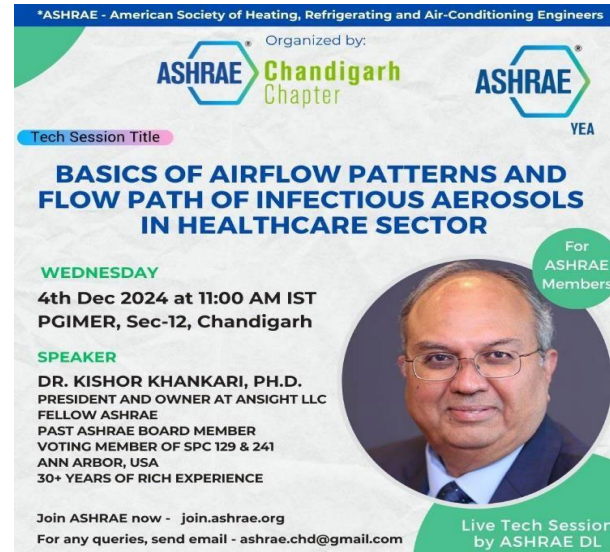
Ecosystem Partner	Organising Partner	Knowledge Partner	Outreach Partner	Media & Digital Partner
 i-RISE	 Crafts Empire	 ASHRAE Chandigarh Chapter	 Rozana Spokesman	 Vritti media
 MENTOR	 ARKA	 WICCI	 TRINITY	 Raniz spiders
 WICCI	 FIT FOUNDATION	 THEN	 educates	 REPT Today
 WICCI	 WICCI	 WICCI	 WICCI	 WICCI

Municipal Bhawan Punjab,
Chandigarh on 20th July 2024

ASHRAE Chandigarh Chapter (7 Events)



Mr. Deniss Knight, President meet with Government official on 17th September 2024



Basics of Airflow patterns and Flow path of infection aerosols in Healthcare Sector by Dr. Kishor Khankari, DL from USA on 4th December 2024



various government department during ASHRAE Networking Night organized by ASHRAE Chandigarh Chapter on 21 December, 2024.



Team ASHRAE participated in HART (Hospital Administration: Recent Trends 2025) on 24th April 2025



ASHRAE Mumbai Chapter (15 Events)



Retailer training programme under Standards and Labelling Programme on 30th July, 2024



Discussion with Directorate of Health Services, Govt. of Goa on ASHRAE Standards 514 & 241 (16th August 2024)

Prof Balkrishna Chodankar, Government Affairs Chair, AMC, Dr. Uttam Desai, Deputy Director of Health Services, Government of Goa & Mr Mahesh Prabhu, President ASHRAE Mumbai Chapter)

- ASHRAE Standard 514 and ASHRAE Standard 241 were discussed with Deputy Director of Health Services Dr Uttam Dessai, Govt of Goa on 16th August 2024.
- The purpose ASHRAE Standard 514 is to establish minimum requirements to reduce illness and injury from physical, chemical, and microbial hazards from water systems in buildings.

ASHRAE Mumbai Chapter (15 Events)



**Discussion with Directorate of Health Services,
Govt. of Goa on ASHRAE Standards 514 & 241
(16th August 2024)**

Ms Denza, Microbiologist (GSPCB), Prof. Balkrishna Chodankar, Government Affairs Chair AMC, Dr Mohan Girap, Scientist (GSPCB) & Mr Mahesh Prabhu, President AMC)

- ASHRAE guideline 12-2020 - Managing the Risk of Legionellosis associated with Building Water Systems was discussed with Scientist Dr Girap and Microbiologist Ms Denza of Goa State Pollution Control Board on 5th August 2024.
- ASHRAE guideline 12 provides information and guidance for control of legionellosis associated with building water systems.

ASHRAE Mumbai Chapter (15 Events)



Presentation on ASHRAE Standard 514-2023 to Scientists and officers of Goa State Pollution Control Board, Govt. of Goa (28th August 2024)

Mr Mahesh Prabhu, President ASHRAE Mumbai Chapter (AMC) and Prof Balkrishna Chodankar, GAC Chair (AMC) with the delegates)

- ANSI ASHRAE Standard 514, Risk Management in Building Water Systems: Physical, Chemical and Microbiological Hazards provides minimum practices to manage overall risk from Microbial hazards (other than Legionella) including chemical and physical hazards associated with Potable and Non Potable Building Water Systems.

ASHRAE Mumbai Chapter (15 Events)



Technical presentation on 'Optimizing Indoor Air Quality in Healthcare Facilities', on 10th October 2024

The programme was attended by Senior officials from Directorate of Health Services, Government of Goa. The attendees included about 10 senior doctors and about 35 Facility Management Engineers and other professionals.



Presentation on ASHRAE Position Paper on Building Decarbonization to Goa College of Engineering

Faculty, staff and students of Civil Engineering Department, Goa College of Engineering, Government of Goa



World Standards Day celebration in association with Institution of Engineers (India) Goa State Centre and Goa College of Engineering on 24th October 2024.

ASHRAE Mumbai Chapter (15 Events)



ASHRAE Mumbai Chapter

On the eve of National Energy Conservation Day
The Institution of Engineers (India) Goa State Centre in association with ASHRAE Mumbai Chapter
is organizing a Technical Talk on

**CONSERVING BUILDING ENERGY USING
DIGITAL TWIN**

MR. RUPESH UMTOL
Co-Founder & Director at Electro-Mech Consultants Pvt. Ltd., Mumbai
Co-Founder & COO at QI Square Pte Ltd., Singapore
Global Head of Digital Twin & Allied Services at SoftTech Engineers Ltd., Pune

Leading a team of engineers specializing in Digital Twin, Virtual Environment,
Energy Efficiency, Net Zero Buildings, LEED Certifications, and Dynamic Simulation
to enhance building design and power savings for new and existing buildings.

WHO CAN ATTEND

Energy Consultants
Facility Managers
HVAC Professionals

ECBC Consultants
Any one involved in Energy
Conservation of Built Environment

FREE REGISTRATION

13 DEC, 2024 | 6:00PM - 8:00PM
International Centre Goa, Dona-Paula

Programme followed by Networking Dinner

RSVP: The Institution Of Engineers Organization(India)- Goa State Centre: +91 9329021077 Email: goasacemindia.org
Balkrishna Chodankar +91 9822483991 Email: chodankarbalkrishna@gmail.com

National Energy Conservation Day celebration in association with Institution of Engineers (India) Goa State Centre on 13th December 2024 at International Centre Dona Paula, Goa



Meeting with Faculty of Civil Engineering Department, Goa College of Engineering, Government of Goa, on 14th December 2024



Meeting with faculty of Indian Institute of Technology, Goa, on 14th December 2024.

ASHRAE Mumbai Chapter (15 Events)



Discussed and shared ASHRAE's position document on Building Decarbonization with Principal and faculty members of Government Polytechnic Panaji, Goa on 30th December, 2024



Discussed and shared ASHRAE's position document on Building Decarbonization with Member of Parliament, Government of India, Captain Viriato Fernandes on 21st January, 2025



Discussed and shared ASHRAE's position document on Building Decarbonization with Principal and faculty members of Government Polytechnic Panaji, Goa on 30th December, 2024

ASHRAE Mumbai Chapter (15 Events)



Meeting with Member of Legislative Assembly, Thane region, Mr Sanjay Kelkar, on 23rd April 2025



Meeting with officials of Directorate of Fire and Emergency Services, Government of Goa, on 16th May 2025

ASHRAE India Chapter (1 Event)



GOVERNMENT OUTREACH PROGRAM

17th APRIL 2025
06:00 PM onwards

Venue
The Connaught
Shaheed Bhagat Singh Marg,
Connaught Place,
New Delhi-01

Entry by Invitation only
For ASHRAE Members - Rs. 5,000/-

KNOWLEDGE + NETWORKING

Mrs. Arundhati S. Khanna
President AIC

Mr. Rajesh Jain
GAC Chair and IPP AIC

Annual Sponsors
DELTA BELIMO Hisense HVAC Supreme ALP

Ritu Chauhan
8383969876
ashraeic@gmail.com

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EVENT HIGHLIGHTS

- Attendance of 30+ Government Officials, industry influencers and 20+ Senior ASHRAE Members
- Discussion on ways to create partnerships and establish a platform for knowledge exchange
- Role of ASHRAE as a technical resource for government officials.
- Networking Cocktail and Dinner



Government Outreach Program on 17th April 2025 at The Connaught, New Delhi

ASHRAE Deccan Chapter (7 Events)



ASHRAE standards explained by Past president of ASHRAE Deccan Chapter, Mr. Kalyanaraman on 31st Jul 2024



ASHRAE Standards for Govt Building Design to R & B Telangana on 01/10/2024

- Chief Engineer Mr. Linga Reddy attended the Event.
- 18 Engineers attended the Program.



Session on Smart City and Sustainable Infrastructure representing ASHRAE in panel of Real Estate in Association with AP chamber of Commerce and Industry Federation by Dr. Saandeevani Vajje on 9th Dec 2024

ASHRAE Deccan Chapter (7 Events)



Meeting With Deputy Chief Minister – Andhra Pradesh

- On 15/12/2024 ASHRAE Deccan had the Opportunity to meet the Deputy Chief Minister of Andhra Pradesh Shri. Pawan Kalyan.
- In the meeting it was about conveyed ASHRAE and the importance of ASHRAE Standards.



MEETING WITH Municipal Administration & Urban Development – Andhra Pradesh 20/12/2024

- 20/12/2024 Deccan President met Municipal Administration & Urban Development Minister of Andhra Pradesh Shri. Ponguru Narayana .
- Explained the importance of Net zero and Ashrae standard 228 for the same . Spoke about Latest Development in Air Conditioning industry.



Distinguished Lecture

INDOOR AIR QUALITY AUDIT IN BUILDINGS

System Zone Concept

Dr. Chandra Sekhar (Ph.D.)
Professor and Programme Director
Dept. of the Built Environment at the National University of Singapore (NUS), ASHRAE Society Vice president & Board Member

Venue
CII-Indian Green Building Council Headquarters
02 Jan 2025
Registration starts 2:30 P.M.

