



**1791 Tullie Circle, N.E./Atlanta, GA 30329
404-636-8400**

TC/TG/MTG/TRG MINUTES COVER SHEET

(Minutes of all Meetings are to be distributed to all persons listed below within 60 days following the meeting.)

TC/TG/MTG/TRG No. 2.5 DATE 01/31/2017

TC/TG/MTG/TRG TITLE Global Climate Change
DATE OF MEETING 31 January 2017 LOCATION Las Vegas

MEMBERS PRESENT	YEAR APPTD	MEMBERS ABSENT	YEAR APPTD	EX-OFFICIO MEMBERS AND ADDITIONAL ATTENDANCE
William Walter -NQ	2015	Eric	2015	See Attachment A
Alamelu Brooks	2015	Cynthia		
	2015	Julian deBullet		
	2015	David Godwin		
	2015			
	2015			

DISTRIBUTION: All Members of TC/TG/MTG/TRG plus the following:

TAC Section Head: Bert Phillips	SH2@ashrae.net
All Committee Liaisons As Shown On TC/TG/MTG/TRG Rosters (Research, Standards, ALI, etc.)	See ASHRAE email alias list for needed addresses.
Mike Vaughn, Manager Of Research & Technical Services	MORTS@ashrae.net

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DRAFT MINUTES

Technical Committee TC 2.5 (*Global Climate Change*)¹

Las Vegas, NV

Tuesday, 31 January 2017, 1:30 - 3:30 pm

1. CALL TO ORDER []

- 1.1. Introduction of members and guests: Meeting was called to order at 1:30, and Eric, the chair was absent; Enrica, the Vice Chair requested all participants to introduce themselves. A sign-in sheet was circulated (Attachment A)
- 1.2. Agenda revision / acceptance – No changes or revisions.
- 1.3. Establishment of a quorum – With 2 of 7 voting members present, quorum was not established.
- 1.4. – Not approved since no quorum. The minutes were posted to the website.
 - Meeting Minutes – January 2016 Winter Meeting, Orlando, Florida
 - Meeting Minutes – June 2016 Annual Meeting, St. Louis, Missouri

2. CHAIRMAN’S ANNOUNCEMENTS [Enrica Updated the information on

- 2.1. Report of TC/TG Chairs’ Meeting –Enrica provided on 3.5 cut-off

ACTION ITEM 1.

- 2.2. Review of 2016-2017 roster, Subcommittee Assignments – Many of the incoming leaders are changing their positions at work, and may not be able to participate in the TC’s meetings. Replacements were identified. Eric rolled up as chair, and Erica Galasso became the vice-chair. Scott Sherwood was unanimously accepted as Research and Program Subcommittee Chairs. Michael Monroe is the webmaster. **ACTION ITEM 2.**

3. Update on Society’s Climate Change Position Document (Don Brundage)

4. Liaison Reports

- Dr. Pawel Wargocki updated on research
- Cyrus Nasserli gave a status on standard
- Michael Vaughn refreshed on staff

5. Subcommittee Reports highlighted as below

- Programs (Scott Sherwood)
- Handbook (Van Baxter)
- Climate Change Chapter for 2021 Handbook (Alamelu Brooks)
- Website (Michael Munroe)
- Research (Scott Sherwood)
- Standards (William Walter)

6. LIAISON REPORTS

The RAC liaison encouraged the TC to identify a Research Subcommittee Chair, to participate in the Monday morning research breakfast, and to propose research. Our TC’s theme is a high priority for the Society.

7. SUBCOMMITTEE REPORTS

7.1. Program Report:

- 7.1.1. Attended the Program Sub-Committee Chair Meeting and met all other Section 2 TC Program chairs, as well as, Ann Peratt. Slide presentation was given on deadline for submissions of Program Seminars, Focus Groups, and conference Papers.

¹ SCOPE: TC 2.5 is concerned with the impact that the activities of the HVAC&R industry may have on the global environment, including greenhouse warming and ozone depletion. This Task Group coordinates activities and planning for the Society to address these issues. This includes identifying factors within the scope of the HVAC industry, which may impact, favorably and unfavorably, the global environment and the role that ASHRAE is serving and could serve.

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7.1.2. Tracks announced for Long Beach as follows:

- 7.1.2.1. Fundamentals and Applications
- 7.1.2.2. HVAC&R
- 7.1.2.3. Refrigeration
- 7.1.2.4. Building Life Safety Systems
- 7.1.2.5. Controls
- 7.1.2.6. Commissioning
- 7.1.2.7. Net Zero Energy Buildings
- 7.1.2.8. Residential Buildings
- 7.1.2.9. Research Summit

7.1.3. After discussion with Ann Peratt, it was agreed that “Superstrom Sandy” seminar would fit best in the Track 4: Building Life Safety Systems.

7.1.4. TC 2.5 will be submitting a program titled “SuperStorm Sandy – How to design HVAC&R & Life Safety Systems under extreme climate events – Flooding”.

