

Meeting Agenda

1. Call to Order (Scott Sherwood) – Meeting called to order at 2:33 PM Eastern

- a. Scott read the scope of TC 2.5 (add link)
- b. Introduction of members and guests
- c. ASHRAE Code of Ethics Commitment
In this and all other ASHRAE meetings, we will act with honesty, fairness, courtesy, competence, integrity and respect for others, and we shall avoid all real or perceived conflicts of interests. (See full Code of Ethics: <https://www.ashrae.org/about-ashrae/ashrae-code-of-ethics>.)
- d. ASHRAE Commitment to Care ([commitment-to-care_2022winter.pdf \(ashrae.org\)](#))
- e. Establish quorum
 - i. Five voting members in attendance, so quorum established.
- f. Revise agenda; accept agenda
Dan Villa moved to approve agenda, Janice Means seconded. No discussion. Motion passed unanimously.
- g. Approvals (if quorum is met):
 - Meeting Minutes: Liz J. moved to approve 2022 Annual Meeting minutes. Renee Clair seconded. No discussion. Motion passed unanimously.

2. Chair's Announcements (Scott Sherwood)

- a. Make sure you are signed up for committee through the ASHRAE website. This will put you on email list. If you have questions, contact Scott Sherwood.
- b. Basecamp access – who can add? Scott will research and come back to the group. Moving forward, the Secretary will add meeting minutes to Basecamp.
- c. TC Chair Meeting
 - i. Feb. 17 deadline for any changes to the committee or sub-committee rosters.
 - ii. There is a 10% discount if company gets 5 new employees to become ASHRAE members. Currently, new full members also get a free summer / winter conference registration.
 - iii. \$3.1M raised in 2022. One-third came from the Chapters.
 - iv. ASHRAE in need of refrigerant experts for the Building Decarbonization Task Force.
 - v. Change to MTGs – Will not have same manual of procedures as a TC. All MTGs will have to apply.
 - vi. Link for hybrid meeting resources
 - vii. RAC expenditures were \$5M in 2022. ASHRAE worked through RTAR backlog, so message is to bring more in. There are 42 current RTARs.
 - viii. TC members – 2021 ASHRAE Strategic Resource Plan – recommended to review and align programs and research around the topics.
 - ix. New Residential TC developed.
 - x. International standards are a big priority for ASHRAE.
 - xi. Climate Change Position Paper:
 1. Current one expires 12/23/23. We will need to either revise or reaffirm before that date. There is a change in format, so it will need to be moved to do that. ASHRAE will do first format change.
 2. If interested in a sub-committee, contact Scott Sherwood. We are also looking for a chair for that sub-committee. We can make minor edits, but nothing major. IPCC AR 6 due out in March or April and committee feels that we should wait until that can be incorporated (current doc used AR 5 as resource).
 3. Recommend that we vote today to Reaffirm the document and update the format.
 4. Janice moves to develop a subcommittee for the Climate Change Position Document. Liz J. seconded. There was discussion about combing through the document to update

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with AR 6 findings after the June meeting. Janice Means would like to participate
Motion passed 5-0 vote.

5. Question was asked about the purpose of a Position Document. It is the official position of the ASHRAE Society on a given topic. It goes through Tech Council and is approved by the board.
6. Membership has to be approved by Tech Council. We recommend who should be on the sub-committee
7. Roster Updates: Joe Rendall listed as CM but will be updated to VM. Several members will be removed as member.

3. Subcommittee Reports

- a. Programs (Daniel Villa)
 - i. Submitting 3rd seminar in Climate Fundamentals program for Tampa. Already have 3 speakers lined up.
 - ii. ASHRAE wants to develop a climate science training course for ASHRAE members.
 - iii. For Tampa, we are also submitting a session on carbon sequestration. Janice has 2 speakers lined up, but needs 3rd speaker that can tie it into buildings. If anyone is interested, let Janice know. Joe Rendall may be interested. Janice will contact him and chair the session.
 - iv. Submittals for Tampa are due Feb. 27
- b. Handbook (Janice Means)
 - i. Had meeting on January 6. Sent info to everyone that was on sub-committee last time. Janice passed around sign-up sheet for those interested in being on committee.
 - ii. Update has to be completed in July 2024.
 - iii. It was noted that the Climate Change Chapter has different Basecamp than TC 2.5.
 - iv. TC 4.2 wants to collaborate on handbook chapters. Janice will coordinate with them.
 - v. There are some issues with refrigerant data in chapter. Janice is looking for help in getting this cleared up. Representative from Chemours agreed to help.
- c. Website (Gerardo Alfonso)
 - i. Website will be updated, once Gerardo gets access again.
 - ii. Will develop short instruction manual on how to use Basecamp.
- d. Research (Elizabeth Jedrlnic)
 - i. Currently have one work statement for RAC. Comments need to be back from co-sponsoring TCs by April 1. There was discussion on content and topic. It was mentioned there is a July 2024 Heat Pump Technical Guide being developed by the Building Decarbonization Task Force. Will resubmit for the May 15 deadline.
 - ii. Talk of increasing research project budget to \$350k. Expect this project to cost \$262k
- e. Standards (Enrica Galasso)
 - i. No update.
- f. MTG.LowGWP (Larry Burns)
 - i. MTG meets twice. First meeting was Sunday and second meeting is Wednesday AM. Covered research and programs in first meeting.
 - ii. Research: Low-GWP refrigerant research is winding down.
 1. 1855 to be published soon
 2. 1884 – SOW nearing completion.
 - iii. Programs: Focus of MTG to get information that has been gathered on Low-GWP out. There will be a collaboration between ASHRAE and AHRI. Proposing two seminars in Tampa.

