

## ASHRAE Technical Committee 2.5 – Global Climate Change Minutes

### 2021 Virtual Summer Conference

#### Zoom Meeting

Tuesday, June 22, 2021 – 1:00 PM – 3:00 PM

## Meeting Agenda

### 1. Call to Order (Matt Clark)

- a. Introduction of members and guests
- b. 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>.)
- c. Establish quorum
- d. Revise agenda; accept agenda
- e. Approvals (if quorum is met):
  - i. Meeting Minutes – January 2021 Virtual Winter Meeting

### 2. Chairman's Announcements (Matt Clark)

- a. Report of TC/TG Chair's Meeting
  - i. Request for TC mergers. Has been happening and some committees are going through the process. TC 2.5 not impacted.
  - ii. ASHRAE certification committee is looking for ideas for potential certification credits. If group has ideas, we can discuss during new business.
  - iii. ASHRAE Winter meeting Jan 29-Feb 2 in Las Vegas. Expo Jan 31 – Feb 2
- b. Review of previous action items

### 3. Roster Updates (Matt Clark)

- a. Reviewed roster. All current VM are valid through June 2022. No current revisions needed. Would like to propose adding Daniel Villa and Enrica Galasso as Voting Members.
- b. Beth Tomlinson is Handbook Chair until summer of 2022. She will reach out to the Handbook Sub-Committee. Would like to get a Vice Chair for that group to work with her now.
- c. Roster updates due by June 28. Anyone that has been active and is interested in a VM position should send an email to Matt.

### 4. Subcommittee Reports

- a. Programs (Daniel Villa)
  - i. Meeting on 6/21. Action items include submitting a seminar idea for the Winter Meeting in Las Vegas. Beth Tomlinson is submitting.
  - ii. Ideas for Ontario and beyond: As a TC, we need to request climate focused keynote speakers. 4-5 high profile speakers with contact info and short bio. Daniel will write letter to Conference Formation Committee. Looking for ideas and will submit prioritized list.
  - iii. Going to suggest a track focused on Ethics / Energy & Climate Justice.
  - iv. Temporary sub-committee to draft a reference on what TC 2.5 has to offer concerning climate change. Will distribute to Section Heads.
- b. Handbook (Beth Tomlinson)
  - i. Officially published Climate Change Chapter in the 2021 Fundamentals Handbook.
  - ii. Database error meant that the contributors were not mentioned in the printed version. ASHRAE is going to update the online version and distribute an errata with contributors. Not reprinting any hard copies.
  - iii. No sub-committee meeting during Summer Conference.
  - iv. Beth will setup plan for Vice Chair. Will attend the training session at the Winter Conference.
  - v. ASHRAE sending an article about the chapter and what it is intended to accomplish. Beth will share what they print when it comes out.
  - vi. Group thanked Beth for her leadership and everyone that contributed to the Chapter.
  - vii. Climate Scientists that contributed have agreed to continue to participate as we make revisions to the Chapter.
- c. Website (Gerardo Alfonso)