7.1.5. Discussed in depth with both TC 2.8 (Sustainability) and TC4.2 (Climatic Informatic) about co-sponsoring the “Superstorm Sandy” program and received their preliminary acceptance, once they bring it to their respective TC membership for discussion.

7.1.6. Learned the point system developed by ASHRAE in selection of which Seminars get accepted.

7.1.7. Should have completed submissions and speaker list within 2 weeks to forward to Tc2.5 membership for discussion and comments.

7.2. Research Report:

7.2.1. Attended the Research Sub-Committee Chair Meeting and met all other Section 2 TC Research chairs.

7.2.2. Research Liason Pawel Wargocki wants every TC to have at least one Research (RTAR) ready for Long Beach meeting.

7.2.3. There is a new Innovation Research Grant (\$5,000) for students. It was encouraged to have students apply if their research is innovative.

7.2.4. I spoke with Pawel W. and Mike Vaugh (Section 2 RAC director) and discussed having 1 ideas available for Research Sub-Committee meeting, which will be a first for TC2.5.

7.2.5. Discussed with both TC 2.8 (Sustainability) and TC4.2 (Climatic Informatic) about coordinated our efforts and meetings so each could attend the other (especially the Main meeting).

7.3. Handbook [Baxter] – Baxter could not continue as handbook subcommittee chair and Alamelu will be the subcommittee chair

7.3.1. Climate Change Chapter for Handbook - Alamelu will develop a schedule to get the chapter completed at least 50% by June in order for the TC. It was suggested not to expedite the handbook chapters since it would be published in 2021. However, Baxter indicated that it would be better to publish online and get reviews before it gets published as a legal chapter.

8. **OTHER BUSINESS**

- Motion (Letter Ballot): Do you approve of the draft Climate Change Position Document dated January 13, 2017 that includes David Godwin’s comments? 4-0-1-CV; motion passed
- Motion (Letter Ballot): Do you approve of the draft Climate Change Position Document dated January 11, 2017 that includes Scott Wayland’s comments? 3-0-2-CV; motion failed

9. **ADJOURN** at 3:30.

**TC 2.5 Action Items
Las Vegas Meeting**

Item	Responsible Party	Action
1.	Eric Sturm	Follow-up with CEC about why 3.5 is the criteria for acceptable presentation if 3 is an average.
2.	Alamelu Brooks	Begin assembling the Climate Change Chapter and provide the draft to TC before Long Beach.

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TC 2.5 Global Climate Change Sign-in Sheet

Meeting Info: 2017 Winter Meeting, Las Vegas, Nevada

Date: Tuesday, January 31, 2017

Name	Affiliation	E-mail	Member (Volting, Corresponding, or Guest)	VEA Member? (Y/N)
ENRICA GALASSO	CARRIER	enrica.galasso@carriere.com	CM - Vice Chair	Yes
G.D. MATHUR	CAISONIC	gd-mathur@cl-mail.com	CM	
ALAN CLEW BROOKS	ICF	alanmclbrooks@icf.com	Volting - Secretary	No
BILL WALTER	CARRIER	william.f.walter@carriere.com	VMNG	No
Manalee Nohar	Bright Power, Inc	naharmanalee@gmail.com	Guest	Yes
Felix Florin	Dakin	felix.florin@dkin.com	CM	N
Anthony Fontana	Freuhafer SE	afontana@esse.freuhafer.com	V	N
Van Baxter	ORNL	vdbaxter@ornl.gov	CM	N
DAVID WARD	CONSULTANT	david.ward@ren.com	NO	NO
Anna Brannon	Integral Group	abrannon@integralgroup.com	Guest	Y

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Name	Affiliation	E-mail	Member (Voting, Corresponding, or Guest)	YEA Member? (Yes/No)
Jerome Lemens	Jacobs Engineering	jerome.lemens@jacobs.com	CI REP SPENDING	NO
PAUL WREGLER	DTU	PAUL@BKG.DTU.DK	RL 506402	NO
Mihir Nandkeolyar	Johnson Controls	Mihir.Nandkeolyar@JCI.com	Guest	NO
Don Brundage	southern company	don.brundage@scs.com	Corresponding	NO
MELISSA ALLEN	ORNL	allenm@ornl.gov		NO
Hua Ge	Concordia Univ.	hua.ge@concordia.ca	Guest	NO
Scott Sherwood	EcoCare Corp.	ImproveYourAir@gmail.com	Corresponding	NO
CARSEN BANISTER	NATIONAL RESEARCH COUNCIL CANADA	carsen.banister@gmail.com	Guest	NO
Stefan Gracik	Integral Group	sgracik@integralgroup.com	Guest	Y
CARLO BAVUZZI	PHD STUDENT	carlo_bavuzzi@umh.br	Guest	NO

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Name	Affiliation	E-mail	Member (Voting, Corresponding, or Guest)	YEA Member? (Yes/No)
Peter Armstrong	Masdar Inst	parms@mit.edu	G	N
Dave Godwin	US EPA	Godwin.Dave@epa.gov	?	N
Dario Azevedo	University of Maine	DarioAzevedo@maine.edu	N	N
Charles Culp				

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