President
Dr. Anand Babu

Secretary
Mr. Jaleel

CTTC Chair
Dr. Saandhepani V

Distinguished lecture by Dr. Chandrasekhar in association with Indian Green Building Council & ISHRAE at IGBC Headquarters on 2nd Jan 2025



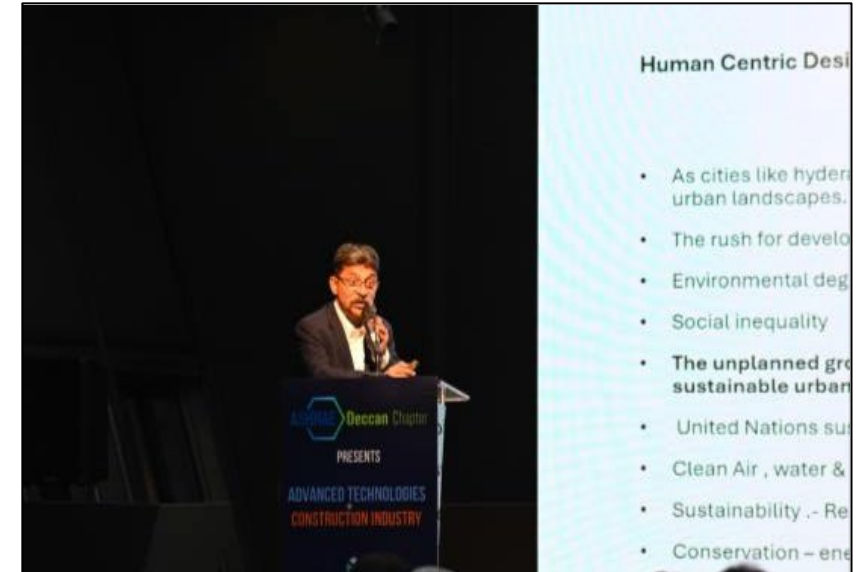
ASHRAE Deccan Chapter (7 Events)



Commissioner and MLA Gadde Rammohan supported the event on 22 April 2025 Earth Day



Interactive Panel Discussion with different stake holders on Advantages and challenges on adoption of Latest Technologies

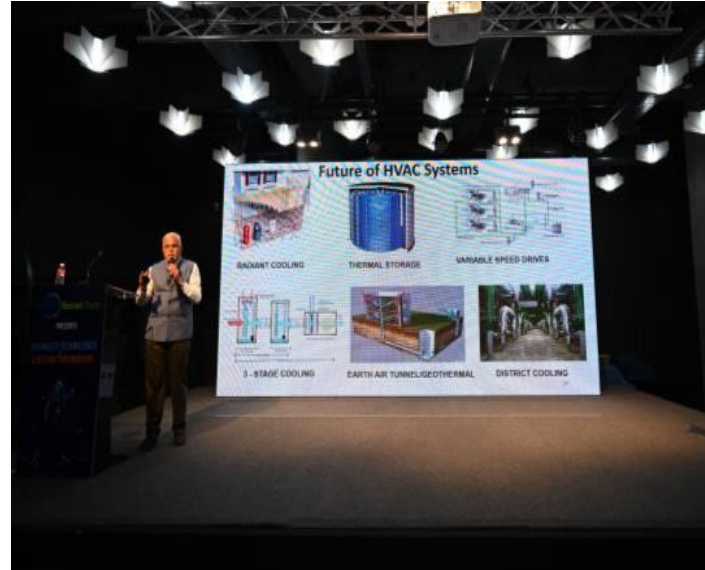


Session on Human Centric Design by Dr. Ramesh

ASHRAE Deccan Chapter (7 Events)



ASHRAE Deccan Chapter in association with ISHRAE Deccan Chapter organized the event, In detail ASHRAE Standards was presented in the program.



Session on Emerging Technologies in HVAC by Mr. N S Chandrasekar



ASHRAE Standards and presentation of various topics to R&B department Telangana

ASHRAE Deccan Chapter (7 Events)



Panel Discussions with APREDCO, CREDAI, BAI & NAREDCO in association with AP Government



Meeting with various AP Ministers



Skill development with Government support by Swarna Bharati Trust by Venkaiah Naidu - HVAC trained batch passing out

ASHRAE Deccan Chapter (7 Events)



DL in association with IIA & school of planning & architecture which is directly under Central Government. Few architects from R&B also attended on behalf of IIA , so you can mention R&B of AP as well



- Meeting with Telangana tourism secretary, explain about importance of ASHRAE and IAQ in Hospitality industry.
- Program with Superintendent Engineer of R&B Department.



Session on ASHRAE Standards by Mr. Prashant Raidu



ASHRAE Bangladesh Chapter (2 Events)



ASHRAE Introductions & Basic Information Session

- Department of Architecture Ministry of Housing & Public Works on 23rd December 2024

Bangladesh Chapter Outreach Event

1/2/25, 3:54 PM

Sanelac.in Mail - Fwd: Form received

name:	Shekhar Chandra Biswas
email:	biswasshekar5@gmail.com
chapter participating:	BANGLADESH
region:	0
event date:	12/23/2024 12:00 AM
location:	in-person large group
engagement type:	State
volunteer number:	4
volunteer names:	1. Shekhar Chandra Biswas, Membership # 8450476, GAC Chair, ASHRAE Bangladesh Chapter 2. M Akram Hossain Boby, Membership # 8361840, GAC Co-Chair, ASHRAE Bangladesh Chapter 3. Md. Moniruzzaman Bapari, Membership # 8471166, GAC Member, ASHRAE Bangladesh Chapter 4. Mr Bankim Bairagi, Membership # 8452600, GAC Member, ASHRAE Bangladesh Chapter
gov officer num:	14
gov officer names:	1. Mir Monzurur Rahman, Chief Architect, Department of Architecture, Ministry of Housing & Public Works, Dhaka, Bangladesh 2. Md. Asifur Rahman Bhuyian, Additional Chief Architect, Department of Architecture, Ministry of Housing & Public Works, Dhaka, Bangladesh 3. Mohammad Ferdous Hassan Khan, Superintending Architect, Department of Architecture, Ministry of Housing & Public Works, Dhaka, Bangladesh 4. Md. Ali Ashraf Dewan, Superintending Architect, Department of Architecture, Ministry of Housing & Public Works, Dhaka, Bangladesh 5. Nusrat Jahan, Executive Architect, Department of Architecture, Ministry of Housing & Public Works, Dhaka, Bangladesh 6. Syed Rezaul Morshed, Executive Architect, Department of Architecture, Ministry of Housing & Public Works, Dhaka, Bangladesh 7. Mohsena Siddika, Executive Architect, Department of Architecture, Ministry of Housing & Public Works, Dhaka, Bangladesh 8. Md. Habibul Quaium, Executive Architect, Department of Architecture, Ministry of Housing & Public Works, Dhaka, Bangladesh 9. Asaduzzaman Noor, Executive Architect, Department of Architecture, Ministry of Housing & Public Works, Dhaka, Bangladesh 10. Md. Abdullah Al Mamun, Executive Executive Engineer, Public Works Department, Ministry of Housing & Public Works, Dhaka, Bangladesh 11. Rubaya Jesmin, Senior Assistant Architect, Department of Architecture, Ministry of Housing & Public Works, Dhaka, Bangladesh 12. Shahary Shobnom Kabir, Assistant Architect, Department of Architecture, Ministry of

Housing & Public Works, Dhaka, Bangladesh 13. Arafat Nawaz Aunkur, Assistant Architect, Department of Architecture, Ministry of Housing & Public Works, Dhaka, Bangladesh 14. Sharmin Sultana, Assistant Architect, Department of Architecture, Ministry of Housing & Public Works, Dhaka, Bangladesh

policy makers contacted:	1
other activities:	No other organization was involved
successful:	The most successful finding was that the architect professionals were enthusiastic about learning ASHRAE activities.
followup:	ASHRAE Bangladesh Chapter needs to enhance student branch activities in more universities. More and more university teachers should be involved in teaching the main themes and guidelines of ASHRAE. Particularly, Bangladesh should consider establishing local standards considering the tropical situation and climate vulnerability of Bangladesh following ASHRAE and including them in the National Building Code.
further engagement:	ASHRAE could introduce more offline training in Bangladesh
relationship plan:	Our ASHRAE Bangladesh Chapter plans to maintain very good relationship to enhance professional competency
further information:	Actually, the outreach event was very interactive. The architects were expecting to get more knowledge-sharing sessions from ASHRAE like 'Building Thermal Insulation', Sustainable building materials, Building Envelope, Passive Cooling issues, etc.

Shekhar Chandra Biswas
GAC Chair, ASHRAE Bangladesh Chapter
&
Superintending Engineer
PWD E/M Design Circle, Dhaka, Bangladesh

1. Chief Architect, Department of Architecture, Ministry of Housing & Public Works, Dhaka, Bangladesh.
2. Additional Chief Architect, Department of Architecture, Ministry of Housing & Public Works, Dhaka, Bangladesh.
3. Superintending Architect, Department of Architecture, Ministry of Housing & Public Works, Dhaka, Bangladesh.
4. Executive Architect, Superintending Architect, Department of Architecture, Ministry of Housing & Public Works, Dhaka, Bangladesh.
5. Executive Engineer, Public Work Department, Ministry of Housing & Public Works, Dhaka, Bangladesh.
6. Senior Assistant Architect, Department of Architecture, Ministry of Housing & Public Works, Dhaka, Bangladesh.
7. Assistant Architect, Department of Architecture, Ministry of Housing & Public Works, Dhaka, Bangladesh.



Thank you to ASHRAE Staff

We appreciate the exceptional support and guidance provided by the ASHRAE staff. Thank you for your continuous help!

Alice Yates, Chris Miller, Emily Porcari,
Jacob Karson and Jason Davidson





E: STANDARDIZED RVC/ REPORTING FORMAT

The following information is compiled into a summary spreadsheet showing activity for each region. The spreadsheet is reviewed by GAC at each Society meeting.

