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**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 7/29/2016

TC/TG/MTG/TRG TITLE Global Climate Change  
DATE OF MEETING 28 June 2016 LOCATION St. Louis

MEMBERS PRESENT	YEAR APPTD	MEMBERS ABSENT	YEAR APPTD	EX-OFFICIO MEMBERS AND ADDITIONAL ATTENDANCE
Matthew Ritter	2015	Julian de Bullet	2015	See Attachment A
Eric Sturm	2015			
Cynthia Gage	2015			
William Walter -NQ	2015			
Brian Smith	2015			
Alamelu Brooks	2015			

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

TAC Section Head:	SHx@ashrae.net Where x is the section number
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

**DRAFT MINUTES**  
Technical Committee TC 2.5 (*Global Climate Change*)<sup>1</sup>  
St. Louis, MO  
Tuesday, 28 June 2016, 1:30 - 3:30 pm

1. **CALL TO ORDER** [Matt Ritter]

- 1.1. Introduction of members and guests: Meeting was called to order at 1:30, and Matt 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 5 of 7 voting members present, quorum was established.
- 1.4. Approval of 26 January 2016 (Orlando, FL) minutes. The minutes were not posted to the website, and so could not be voted on.

2. **CHAIRMAN'S ANNOUNCEMENTS** [Matt Ritter]

- 2.1. Report of TC/TG Chairs' Meeting – The notes from the Section meeting are attached (Attachment B). Matt highlighted that in early July, an email will come out to request if you want a letter of thanks sent to your employer. Two new MTGs have been formed. Twelve speakers from the Orlando meeting got unacceptable ratings (rating below 3.5 out of 5). They will receive a letter indicating that if they get two more unacceptable ratings, they will have to have speaker training. An extensive discussion occurred that a score of 3 is average. Many did not know that 3.5 is failing. Eric will find out from CEC why 3.5 is the cut-off for acceptable.

**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. Matt will have to roll off as chair, and Eric will roll up as chair. Erica Galasso will become the vice-chair. Scott Sherwood agreed to perform as Research and Program Subcommittee Chairs. Bill Walter can no longer serve as Low.MTG liaison. The Low.MTG alternate, Larry Burns, will roll up to be our rep. Michael Monroe will move on as webmaster. **ACTION ITEM 2.**

3. **UPDATE REPORTS ON RELATED TREATIES/ACCORDS AND ACTIVITIES** [Round Table Discussion]

3.1. International Treaties on Climate and Ozone

- 3.1.1. UNFCCC Bonn – Past President Jim Wolf provided the following information. The Paris agreement is quasi-voluntary with intended reduction plans for the period 2020-2025. Each country set their own baselines, deadlines, and reductions. US is using 2005 as base of reference. This agreement is first time all countries are engaged. However, combined these agreements will not meet the desired goal of less than 2 degree rise. Every five years each country will develop more restrictions. In 2017 they will set goals for next five year window of 2025-2030. There was a green climate fund put together to help the developing countries. The fund is very short of needs. There is an agreement for reporting their reduction status. Still needed are some guidelines on how to report. Six gasses are controlled under this including the HCFCs. Some of the country goals addressed these compounds, but most of the goals are addressing energy side.
- 3.1.2. Montreal Protocol HFC Amendment – Past President Jim Wolf presented this information. The parties are working toward an amendment for 2016 with a production/use step down and timeframes for the steps. Next meeting is Vienna. Gulf countries are holding out because of the high temperatures conditions which don't have good alternative refrigerants. The 2L refrigerants could work, except for safety restrictions on

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<sup>1</sup> 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.

their use. This is one of the drivers for the new ASHRAE and US government initiative on 2L announced at this conference.

- 3.2. European F-Gas Update – These are still moving forward and in general are more restrictive than what seems might be the MP HFC amendment.
- 3.3. North America - US already has some restrictions in place. Canada should have something by 2016.
- 3.4. China and Rest of Asia – no discussion.

#### 4. **UPDATE ON CLIMATE CHANGE POSITION DOCUMENT** – No Report

#### 5. **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.

#### 6. **SUBCOMMITTEE REPORTS**

6.1. Program [Eric Sturm] - Eric attended the program chair training. CEC is looking for reviewers. Long Beach will have two new program types: panel discussions and debates.

6.1.1. Possible future programs for:

6.1.1.1. Las Vegas, NV, Jan. 30-Feb. 1, 2017 – There is a climate change track at this meeting: Effects of climate change on HVACR. We will propose a seminar on this topic: three speaker topics have been identified: response to floods, response to droughts, and regulatory response on refrigerants. Scott Sherwood will chair. Eric will help Scott with the program process. **ACTION ITEM 3.**

6.1.1.2. Long Beach – We will propose a debate on the Climate Change – Real or Not. Victor Goldsmidt (Not) was identified as one of the debaters. Three more debaters needed. There was also discussion for a couple of forum topics: (a) In responding to climate change, are there still unasked questions; and (b) possible research topics for Section 2 TCs.

6.2. Handbook [Baxter] –

6.2.1. 2013 Handbook of Fundamentals, Chapter 29 Refrigerants, GEP section – Our section for the Fundamentals 2017 has been completed, voted on, and submitted to TC 3.1 for inclusion in the chapter. Our section includes both AR4 and AR5 values. Van thanked Barbara Minor of TC 3.1 for her help in getting the AR5 values into the section.

6.2.2. Chapter 34 Energy Resources (TC 2.8 cognizant TC) – no report.

6.3. Climate Change Chapter for Handbook - Alamelu has developed a schedule to get the chapter completed by December in order for the TC to review it before Las Vegas. She has sought some contributors who are external to the TC. Once completed this will be put into the on-line version of the handbook, which will make it easier to add for the 2021 revision of the handbook. **ACTION ITEM 4.**

6.4. Web Site [Don Brundage] – No report.

6.5. Research [Jibonananda Sanyal] – Chair was not here and so no one attended the research breakfast.

6.6. Standards [Bill Walter] – We have no responsibilities on standards. Bill updated that Std 34 has been reviewing applications every six months for new refrigerants. ISO 817 is meeting in Brugge in Sept. An ad hoc group is meeting to discuss ways to merge ASHRAE Std 34 and ISO 817.

6.7. MTG Update [John Karakash] – John reported on the Cold Climate Design Guide which was just published. He would appreciate a review of the sustainability chapter by the TC 2.5 members.

#### 7. **OTHER BUSINESS** - none identified

#### 8. **ADJOURN** at 3:30.

**TC 2.5 Action Items  
St. Louis 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.	Matt Ritter	Submit an emergency roster change to show the changes in leadership positions. (Michael Monroe will need to first join as a PCM so that he can be webmaster)
3.	Scott Sherwood (Eric Sturm & Matt Ritter)	Develop and submit package on-line by Aug 8 deadline. (Eric to help Scott with program procedures. Matt to identify California Edison speaker. )
4.	Alamelu Brooks	Begin assembling the Climate Change Chapter and provide the draft to TC before Las Vegas.