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- i. Website is updated. If you want more info published to share with the Society, send to Gerardo and he will put it on the website. [Index | ASHRAE 2.5 Global Climate Change \(ashraetcs.org\)](https://ashraetcs.org)
  - ii. Beth mentioned additional content that we could not include in the Handbook Chapter that we want to link to online (i.e. global climate zone differences). Content ideas should be sent to Gerardo.
- d. Research (Elizabeth Jedrlnic)
  - i. Liz was not in attendance. Matt gave report in her absence. ASHRAE continues to fund existing research, but not currently funding new research. No research Chair breakfast this year due to funding restrictions. Research also met yesterday. RTARs are still being accepted.
  - ii. Literature search and road map for value added by mitigating climate change. Small team pulled together to do this.
  - iii. Development of HVAC equipment testing that looks at and develops testing standards for climate change. This will follow the literature search.
  - iv. Has there been any discussion about research on new weather data for future design? 4.2 is has talked about using weather data. Main meeting on 6/23, so could be some discussion on this then. Beth is planning on attending and will touch base on status. Could be a joint effort between TC 4.2 and TC 2.5. TC 7.9 Building Commissioning is also really interested.
  - v. There is a Task Force under 189.1 that is looking at risk assessment guidance. This is a growing area and there are automated tools that are emerging. Since the private sector is advanced in these tools, the question is being asked if ASHRAE should do something or just point people to range of tools already available.
- e. Standards (Enrica Galasso)
  - i. If there are any standards that we want to offer guidelines to, Enrica would like to get that input. It has been difficult to gather information with the virtual setting.
  - ii. Discussion about a section on calculations as an addition to Chapter or if we can we push that to standards. How should CO2 impact be calculated based on HVACR equipment used? Would a standard or guideline be more appropriate? Next step is to gather folks from Handbook Sub-Committee to discuss before the next conference to draft what we would be proposing. Enrica will setup meeting. If interested in joining, send note to Matt & Enrica
- f. MTG.LowGWP (Larry Burns, John Karakash)
  - i. Committee not meeting until later this summer.
  - ii. Jim Wolf is the Committee Chair and provided an update. There are 2 active projects.
    - 1. 1855 – Survey of detection devices. Ready to finalize report. Waiting for input from AHRI. Expected to be finalized in the next couple of months.
    - 2. 1806 – Development of modeling tool. Still in pilot phase. Determining if moving to next version.
    - 3. Programs – Updates on projects, plus activity with AHRI and UL in Las Vegas.
    - 4. Working closely with AHRI to incorporate Standards 15 and 15.2 in model codes. Anticipate on January 1, 2025 you will not be able to ship equipment with HFCs. Next meeting expected in July.

#### 5. Liaison Reports

- a. Handbook – Javier Korenko
  - i. No report
- b. Standards – Niels Bidstrup
- c. Research - TBD
- d. Staff – Steve Hammerling
- e. TC 2.7 – Matt Clark
  - i. No report. Meeting this Thursday.
- f. TC 2.8 – Renee Clair
  - i. No report. Meeting on Sunday.
- g. TC 2.10 – Scott Sherwood

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- i. Beth gave update - Focus on shocks. Missing climate adaptation in scope. Willing to work with our committee to include. Renee to get additional information from Carol. Jason is chair of new proposed Resilience chapter. Not sure what Handbook it will be part of. If someone is interested in helping, reach out to Jason.
- h. TC 7.1 – Eric Haley
  - i. Integrated building design. Looking at scope and title because over time it has evolved to also look at integrated project delivery and building management. Handbook chapter for 2023. Draft expected for Las Vegas meeting. Always looking to sponsor or co-sponsor new research projects. We had a quick overview of integrated project delivery in our Chapter. Beth asked for Eric to pass that along to the committee.
- i. TC 9.9 – Gerardo Alfonso
  - i. Main committee meeting was last week.
- j. SSPC 90.1 – Don Brundage
  - i. No report.
- k. Previously suggested: TC 5.10, TC 6.7, SSPC 189.1, SSPC 100
- l. TC 4.2 – Michael Roth
  - i. Idea of trends in climate data was added to handbook. If interested, group should check out that content.
- m. Who should take on topic of climate change risk assessment? Commissioning TCs and 189.1. Not just new design, but also part of retro-commissioning. There has been some discussion about generating a MTG. Would TC 2.5 be interested in participating? Yes. Matt can reach out to Section Head to understand process. Beth has list of interested TCs and we can reach out to figure out next steps.
- n. Add TC 7.9 to liaison report - Beth

#### 6. Update Reports on Related Treaties, Accords, and Activities (Round Table Discussion)

- a. No discussion.

#### 7. New Business

- a. Governmental Updates
  - i. Idea is to appoint someone that does GA in their day job to give an update to the group at each meeting. If anyone is interested in this role, let Matt know. Will be roundtable discussion until someone volunteers.
  - ii. Big push for building electrification. DOE putting out challenges for companies to develop cold weather heat pumps.
  - iii. Sandia created new division on climate change and energy efficiency. Expect funding to be much more generous. EERE Office is looking at a \$1B budget, which is a huge increase.
  - iv. A couple of states have Built to Last Act. Asking NOAA to provide projected climate info in a standardized format. Is this a resource that ASHRAE can use? Renee to reach out to colleague to understand likelihood of bill passing.
- b. Strategic Plan
  - i. Focus from refrigerants to climate change, risk assessments and standards we can develop.
  - ii. Task Forces are a new thing for ASHRAE. Started with COVID-19 Task Force.
  - iii. Katherine reported on the on Decarbonization Task Force. She is leading the Grid Building Intersection sub-group. Gathering the TC relationships and SPC and SSPC relationships. Have over 100 volunteers and more coming on each day. Expect that each TC with an interest in the subject is represented, but doing the cross tally to confirm. If interested, go to the ASHRAE decarbonization website to volunteer or send email to [decarb@ashrae.org](mailto:decarb@ashrae.org)
  - iv. There is a public policy issue brief on Building Decarbonization. Official position document on Building Decarbonization is under development.
  - v. Question was asked where refrigerant management falls. Expects it is under the Appliance and Equipment Standards sub-group.