RVC Report for Region **RAL**

ACTIVITY	
CRC	
Total number of chapters in region	21
Number of chapters present	20
Number of GA chapter chairs present	10
Percentage of participation	95%
Percentage of GA chapter chair participation	50%
No. of planning sessions held	2
PAOE	
No. of Chapters Reporting PAOE Points:	8
No. of Chapters Making Society Minimum :	6
No. of Chapters Making Society PAR :	2
Highest PAOE Points by a Chapter:	Falcon
Percentage of chapters reporting	36%
Percentage of chapters making Society Minimum	25%
Percentage of chapters making Society PAR	1%
CHAPTER VISITS	
No. of visits made:	0
No. of visits scheduled:	2
Percentage of chapters visited:	0%
GAC AWARDS	
Government. Affairs Award	0
Government Outreach Days	
No. of Chapters Participating	12
No. of government officials visited	40
No. of ASHRAE members participating	82
No. of Chapters reporting	4
No. of days duration	14



ASHRAE Region At Large
GOVERNMENT AFFAIRS 2024/2025
Phoenix Summer Meeting



RVC BIO:

Ahmed M. Bolbol

Consulting Engineer

Cairo, Egypt

Chapter 211 Pyramids

GA Chapter Chair *2014/2017*

Chapter President *2023/2024*

Third Year of 3 Years GA RVC Term *2022/2025*



RAL - 21 chapters

- Alexandria
- Bahrain
- Cairo
- Central Pakistan
- Faisalabad
- Jordan
- Kuwait
- Lebanon
- Libya
- Nigeria
- Northern Pakistan
- Oman
- Pakistan
- Pyramids
- Qatar
- Saudi Arabia
- South Africa
- Sudan
- Turkey
- UAE (Falcon)
- Ghana

CRC workshop in Karachi, Pakistan



RAL RPM in Cairo (May, 2024)



Falcon Chapter Achievement



ONLINE Meetings invited by Sudan, Alex. & Ghana Chapters



Eng. Ahmed Bolbol
ASHRAE GAC-MMSC & GA RVC

Topic Governance Affairs
Committee Session

Co-Host

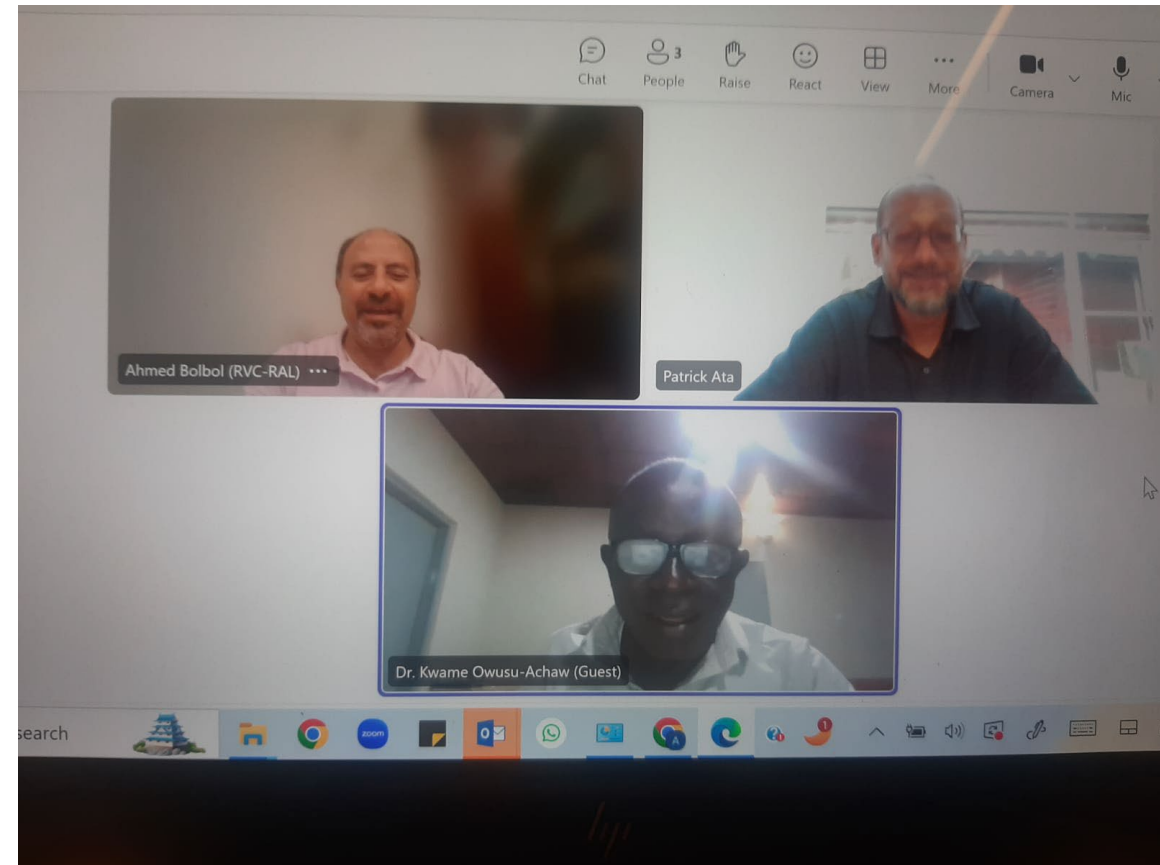


November 20 Wednesday 6:00 PM
Sudan time GMT+2

For Feedback
Info@ashraesdn.com



Scan to Register



Restart for struggling and new chapters



North Pakistan activities and GA nights



Pyramids chapter activities

- Egyptian Ministry of Environmental with UNEP Training and gathering to be continued



Regional Accomplishments:

- ✓ Falcon chapter achieved the standard 241 adoption as the first chapter between all ASHRAE chapters worldwide.
- ✓ North Pakistan and central Pakistan chapters had a government outreach nights where gathering many governmental entity and persons to discuss an ASHRAE issues.
- ✓ Pyramids Chapter had many numbers of government outreach to support discuss Environmental and global warming
- ✓ ***Sudan, Alexandria*** and Ghana chapters in new strong restarts.



Challenges

- 1) To have better reports forms from the GAC .
- 2) Two online meetings for the next half year
- 3) More Chapter visits (RVC and RAL responsibility).
- 4) To have a GA committee in each chapter.
- 5) At least two Nominations for the awards

Lessons Learned

- 1) More support for struggling chapters (Libya, Lebanon, South Africa ... etc.)
- 2) Be sure that each chapter has active GA Committee
- 3) Increase the online meeting specially to under-standing the ***reporting, PAOE***

Award nominations.

- 4) Interacting between the GA activities with other committee and increase the outreach attendance.



THANK YOU



In Honor of David Andrew Palty (Dave)

December 6, 1958 – September 1, 2019



Anyone who knew Dave knew that his passion for life was infectious and it permeated through everything he was involved with, be that work, family, ASHRAE, etc. Dave was truly one of the good guys and his ASHRAE FAMILY will miss him.

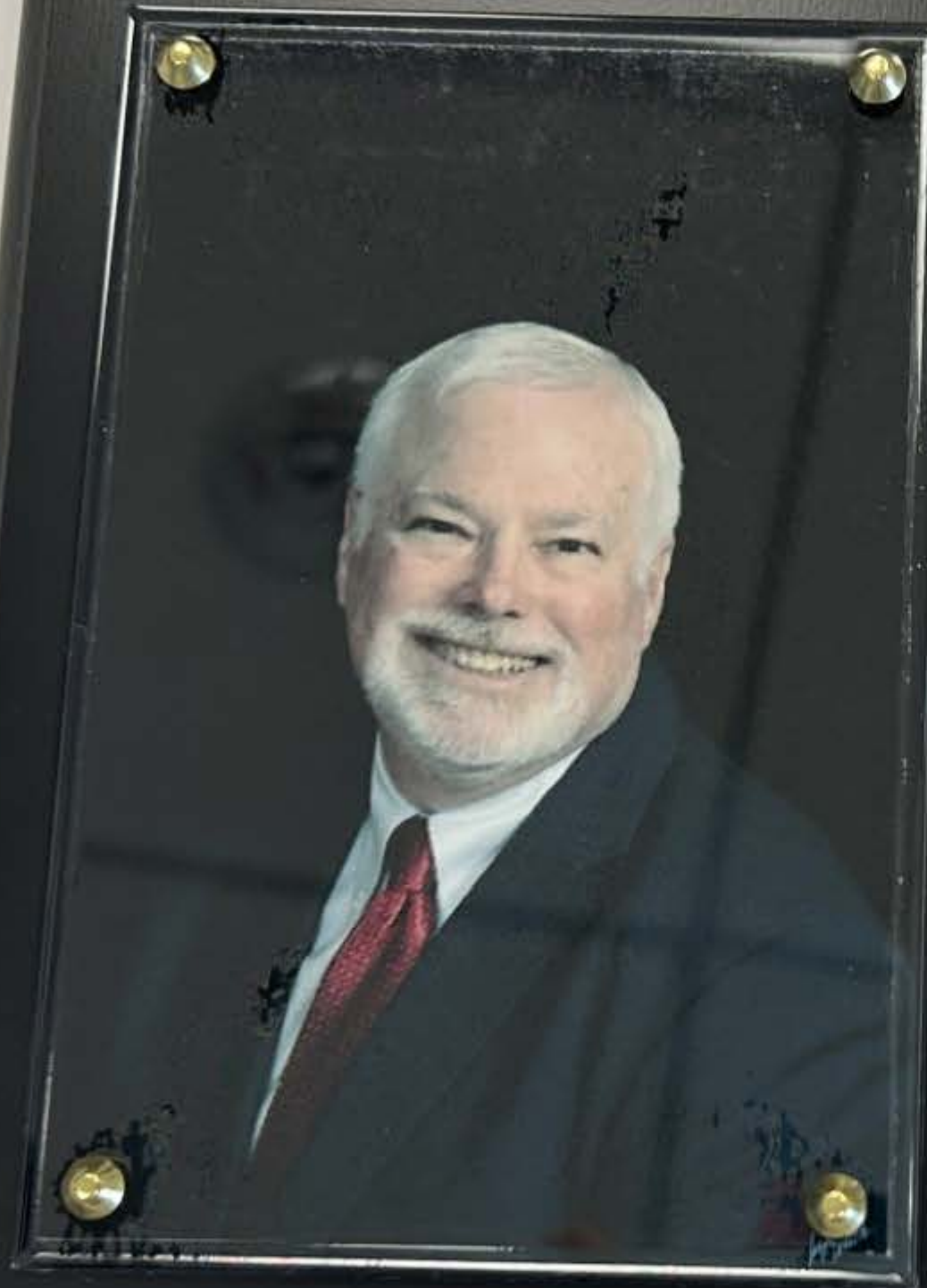


The Dave Palty Outstanding GAC Service Award

The Dave Palty Outstanding GAC Service Award is an informal committee award that is given each year to recognize outstanding overall effort on the GAC committee.

The individual will be recognized at the GAC committee meeting at the ASHRAE annual meeting and will receive a certificate recognizing their outstanding efforts over the course of the year to promote and advocate on behalf of ASHRAE.





The Dave Palty
GAC Service Award

2024 - 2025

Presented To

PETER J.
KONECK-WILWERDING

In Recognition Of
Outstanding Overall
Efforts On ASHRAE's
Government
Affairs Committee





Shaping Tomorrow's Built
Environment Today

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2025 ASHRAE Annual Conference

LEADERSHIP PRESENTATION

Code of Ethics

We will act with honesty, fairness, courtesy, competence, inclusiveness and respect for others, which exemplify our core values of excellence, commitment, integrity, collaboration, volunteerism and diversity, and we shall avoid all real or perceived conflicts of interest.

Value Statement

In ASHRAE meetings, we will act with honesty, fairness, courtesy, competence, inclusiveness and respect for others, which exemplify our core values of excellence, commitment, integrity, collaboration, volunteerism and diversity, and shall avoid all real or perceived conflicts of interest. Our culture is one of inclusiveness, acknowledging the inherent value and dignity of each individual. We celebrate diverse and inclusive communities, understanding that doing so fuels better, more creative and more thoughtful ideas, solutions and strategies for the Society and the communities our Society serves. We respect and welcome all.