4. Liaison Reports

- a. Handbook – Stephanie Magis - Not in attendance
- b. Standards – Niels Bidstrup - Not in attendance

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- c. Research – William Hutzel
 - i. RAC is fully back in business. Talking about increasing the amount you can request. Threshold is currently \$250k and anticipate that changing.
- d. Staff – Steve Hammerling - Not in attendance
- e. TC 2.7 – Matt Clark - Not in attendance
- f. TC 2.8 – Renee Clair
 - i. Green Guide to be published this spring, committee to develop Water Energy Nexus guide forming. New research
 - ii. TC 2.10 – Scott Sherwood - Meeting has not occurred.
 - iii. TC 7.1 – Eric Haley - Not in attendance
- g. TC 9.9 – Gerardo Alfonso
 - i. Published guidelines and available in the bookstore. Working on new updates to guidelines.
 - ii. SSPC 90.1 – Don Brundage - Not in attendance
 - iii. SSPC 90.4 – Gerardo - No update.
- h. Previously suggested: TC 5.10, TC 6.7, SSPC 189.1, SSPC 100

5. Update Reports on Related Treaties, Accords, and Activities (Round Table Discussion)N

- a. Proposal expected from the EU Parliament on PFAS regulations tomorrow. Many refrigerants could be included in new definition. There will be time for public review and comments. Expect to be finalized in 2024. Larry xxx will share link with details for those that are interested.

6. New Business

- a. Governmental updates
 - i. Minnesota announced yesterday that it will hit 100% decarbonization by 2040 for energy distribution sector.
- b. Building Decarbonization Task Force:
 - i. Four major areas are supported by the Resource and Knowledge Hub that was created by the Task Force.
 - 1. Position Document
 - 2. Education
 - 3. Standards: Addressed in several ASHRAE standards. New standard on embodied carbon LCA to be developed. Standard 240P with ICC – whole life embodied carbon approach. First meeting was first part of year. Second meeting later in January. Fast tracking the standard development.
 - 4. Technical Tools: Producing Tech Guides and ALI courses as resources for industry. BPS Tech Resource Guide released last week.
 - 5. CIBC TM65 – Looking to expand to other regions outside the UK.
- c. TC 2.5 Title and Scope: Rewrote scope a couple of years ago to include buildings impact on the environment, as well as the environment's impact on buildings. Should we rewrite to include decarbonization? The group discussed adding decarbonization. Ozone depletion is referenced and is outdated.
- d. Janice moved to table discussion. Scott Sherwood will write draft for revised scope. Will revisit in Tampa.
- e. YEA trying to get members engaged more in TC meetings. Liz J. asked the group to be welcoming when they attend.

7. Adjourn

- a. Renee Clair motioned to adjourn. Daniel Villa seconded. Meeting adjourned at 4:30 PM Eastern.

Meeting Attendees:

TC 2.5 Global Climate Change
Main Meeting
Monday February 6, 2023 2:30pm-4:30am
Omni North International A

Attendee Name	Affiliation	TC Involvement	Email Address	VM	YEA	Int'l
Scott Sherwood	Eco-Care Corp.	Chair	ImproveYourAir@gmail.com	Y		
Renee Clair	JCI	Secretary	renee.m.clair@jci.com	Y		
Daniel Villa	Sandia National Labs	Program	dlvilla@sandia.gov	Y		
Elizabeth Jedrlnic	Trane	Research	elizabeth.jedrlnic@trane.cp	Y	Y	
Janice K. Means	Retired from Lawrence Tech U	Handbook	jmeans@ltu.edu	Y		
Xin Qin	SLR	CM	xqin@slrconsulting.com			Y
Gerardo Alfonso	Ingeal	CM	ventas@ingeal.com			Y
Larry Burns	Carrier	CM	larry.burns@carrier.com			
Eric Peterson	University of Leeds, UK	CM	e.peterson@leeds.ac.uk			Y
Philip Jarrett	ECCC	CM	pjilip.jarrett@eccc.com			Y
Praveen Cheekatamarla	Oak Ridge National Laboratory	CM	cheekatamapk@ornl.gov			
Jim Wolf	Global Policy Associates	CM	gpawolf87@ad.com			
Don Colliver	University of Kentucky	CM	dcolliver@uky.edu			
Parag Rastogi	Aranco	CM	prastogi@aranco.com		Y	
Joshua DeYoung	KCC	CM	jdeyoung@kccmfg.com		Y	
Dru Crawley	Bentley Systems	PCM	dbcrawley@gmail.com			
Carrie Monplaisir	Clark Nexsen	PCM	carrie.monplaisir@gmail.com		Y	
Carrie Brown	Resource ReFocus	PCM	carrie@resourcerefocus.com			
Juan Alfonso	Ingeal	Guest	ventas@ingeal.com			Y
Stephen V. Spletzer	Chemours	Guest	steohen.spletzer@chemours.com			
Tao Yang	Texas A&M University	Guest	taoyang@tamu.edu			
Kurt Rindoks	Kewdunee Scientific	Guest	kurtrindoks@kewdunee.com			
Tim Pfeiffer	Oklahoma State University	Guest	tim.pfeiffer@okstate.edu		Y	Y
Ruiji Sun	UC Berkeley	Guest	ruijis@berkeley.edu		Y	
Keith Reihl	Houston Airport Systems	Guest	reihl@scobell.bet			Y
Emily Porean	ASHRAE Staff	Guest	eprean@ashrae.org			
Yan Zhao	GTI Energy	Guest	yanz33@uci.edu			
Ali Jalalzadeh		Guest	ali.jalal2012@gmail.com			
Yujie Xu	LBNL	Guest	yujie@alnl.gov			
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Stephanie Mages	Compass Rose Consultants	Guest/Handbook Liason	s.mages@yahoo.com			
TOTAL				31 Present	5	6