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- c. Review of Previous Action Items
  - i. Update on position document: It was recommended to ASHRAE to reaffirm it. Want to wait for AR6 to come out before updating. Does not have sub-committee identified yet for next cycle and needs to find out timing. Can it be updated outside of the three-year cycle? Expect there will be significant revisions after AR 6 comes out. Volunteers are identified in last meeting's minutes. Anyone else interested, let Matt know via email. Scott Sherwood and Gerardo Alfonso volunteered to be part of sub-committee.
  - ii. Strategic Plan – 2.10 is the authority for Resilience. Matt will get more information on the Strategic Plan process.
  - iii. Basecamp – if not added or have an issue, let Matt know. Also, feel free to share government updates with group. Folders for governmental updates. Gerardo needs to be added

#### 8. Adjourn

- a. Gerardo motion to adjourn. Beth seconded. Meeting adjourned at 2:43 eastern.

#### Meeting Attendees:

- 1.) Scott Sherwood, EcoCare NY, Vice Chair TC 2.5
- 2.) Russell Taylor; Carrier Corporation; [Russell.Taylor@carrier.com](mailto:Russell.Taylor@carrier.com)
- 3.) Elizabeth Tomlinson, TKDA, TC2.5 Handbook Chair, VM, [Elizabeth.Tomlinson@tkda.com](mailto:Elizabeth.Tomlinson@tkda.com)
- 4.) William Ryan University of Illinois at Chicago Corresponding Member, [wryan@uic.edu](mailto:wryan@uic.edu)
- 5.) Michael Roth; Klimaat; CM; [michael.roth@klimaat.ca](mailto:michael.roth@klimaat.ca)
- 6.) Daniel Villa, Sandia National Laboratories, [dlvilla@sandia.gov](mailto:dlvilla@sandia.gov), TC2.5 Programs Chair
- 7.) Alex Corvino, WSP, [alexander.corvino@wsp.com](mailto:alexander.corvino@wsp.com)
- 8.) Gerardo Alfonso. Ingeal, Bogotá, Colombia. Webmaster
- 9.) Joseph Rendall, Postdoc ORNL, [rendalljd@ornl.gov](mailto:rendalljd@ornl.gov)
- 10.) Charlie Hon True Manufacturing REF-CPCC TC 10.07 [chon@truemfg.com](mailto:chon@truemfg.com)
- 11.) Jacob Moberg, Stan Weaver and Company, Orlando FL, [jmoberg@stanweaver.com](mailto:jmoberg@stanweaver.com)
- 12.) Shams Shaikh, Infinitum Electric, [shams@infinitumelectric.com](mailto:shams@infinitumelectric.com),
- 13.) Jim Wolf, [gpawolf87@aol.com](mailto:gpawolf87@aol.com)
- 14.) Gerardo Alfonso, INGEAL, [ventas@ingeal.com](mailto:ventas@ingeal.com)
- 15.) Rafi Karim, AEI, [rkarim@aeieng.com](mailto:rkarim@aeieng.com)
- 16.) Matt Clark, TC 2.5 Chair, Carrier Corporation, [Matthew.m.clark@carrier.com](mailto:Matthew.m.clark@carrier.com)
- 17.) Enrica Galasso, Standards Subcommittee Chair, [enrinca.galasso@nationalgrid.com](mailto:enrinca.galasso@nationalgrid.com)
- 18.) Renee Clair, VM, Secretary, Johnson Controls, [renee.m.clair@jci.com](mailto:renee.m.clair@jci.com)