Harassment and Discrimination

ASHRAE strictly prohibits and does not tolerate discrimination against members or applicants for membership because of such individual's race, color, religion, age, sex, sexual orientation, national origin, physical or mental disability, pregnancy, genetic information, veteran status, uniformed service member status, or any other category protected under applicable law.

Commercialism

ASHRAE's Commercialism Policy allows for Society activities that fulfill the mission of technological advancement with adherence to business plans that generate income to offset operational expenses such as AHR Exposition, ASHRAE periodicals, website, and Society conference events such as the Welcome Party, luncheons, registration kits, and receptions.

MARKETING CENTRAL

ASHRAE has a **NEW TAGLINE!** Shaping Tomorrow's **Global** Built Environment Today.



Shaping Tomorrow's Global
Built Environment Today

Download at [Marketing Central](#)

2025-28 ASHRAE Strategic Plan



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1

Position ASHRAE as the **global leader** in advanced solutions to improve indoor environmental quality (IEQ) and address climate change.

2

Pursue **impact-focused engagement** by targeting stakeholders to support a strong workforce and maximize utilization, adherence, and trust of ASHRAE's global expert resources.

3

Increase the **accessibility** of ASHRAE content, resources, and member opportunities.

OBJECTIVES

- Lead the development of widely adopted standards to support indoor environmental quality, decarbonization, and resilience.
- Develop alliances and diverse working groups that position ASHRAE to lead and collaborate globally in identifying challenges, defining solutions, and developing approaches to address them.
- Develop resources based on member needs and industry trends.

- Tailor and target engagement and resources to ASHRAE members and defined key stakeholders.
- Provide guidance to targeted stakeholders on impactful ways to maximize the positive downstream effect of their engagement on the built environment.
- Empower professionals in their journey to maximize industry impact in support of ASHRAE's mission and vision.
- Pursue partnerships to amplify the impact of ASHRAE's mission and support the HVAC&R and built environment workforce.

- Identify and address structural, content, and financial barriers to access.
- Align communication and delivery methods and formats to enhance accessibility and effectiveness of content, resources, and volunteer opportunities.
- Strengthen communication channels with and through chapters and regions to empower contribution to the Society as thought partners in adapting resources to local context and needs.

2025-28 ASHRAE Strategic Plan

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Healthy, Sustainable and Resilient Communities

Providing a healthy, productive and resilient indoor environment, while minimizing greenhouse gas emissions, is critical to today's built environment. Further, global stakeholders' leveraging of ASHRAE's standards and technical resources presents an opportunity for ASHRAE to solidify global leadership in supporting healthy, sustainable and resilient communities. ASHRAE prioritizes timely identification of industry trends, expedient content development, and forges key partnerships to advocate and collaborate with industry.



Empowered Workforce

The development of a skilled, competent, and solutions-oriented workforce is critical to addressing the challenges facing the built environment and the HVAC&R industry, today and in the future. ASHRAE continues to provide educational and professional development resources. Our members and industry partners need these tools to implement key initiatives such as decarbonization, resiliency, and indoor environmental quality goals and policies. ASHRAE, with the support of our chapters and regions, partners with key industry stakeholders in tackling the unique workforce challenges facing the industry globally.



Organizational Agility

ASHRAE's ability to serve communities, the industry, the current and future workforce, and provide value to its volunteer members, is dependent on forward-looking products, services, and solutions. ASHRAE will use emerging technologies to support the development of resources and knowledge flow between ASHRAE's chapters, regions, technical bodies, and the industry, harnessing organizational and operational efficiencies.



Emerging Technologies

In today's rapidly evolving landscape, emerging technologies are revolutionizing the built environment and HVAC&R industry, expanding numerous career opportunities. By combining technological advancements such as AI with human creativity, both seasoned professionals and new talent can collaborate to drive industry-wide progress. Advanced automation and AI-enabled systems propel energy efficiency and smart buildings, enhance comfort and IEQ, improve operations and maintenance, and deliver holistic and sustainable solutions for industry professionals. ASHRAE engages in a thoughtful process to evaluate and prioritize opportunities to leverage new technologies.

2025-28 ASHRAE Strategic Plan

Download in English and Spanish at
ashrae.org/strategicplan

ASHRAE Board of Directors



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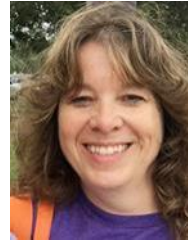
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Westminster, Maryland

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Patrick Marks, P.E.
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Papillion, Nebraska



Carrie Brown, Ph.D.
Oakland, California



Mike Pouchak, P.E., Fellow ASHRAE
St. Anthony, Minnesota



David Yashar, Ph.D., Fellow ASHRAE
Gaithersburg, Maryland



Daniel Nall
Princeton, New Jersey



Heather Schopplein-Anderson, P.E.
Santee, California

Government Affairs



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Over 100 Government Outreach
Events during the 24-25 SY

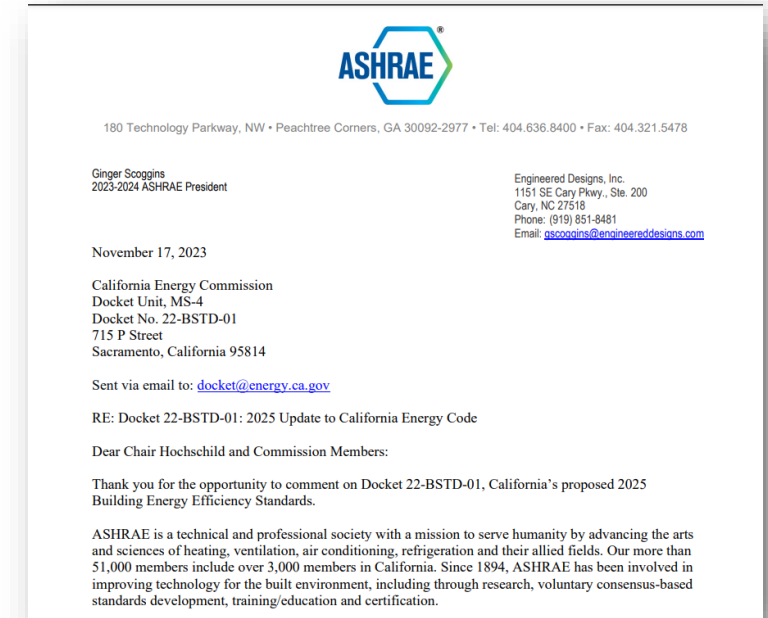
GOVERNMENT AFFAIRS UPDATE



BI-WEEKLY NEWSLETTER

Sign up for the Government
Affairs Update
online or email
GovAffairs@ashrae.org

LETTERS & TESTIMONY



Share your Expertise with Government Officials through the new SMEs for GOEs Program



Policymakers and elected officials need your expertise to make better decisions as they craft legislation and regulations impacting HVAC&R and the built environment.

The Government Affairs Committee (GAC) has developed a new program to identify Subject Matter Experts (SMEs) who can effectively communicate with non-technical audiences such as government officials

BE THE SOURCE of technical expertise for these decisions!



Sign up online or email GovAffairs@ashrae.org

Projected Amounts for Society Year ending June 30, 2025



\$2.7M Research Promotion Campaign
(Research, YEA, ALI, Scholarships, General)



\$1.95M Raised for Endowments



\$218,500 Awarded through
40 Scholarships



\$1.9M Raised for Research



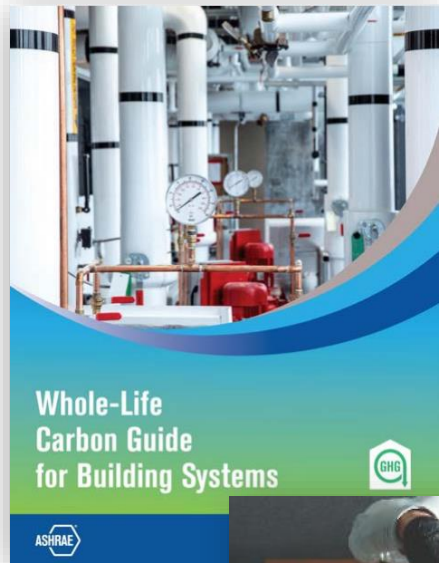
\$51,000 Raised by College
of Fellows and Life Members Club



\$1.18M Given by ASHRAE
Regions, Chapters and Sections

More than 5,000 contributions from Members, Organizations and other Associations

**JUST
RELEASED!**



- Issued RFPs for two (2) CEBD projects in May
- Additional RFPs for CEBD projects to be issued in August
- Released two (2) more decarbonization guides
- New Decarbonizing Building Thermal Systems eLearning Course
- Suite of Decarbonization Guides:
 - ✓ Grid Interactive Buildings for Decarbonization Design
 - ✓ Decarbonizing Hospital Buildings
 - ✓ TM65 Addendum for North America with CIBSE
 - ✓ Building Decarbonization Retrofits for Commercial & Multifamily Buildings
 - ✓ Decarbonizing Building Thermal Systems: A Guide for Applying Heat Pumps & Beyond with NREL
 - ✓ **NEW!** *Whole Life Carbon Guide for Building Systems*
 - ✓ **NEW!** *Guide to Strategic Decarbonization Planning with USGBC*

New Standards

New Guideline



ANSI/ASHRAE Standard 52.2-2025
(Supersedes ANSI/ASHRAE Standard 52.2-2017)
Includes ANSI/ASHRAE addenda listed in Appendix L

Method of Testing
General Ventilation
Air-Cleaning Devices
for Removal Efficiency
by Particle Size

See Information Appendix C for approval dates by ASHRAE, the American Society for Health Care Engineering and the American National Standards Institute.

This Standard is under continuous maintenance by a Standing Standard Project Committee (SSPC) for which the Standards Committee has established a documented program for regular publication of addenda or revisions, including procedures for timely recommended comments on proposed changes to any part of the Standard. Instructions for how to submit a change can be found on the ASHRAE® website (www.ashrae.org/standards).

The most edition of an ASHRAE Standard may be purchased from the ASHRAE website (www.ashrae.org) or from ASHRAE Customer Service, 180 Technology Parkway, Peachtree Corners, GA 30092. E-mail: info@ashrae.org; Fax: 678-575-2125; Telephone: 404-840-8900 (worldwide), or toll free 1-800-541-4773 (for users in US and Canada). For reprint information, go to www.ashrae.org/reprints.

© 2025 ASHRAE ISBN 1591-2335

PDF includes a hyperlinks for download of worksheets. Click on a reference to a section, table, figure, or equation to jump to its location. Return to the previous page via the backarrow icon.

Includes online access to System Calibration and Water Pressure Drop Adjustment worksheets.



ANSI/ASHRAE Standard 30-2025
(Supersedes ANSI/ASHRAE Standard 30-2019)
Includes ANSI/ASHRAE addenda listed in Appendix E

Method of Testing
Liquid Chillers

See Information Appendix C for approval dates by ASHRAE, the American Society for Health Care Engineering and the American National Standards Institute.

This Standard is under continuous maintenance by a Standing Standard Project Committee (SSPC) for which the Standards Committee has established a documented program for regular publication of addenda or revisions, including procedures for timely recommended comments on proposed changes to any part of the Standard. Instructions for how to submit a change can be found on the ASHRAE® website (www.ashrae.org/standards).

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Includes online access to System Calibration and Water Pressure Drop Adjustment worksheets.



ANSI/ASHRAE/ASHE Standard 189.3-2025
(Supersedes ANSI/ASHRAE/ASHE Standard 189.3-2021)
Includes ANSI/ASHRAE/ASHE addenda listed in Appendix D

Design, Construction, and
Operation of Sustainable
High-Performance
Health Care Facilities

See Information Appendix D for dates of approval by ASHRAE, the American Society for Health Care Engineering and the American National Standards Institute.

This Standard is under continuous maintenance by a Standing Standard Project Committee (SSPC) for which the Standards Committee has established a documented program for regular publication of addenda or revisions, including procedures for timely recommended comments on proposed changes to any part of the Standard. Instructions for how to submit a change can be found on the ASHRAE® website (www.ashrae.org/standards).

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PDF includes a hyperlinks for download of worksheets. Click on a reference to a section, table, figure, or equation to jump to its location. Return to the previous page via the backarrow icon.



ASHRAE/ASHE Guideline 43-2025

Operations Guideline
for Ventilation
of Health Care Facilities

Approved by ASHRAE on May 25, 2025, and by the American Society for Health Care Engineering on May 15, 2025.

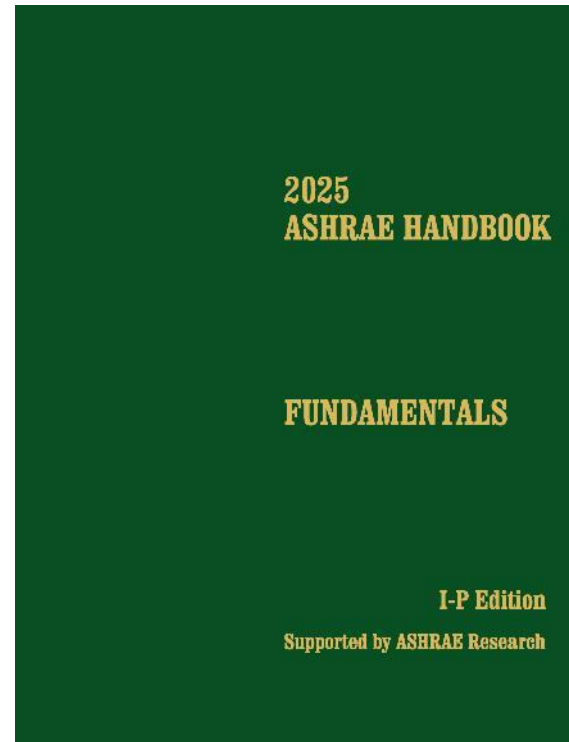
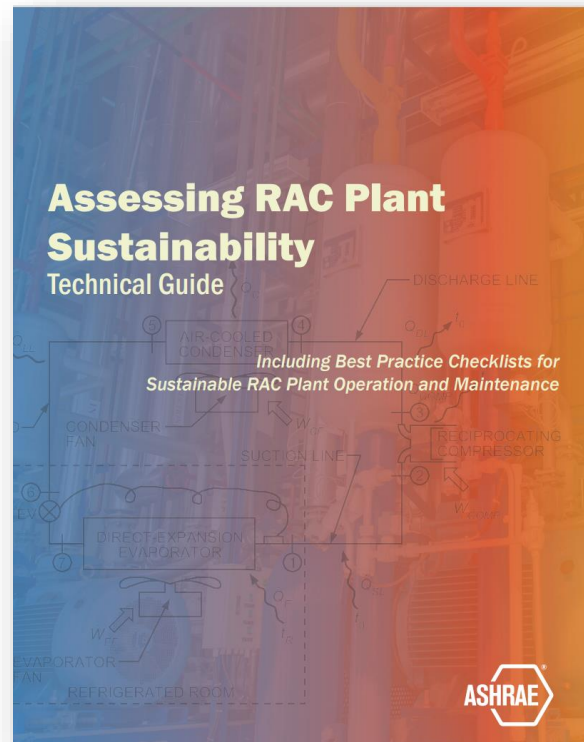
This Guideline is under continuous maintenance by a Standing Standard Project Committee (SSPC) for which the Standards Committee has established a documented program for regular publication of addenda or revisions, including procedures for timely recommended comments on proposed changes to any part of the Guideline. Instructions for how to submit a change can be found on the ASHRAE® website (www.ashrae.org/standards).

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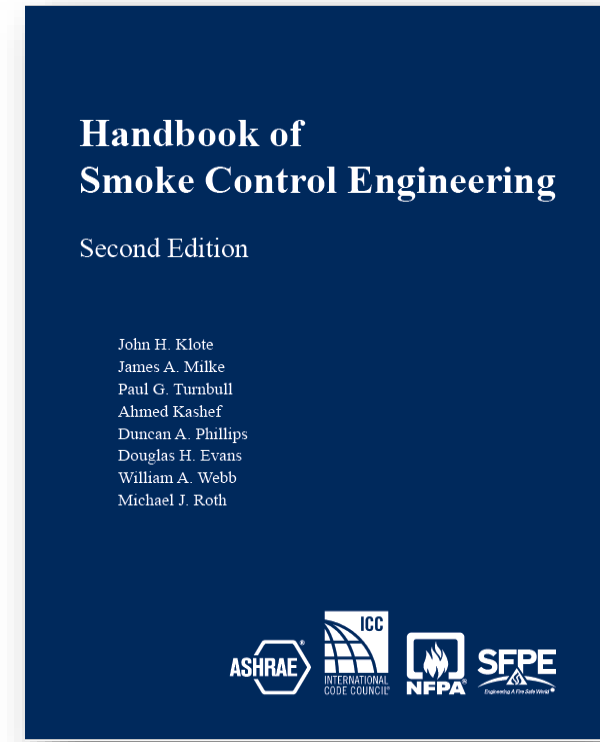
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PDF includes a hyperlinks for download of worksheets. Click on a reference to a section, table, figure, or equation to jump to its location. Return to the previous page via the backarrow icon.

Get the Latest and Greatest Publications



Coming July 1!



Professional Development



ABOUT

TECHNICAL RESOURCES

PROFESSIONAL DEVELOPMENT

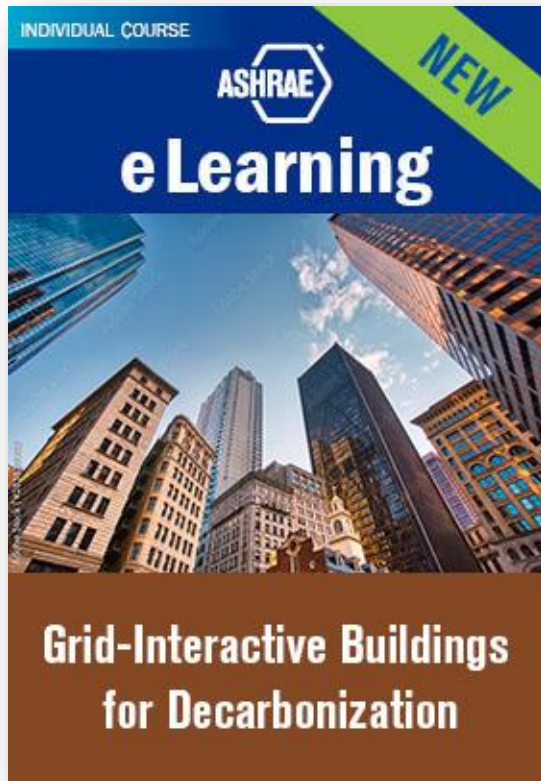
CONFERENCES

COMMUNITIES

MEMBERSHIP

eLearning

New Course



ASHRAE Learning Institute

Free Publication



Empowering professionals to advance their careers and the industry.

Certification

New Certification



Near Record Application Total
SY 2025

Farr and Setty Family Foundation Funds Scholarships for ALI, ACT, and eLearning Registrants

ASHRAE Members in their **first 5 years** of membership get **35% off** one ALI, ACT, or eLearning course—thanks to support from the Farr and Setty Family Foundation Funds!

- ✓ One-time use per Society Year
- ✓ Apply 3 weeks before your course
- ✓ Must include a chapter officer's support letter

Where to apply? Check the page of the course you're interested for an application.



2025 Conferences

[ABOUT](#)[TECHNICAL RESOURCES](#)[PROFESSIONAL DEVELOPMENT](#)[CONFERENCES](#)[COMMUNITIES](#)[MEMBERSHIP](#)

Denver, CO August 13-15, 2025

2025 ASHRAE Conference for Integrated Design, Construction & Operations



Montreal, Canada September 24-26, 2025

IEQ 2025 Conference

Co-Organized by ASHRAE and AIVC



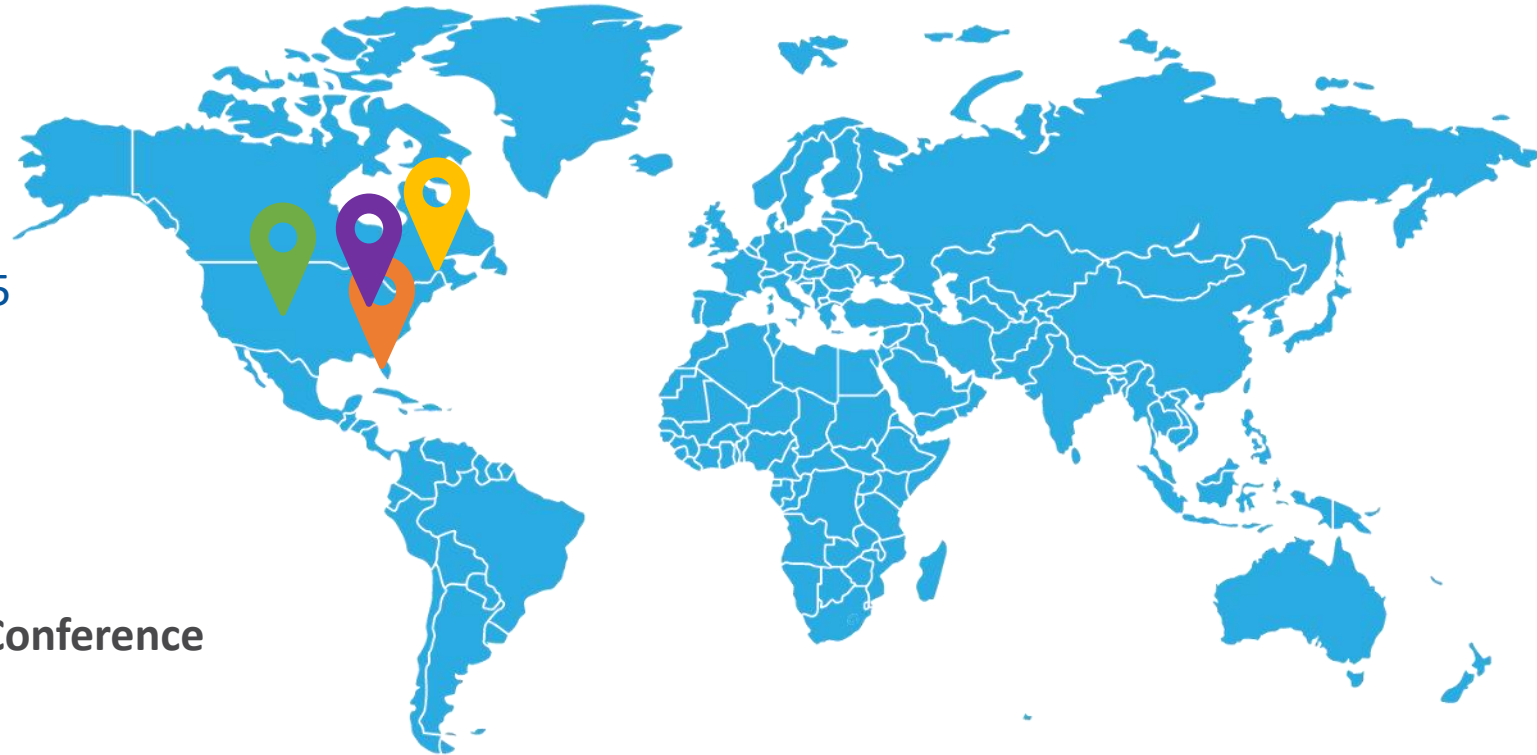
Chicago, IL October 22-24, 2025

2025 ASHRAE Building Decarbonization Conference



Clearwater Beach, FL December 8-11, 2025

2025 Buildings XVI Conference



2026 ASHRAE Winter Conference



[ABOUT](#)

[TECHNICAL RESOURCES](#)

[PROFESSIONAL DEVELOPMENT](#)

[CONFERENCES](#)

[COMMUNITIES](#)

[MEMBERSHIP](#)



2026 ASHRAE WINTER CONFERENCE

Join us in Las Vegas, NV
Jan 31- Feb 4

Registration Opens in September

Committees and Student Scholarships

[ABOUT](#)[TECHNICAL RESOURCES](#)[PROFESSIONAL DEVELOPMENT](#)[CONFERENCES](#)[COMMUNITIES](#)[MEMBERSHIP](#)

Find Committees and Nominate Yourself or Others

**FEB
2026**

February: Nominations for appointed committees are due.

**JUN
2025**

June: Speak with your committee ExO/CO if your current appointment/elected position ends to be nominated for another.

**SEP
2025**

September: Nominations for elected positions are due. (Publications & Education Council, Tech Council, RAC, TAC, Standards, Handbook, Nominating)

Communities > Student Zone > Scholarships

44 Society Scholarships Available for 2025-2026 SY

Each year the ASHRAE Foundation awards scholarships of up to **\$12,500** USD each to qualified students.



Spread the word to students and encourage them to apply.



Consider donating to help support the scholarship program.

New! Find the *ASHRAE-USGBC IAQ for Schools Guide* in the Student Zone Resources.

Membership

[ABOUT](#)[TECHNICAL RESOURCES](#)[PROFESSIONAL DEVELOPMENT](#)[CONFERENCES](#)[COMMUNITIES](#)[MEMBERSHIP](#)

Have you selected your Annual Membership Benefit?

Benefits are selected during the join & renewal process. If you haven't done so, login and select from benefit options available.

eLearning Course  150+ to choose from	ASHRAE Standard or Guideline  100+ to choose from	ASHRAE Handbook  PDF version of the most recent	Handbook Online  4 most recent	ASHRAE Certification Exam Study Guide  3 to choose from
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New, Full Dues Paying Members Automatically Get:

1 Free Registration  to Winter or Annual Conference	&	12 Months FREE  Handbook Online
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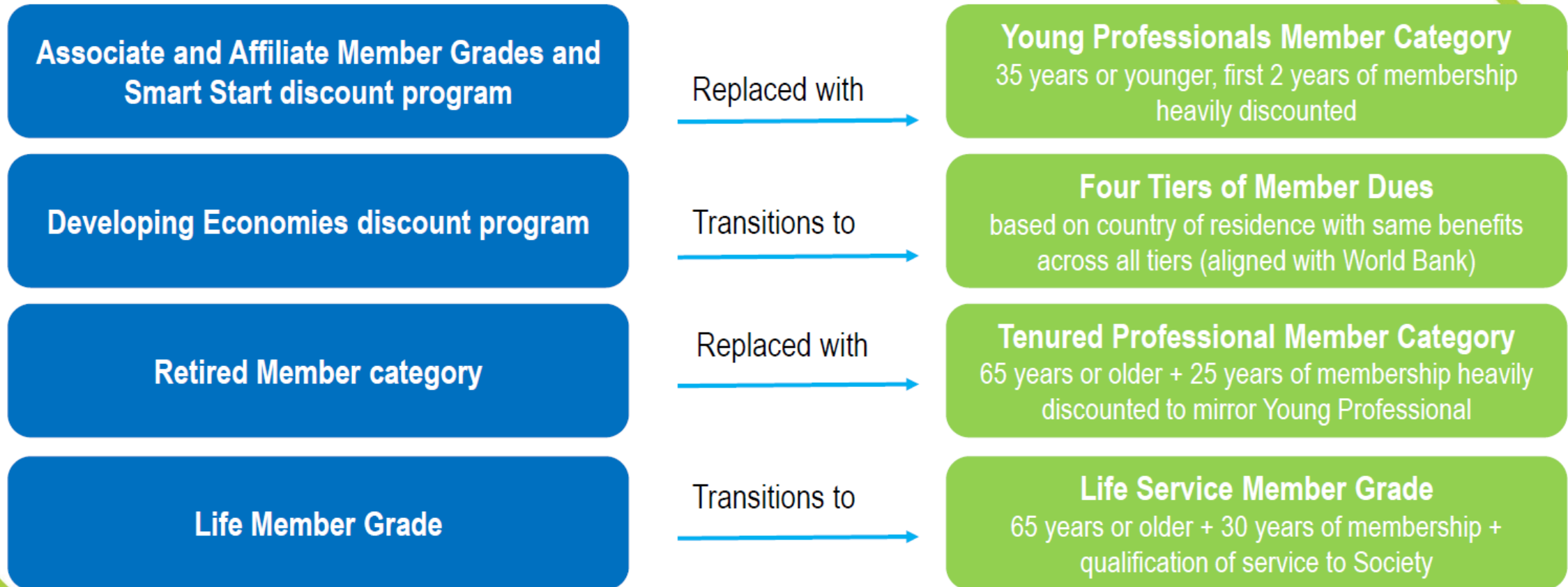
HONORS & AWARDS

The following awards have a DEC 1 deadline:

Andrew T. Boggs Service Award | Distinguished 50 and 75-Year | Distinguished Service Award (DSA) | Eunice Foote Decarbonization Award | Exceptional Service Award (ESA)

Louise & Bill Holladay Distinguished Fellow Award

Proposed Change to Membership Model



Benefits: All Members, even Students, receive access to Handbook Online. Members receive additional annual benefit option
Member Qualifications: Broadened to be more inclusive of anyone interested in the Building Sciences industry



Current Model

Full Member Grade

Full Member	Fellow Member *	Full Member DE	Retired Member	Retired Member DE	Life Member	Presidential Member
100% (\$285)		60% (\$170)	15% (\$45)	50% of RM (\$25)	\$0	
12 years combined experience for post high ed, work, pro engineering reg/license *Good standing for 10+ yrs & elected by BOD			Retired from active participation in business + 10 yrs membership + ≥ 55		30 yrs cumulative member + ≥ 65	Served as Society President
Full Benefits: Subscription to HPB, Journal, Insights + Choice of 1 annual benefit + Tech Portal + Member pricing on publications, standards, courses and conferences		Benefits: Same as Full except subscription to <u>digital</u> Journal and Choice of 1 annual benefit: HB PDF, 1 STD or GDL or eLearning Course		Benefits: Same as Full Member except NO choice of annual benefit.		Benefits: Same as Full Member + waived dues, extreme discounts to W&A Conferences. Invitations to VIP events (Presidential only)
Additional New Member Benefits: Receive a Comp Winter or Annual Conference to attend in first 2 years + HBO access for 1 year		Current Model continues onto next page				

Current Model continues onto next page

Associate Member Grade

Associate Member	Associate Member DE	Smart Start Associate Member	Smart Start Associate Member DE	Life Member
100% (\$285)	60% (\$170)	FY 10% (\$30) SY 37.5% (\$105) TY 50% (\$145)	FY 10% of DE (\$15) SY 37.5% DE (\$65) TY 50% of DE (\$85)	\$0
Work experience and interest in design, operation, maintenance in HVAC&R		3 yr program that allows Students to transfer to Associate grade at a rate that is recent graduate friendly		Associate Member 30 yrs cumulative member + ≥ 65
Full Benefits: Subscription to HPB, Journal, Insights + Choice of 1 annual benefit + Tech Portal + Member pricing on publications, standards, courses and conferences *DE Associate and Smart Start have same benefits as Full Member DE				
Additional New Member Benefits: Receive a Comp Winter or Annual Conference to attend in first 2 years + HBO access for 1 year <u>*Associate DE and Associate Smart Start DE not eligible*</u>				
				Benefits: Same as Full Member + waived dues, extreme discounts to W&A Conferences + Invitations to VIP events





Current Model - Continued

Affiliate Member Grade		Student Member Grade			Other
Affiliate Member	Affiliate Member DE	Student Member	Student Member DE	Student Branch Advisor	Honorary Member
FY 25% (\$70) SY 37.5% (\$105) TY 50% (\$145)	FY \$25% of DE (\$45) SY \$37.5% DE (\$65) TY 50% of DE (\$85)	10% (\$30)	50% of Student Member (\$15)	10% (\$30)	\$0
30 years old OR have been honorably discharged from the Military within 5 yrs		Studying or have interest in HVAC&R industry related field + Must be currently enrolled in university, college, junior college or technical institute		Faculty member who is ASHRAE member & must submit application and submit annual report	Any notable person of preeminent professional distinction & elected by the BOD
Subscription to HPB, Journal & Insights + Tech Portal + Member pricing for publications, courses, standards and conferences		Subscription to HPB, Journal & Insights + Tech Portal + Student Member pricing for publications, courses, standards and conferences + Access to Student Bookstore for heavily discounted publications and printed HB			Full Member Benefits if requested
Cannot hold office or vote		Cannot hold office or vote			



ASHRAE Simplified Model

Member Grade					Student Member Grade		Other			
Member				Young Professional	Tenured Professional	Life Service Member	Presidential Member	Student Member	Student Branch Advisor	Honorary Member
<u>WB</u> Tier 1 100% (\$285)	<u>WB</u> Tier 2 80% (\$230)	<u>WB</u> Tier 3 60% (\$170)	<u>WB</u> Tier 4 40% (\$115)	40% (\$115)		\$0		7.5% (\$20)	20% (\$60)	\$0
Anyone interested in the building sciences industry				Anyone ≤ 35 yo who joins pays this fee first for 2 years	Anyone ≥ 65 yo with 25 years cumulative membership	30 yrs cumulative member + ≥ 65 + DSA or 15 qualifying service points	Served as Society President	Must be currently enrolled in university, college, junior college or technical institute	Faculty member who is ASHRAE member & must submit application and submit annual report	Any notable person of preeminent professional distinction & elected by the BOD
HBO + Journal, HPB, Insights + Tech Portal + Member Pricing + Voting Privileges and Serve as C,R,S level roles Choice of 1: eLearning Course, Certification Study Guide, Standard or Guideline				HBO + Journal, HPB, Insights + Tech Portal + Member Pricing		Same as Member + waived dues, extreme discounts to W&A Conferences. Invitations to VIP events (Presidential Only)		Same as Young and Tenured Professionals		Full Member Benefits if requested
Additional New Member Benefits: Receive a Comp Winter or Annual Conference to attend in first 2 years + HBO access for 1 year										

ASHR

*2025-2026 approved dues rates



ASHRAE® Simplified Model Highlighted Changes

Associate and Affiliate Member Grades and Smart Start discount program

Replaced with

Young Professionals Member Category

35 years or younger, first 2 years of membership heavily discounted

Developing Economies discount program

Transitions to

Four Tiers of Member Dues

based on country of residence with same benefits across all tiers (aligned with World Bank)

Retired Member category

Replaced with

Tenured Professional Member Category

65 years or older + 25 years of membership heavily discounted to mirror Young Professional

Life Member Grade

Transitions to

Life Service Member Grade

65 years or older + 30 years of membership + qualification of service to Society. Members who don't qualify are eligible for discounted Tenured Professional category.

Student Branch Advisor dues rate

Increases to

20% of Full Dues

SBAs would go from paying the same rate as Students (10% - \$30) to paying slightly more at 20% of dues (currently \$60). SBAs would still receive Student pricing to W&A Conferences, the same benefits and access to Handbook Online.

Benefits: All Members, even Students, receive access to Handbook Online. Full Members receive additional annual benefit option.

Member Qualifications: Broadened to be more inclusive of anyone interested in the Building Sciences industry

Reasons for the Changes

Simplification

Support Diversity, Equity and Inclusion

Young Professionals mirrors Tenured Professionals

Lift Member qualifications and restrictions

Same benefits and same dues rate

All members (except Students) can vote

All members (except Students) can hold C,R,S roles

Anyone interested in building sciences can join ASHRAE

Tiered Member Dues match all four Tiers of World Bank

Motion from Region-at-Large CRC Lebanese Chapter

Motion from Region VIII CRC Monterrey Chapter

Slowing the continued growth of Non dues paying Life Members

Added Benefit for ALL Members including Students: HBO

Motion from Region VIII Central OK Chapter

Motion from Region XI CRC Southern Alberta Chapter

MP & SAC

MP

Access to HBO serves as retention tool

When 12-month subscription to HBO ends, member will renew to gain access instantly

Access for students to HBO gives incentive for joining as a Young Professional to keep access

Rewards those who have served Society through different channels with waived dues

Allows members who have 30 years of membership and age 65 or older with significantly discounted dues rate to maintain HBO, Journal and Member Pricing

Recommended Timeline

- **February 2025:** MMAH brought motion to the Board of Directors to approve plan.
 - Motion tabled to allow for 60-day "cooling off period."
- **May BOD Meeting:** BOD approved the final plan and bylaws amendment.
- **2026 Winter Conference:** Bylaws amendment read at the Meeting of the Members (Saturday Plenary Session) in Las Vegas.
- **Spring 2026:** Proposed Bylaws amendment added to Spring Ballot for membership vote
- **June 2026:** Election
- **By June 30, 2027:** If Bylaws amendment are approved, all changes made to membership database, website, promotional materials, ROB, Committee/Council MOPs and training materials. *(Staff and Members Council will need 1 year to implement new model changes)*
- **July 1, 2027:** New model implemented.

Questions? Contact members@ashrae.org



Media Inquiries



**Asked to make a statement
on behalf of ASHRAE?**

Please send all media
inquiries to
publicrelations@ashrae.org
before responding to
members of the press.

Thank you!
Questions or Comments?

[ashrae.org](https://www.ashrae.org)

PROPOSED EXPANSION OF THE GAC WEBSITE TO BETTER SUPPORT GOVERNMENT AFFAIRS GLOBALLY

Recommendation for GAC-SC Approval:

MOTION: Recommends that the GAC expand the scope its existing international website beyond the EU to include the Middle East and Africa (MEA) as a first step toward full global coverage. This will allow ASHRAE to provide and communicate technical information effectively to government officials and policy makers in the MEA. Regular updates would include government outreach events; official ASHRAE testimonies, letters and positions on proposed legislation; the status of energy and energy policy related bills and budgets; governmental hearings, meetings, and conferences; etc. Initial content for the new landing pages would be developed during July-December 2025, and the site would be launched in January 2026.

BACKGROUND:

The GAC's website is an effective and well-established tool for grassroots members to introduce government officials to ASHRAE, as well as the issues that are critical to advancing the arts and sciences of heating, ventilation, air conditioning and refrigeration. Between December 2021 and February 2022, the GAC Communication Coordinator conducted a survey of GAC RVCs and chapter GAC Chairs to identify opportunities to improve the website. Approximately 21% of those survey recipients responded. One of the improvement opportunities identified was to expand the website's scope so that it can be more of a resource to non-U.S. legislative bodies, which are increasingly turning to ASHRAE for technical support.

Because government officials often need information quickly, having a dedicated website in place where there is a ready reserve of geography-specific industry news and ASHRAE technical information would be useful to our members as they seek to lend support to their local governmental bodies. The proposed initial expansion will begin with coverage in those MEA countries where we currently have chapters—Ghana, Nigeria, South Africa, Egypt, and Dubai. Governments in these countries are increasingly looking to ASHRAE for expertise and guidance as they develop codes and regulations for their developing built environments. Notably, in April 2025, the Ghana Section of the Nigeria Chapter was established as a full ASHRAE Chapter. Several

government officials and representatives attended the inauguration ceremony and expressed not only a keen awareness and appreciation for the work that ASHRAE does but also their intention to turn to ASHRAE as a partner as they strengthen their burgeoning building codes.

Under the expanded program, monthly policy updates would be developed for the Middle East and Africa and be distributed to ASHRAE members in those regions on a monthly basis. The information would also be uploaded to the website and be available to all interested persons. Updates would be of similar content to those developed for the U.S. and the E.U. but would be tailored to the circumstances, happenings, and needs of the MEA, particularly the MEA countries with chapters, sections and members.

While the U.S.-focused pages are developed by staff with some input from members, the EU pages are developed with content delivered by Dentons Global Advisors (DGA), an international consulting firm with a foundation in commercial diplomacy and specializing in providing multidisciplinary expertise and high-impact advisory services across geographies and industries. In initial conversations with DGA, they have indicated that they are amenable, available and capable of expanding their work for ASHRAE to include the MEA. Additionally, of note in April 2025, former U.S. DOE Secretary of Energy, Jennifer Granholm joined DGA. In her role at DGA, she will advise multinational corporations, investors, as well as energy and infrastructure firms as they navigate cross-border dynamics – including grid modernization and energy-intensive technologies such as AI and data centers. Her participation makes expanding our existing contract with DGA to include this new international work a wise choice.

FISCAL IMPACT: \$25,000.

The fiscal impact uses an estimated budget provided by Dentons Global Advisors, which currently develops content for the GAC's existing EU webpages.

STAFF IMPACT: 117 hours annually

Marketing staff time of approx. 75 annual hours includes an average of about 4 hours per month plus an initial landing page setup of 15 hours. Marketing staff time includes establishing and maintaining the distribution list, sign-up form, preference center updates, template creation, managing content,

developing auxiliary content, posting to the site, and other coordination activities. Marketing staff would also assist in evaluating the website and developing an annual report for the GAC.

GAC staff time of approx. 42 annual hours includes reviewing and managing content, as well as general oversight. GAC staff would also meet with the GAC Communication Coordinator regularly, evaluate the website annually and develop an annual report for the GAC.

TECHNOLOGY COUNCIL

Notes for GAC 6/20/25

These are notes that I (Heather Schopplein) think will be of interest to the GAC committee. They are a small fraction of the work being done by the Council and its Standing Committees.

Tech Council approved member appointments to the committee to revise the *Infectious Aerosols* PD.

Technology Council recommended to the Board of Directors that the Rules of the Board 2.425.003.6, *Operation*, be approved as shown below:

- (2.425.003.6)
- D. Formation of all new standard project committees and titles, purposes and scopes, shall be approved by the Board of Directors Technology Council or its designee before the project committees take action.

Residential Buildings Committee Leadership gave approval for the new RBC webpages to go live. The two new webpages were created by ASHRAE.

The Global Technical Interaction Committee is preparing a video to promote ASHRAE global technical activities. The goal is to complete the final video by this conference.

The special projects subcommittee is working with CEBD on creating WS (work statements) to get Research RFPs issued for the following approved projects:

- Global ASHRAE Member Needs for Building Decarb Education (CEBD)
- Streamlined, Flexible International Building Code Framework (CEBD)
- Refrigerant Emissions Management, Tracking and Compliance
- Update Equipment Lifespan Tables
- Whole Life Carbon Gap Analysis
- Whole Building MEP Benchmarking Data Research
- Decarbonization Framework for Data Centers
- Residential Retrofits – A Summary of Existing Resources
- Design Guide Supermarket Decarb
- Whole Life Carbon Calculation Guide for Building Systems

Refrigeration/CPCC (REF-CPCC) is revising the *Refrigerants and their Responsible Use* Position Document. The final draft hopes to be approved at this conference.

EHC expects to report their 2025 Trends and Research Gaps report to Tech Council at this Conference.

Technology Council recommended to the Board of Directors that all ASHRAE Regions with Chapters outside United States and Canada to appoint a liaison (Regional position) who will work closely with the GTIC to help in interaction with the ASHRAE Chapters in their Region and help promote exchange of ASHRAE technical resources to meet its objectives.

For Reference Here is a List of Current Position Documents and if they have a PPIB

<u>Position Document Titles</u>	<u>Cognizant Committee</u>	<u>PPIB?</u>
Environmental Tobacco Smoke	EHC	Environmental Tobacco Smoke and Electronic Nicotine Delivery Systems
Building Decarbonization	tbd	Building Decarbonization
Energy Efficiency in Buildings	TC 7.6	No
Unvented Combustion Devices and Indoor Air Quality	EHC	No
Limiting Indoor Mold Growth and Dampness in Buildings Systems	TC 1.12, EHC	No
Resiliency in the Built Environment	TC 2.10	Resiliency in the Built Environment
Climate Change	TC 2.5	Climate Change and the Built Environment
Combustion of Solid Fuels and Indoor Air Quality in Primarily Developing Countries	EHC	No
Human Health and Wellness in the Built Environment	EHC	N/A
Infectious Aerosols	EHC	No
Refrigerants and their Responsible Use	REF	Refrigerants and Their Responsible Use
Indoor Carbon Dioxide	EHC	Indoor Carbon Dioxide, Ventilation and Indoor Air Quality
Indoor Air Quality	EHC	Indoor Air Quality
Filtration and Air Cleaning	EHC	No

Pub-Ed Representative Report to GAC

Megan Tosh – June 20, 2025

- Handbook Committee is implementing the volume restructuring plan developed by the PEC Ad Hoc Subcommittee on Handbook Volume Rebalancing with the 2028 *HVAC Systems and Equipment* volume.
- The Certification Committee will pursue an onsite exam administration at the 2026 Winter Conference to take place at the AHR Expo, leveraging complimentary ALI courses and marketing in order to maximize registrants.
- Through December 31, 2024, 256 certification applications have been processed, which is keeping pace with the 262 applications processed during the same time period in SY 2024, which was a record year for certification applications.
- Publications Committee is finalizing a report that evaluates publication opportunities that support other ASHRAE products & services. This report considered ASHRAE's Public Policy Positions and took feedback from their report on recent legislative action.



Shaping Tomorrow's Global
Built Environment Today

..... Certificate of Appreciation

Presented to

Sheila Hayter

In grateful recognition of your devoted leadership, dedication to
ASHRAE members, focus on inclusivity, and steady and wise guidance
of the ASHRAE Government Affairs Committee.

On this the 20th day of June 2025

Meghan McNulty
GAC Vice-Chair, 2024-2025

Bryan Holcomb
Board Ex-Officio, 2023-2025

SY 2025-2026 GAC Subcommittee Assignments				
Executive	Policy & Programs	Member Mobilization	Global Affairs	Nominating
Meghan McNulty (Chair)	Adrianne Mitani (Chair)	Eleazar Rivera-Mata (Chair)	Luis Miguel Alvarado (Chair)	Mick Schwedler (Chair)
Mick Schwedler (Vice Chair)	Jessica Renner	Dennis Knight	Adrianne Mitani	Meghan McNulty
Adrianne Mitani (Policy and Programs Chair)	Varun Jain	Will Fisher	Geoff Jenks	Adrianne Mitani
Eleazar Rivera-Mata (Member Mobilization Chair)	Victor Nino	Harrison Kesling	Eleazar Rivera-Mata	Eleazar Rivera-Mata
Luis Miguel Alvarado (Global Affairs Chair)	Doug Cage	Adam Doubblestein	Abdul Razaak Syed Mubarak	Luis Miguel Alvarado
Brad Lentz (Communications Coordinator)	Geoff Jenks	Abdul Razaak Syed Mubarak	Ioan Dobosi	Syed Mubarak
Keith Reihl (Members Council Representative)	Alexander Armstrong	Patrick Villaume	Varun Jain	
Megan Tosh (PubEd Council Representative)	Ioan Dobosi	Megan Tosh	Abdallah Mahmoud	
Heather Schopplein (Tech Council Representative)	Keith Reihl	Andy Persily	Heather Schopplein	
Ashish Rakheja (Coordinating Officer/Treasurer)	Philip Marvin Johnston	Artorius Reyes		
Rob Craddock (BOD ExO)				
Alice Yates (Staff Liaison)	Neil Gavigan (Staff Liaison)	Emily Porcari (Staff Liaison)	Jacob Karson (Staff Liaison)	Alice Yates (Staff Liaison)

MBOs for the GAC SY2025- 2026

#	MBO	Subcommittee Assigned	Metric(s)	Strategic Plan Goal/Initiative
1	MBO #1: Incentivize members to follow up with government officials after GOEs Completion date: 6/30/2026	Member Mobilization	- Recommend additional PAOE points for following up with government officials after a GOE - Develop process for follow-up actions from GOEs and incorporate into GOE training. - Develop at least one recommendation that would encourage follow-up with government officials.	#2 – Impact-Focused Engagement <i>Organizational Agility</i>
2	MBO #2: Improve forms for GOE reporting and GAA nominations to increase submissions. Completion date for GAA activities: 09/15/2025 Completion date for GOE activities: 1/31/2026	Member Mobilization	- Identify ways to make GOE reporting form and Award nomination process simpler, shorter, or easier to complete, and revise for use this SY. - Create short video showing how to fill out the revised GOE reporting form. - Create video showing how to prepare a nomination for the Government Affairs Award.	#3 – Increase Accessibility <i>Organizational Agility</i>
3	MBO #3: Implement and improve SMEs for GOEs pilot program. Completion date: 6/30/2025	Policy & Programs	- Refine SME application process. - Review PPIBs, PPPs, and GOEs, and PPPs to identify expertise needs - Schedule 3 government engagements employing ASHRAE SMEs. - Develop evaluation approach to assess effectiveness of initial engagements and prepare summary report. - If continuation or modification of the program is advised, recommend updates to GAC guiding documents to support continuation or modification of the SME program.	#2 – Impact-Focused Engagement <i>Organizational Agility</i>

#	MBO	Subcommittee Assigned	Metric(s)	Strategic Plan Goal/Initiative
4	MBO #4: Consider ways to better inform ASHRAE's technical committees of relevant public policy actions, and to solicit updates from TCs and PCs. Completion date: 6/30/26	Policy & Programs	Develop at least two recommendations for improving connections between ASHRAE technical committees and public policy actions, such as informing Standards Committees of adoptions and references, and developing a process for getting updates on significant PC and TC actions, as well as model code proposals.	#3 – Increase Accessibility <i>Organizational Agility</i>
5	MBO #5: Work with Global Technical Interaction Committee (GTIC) to facilitate sharing of information to avoid duplication of efforts, including through improved understanding of market needs and the tracking and adoption of ASHRAE standards and guidelines around the world. Completion date: 6/30/2026	Global Affairs	- Nominate a liaison from GASC to GTIC and send recommendation to GAC Chair at earliest possible opportunity. - Each member of GASC to provide a list of ASHRAE standards that have been adopted by various jurisdictions in their regions. - Informed by the data above, identify opportunities for ASHRAE Standards adoption, including through scheduling meetings, sharing information about standards, and/or writing advocacy letters for standards adoption.	#1 – Global Leader <i>Healthy, Sustainable and Resilient Communities</i>
6	MBO #6: Provide recommendations to the full committee on priorities for document translation. Completion date: 6/30/2026	Global Affairs	- Develop guidelines for identifying which languages and documents should be prioritized for translation. - Recommend which languages and documents should be prioritized for translation in SY25-26. - Review previously translated documents for necessary updates. - Form work groups to translate priority documents into priority languages.	#1 – Global Leader <i>Organizational Agility</i>

#	MBO	Subcommittee Assigned	Metric(s)	Strategic Plan Goal/Initiative
7	MBO #7: Improve methods for seeking input from ASHRAE members and the Executive Committee on issues to be addressed in the society's public policy priorities. Completion date: 3/31/2026	Executive Subcommittee	Develop 1-2 new outreach tools for seeking input from members and the Executive Committee. Make sure this outreach is done no later than third quarter of the society year so that it can be considered for revising the PPPs for SY26-27.	#2 – Impact-Focused Engagement <i>Organizational Agility</i>
8	MBO #8: Coordinate with Environmental Health Committee (EHC) on emerging IEQ topics, in alignment with SY25-26 Presidential Theme Completion date: 6/30/2026	Executive Subcommittee	- Hold quarterly meetings with EHC Policy Subcommittee Chair and GAC Chair, VC, and PPSC Chair. - Develop 1-2 recommendations to improve GAC-EHC collaboration and responsiveness to emerging IEQ issues.	#1 – Global Leader <i>Emerging Technologies</i>
9	MBO #9: Evaluate feasibility of establishing a “scholarship” fund for public sector workers’ conference attendance through ASHRAE Foundation funding. Completion date: 4/30/2026	Executive Subcommittee	- Determine feasibility, limitations, and costs of a “scholarship” fund to help fund public sector workers’ attendance at ASHRAE conferences. - If feasible, complete an ASHRAE Foundation Board of Trustees funding request form to establish program.	#3 – Increase Accessibility <i>Emerging Technologies</i>
10	MBO #10: Recommend changes to PAOE for next SY. Completion date: 9/30/2025	All SCs	Each SC to develop at least one recommendation to the PAOE.	#3 – Increase Accessibility <i>Organizational Agility</i>

Notes on ASHRAE 2025-2028 STRATEGIC PLAN:

Strategic Goals:

1. Position ASHRAE as the **global leader** in advanced solutions to improve indoor environmental quality (IEQ) and address climate change.
2. Pursue **impact-focused engagement** by targeting stakeholders to support a strong workforce and maximize utilization, adherence, and trust of ASHRAE's global expert resources.
3. Increase the **accessibility** of ASHRAE content, resources, and member opportunities.

Strategic Initiatives:

- Healthy, Sustainable and Resilient Communities
- Empowered Workforce
- Organizational Agility
- Emerging Technologies

Potential Mentor-Mentee Assignments

Mentor:

Mentee(s):

Andy Persily (Colorado)

Brad Lentz, Comms Coordinator (Seattle, WA)
and Mick Schwedler (Wisconsin)

Eleazar Rivera-Mata
(Monterrey, Mexico)

Jessica Renner, Region IX (Omaha, NE)
Alexander Armstrong, Region X (Southern CA)

Doug Cage (KY)

Harrison Kesling, Region IV (North Carolina)
Dennis Knight, Member at Large (South Carolina)

Syed Mubarak (Singapore)

Abdallah Mahmoud (Dubai)