



Shaping Tomorrow's  
Built Environment Today

**MINUTES (DRAFT)**

**Refrigeration Committee Technology Committee  
for  
Comfort, Process, and Cold-Chain  
(REF-CPCC)  
Spring Meeting,  
Wednesday April 1st, 2020  
Web Meeting**

*These minutes have not been approved and are not the official, approved record until approved by this committee.*

**MEMBERS PRESENT:**

Rajan Rajendran, *Chair*  
Yunho Hwang, *Vice-Chair*  
Walid Chakroun  
Didier Coulomb – Joined Late?  
Martin Dieryckx – Joined 12:48 pm  
Ayman Eltalouny  
Stephen Gill  
Charles Hon  
Dustin Lilya  
Carlos Alberto Mitroga  
William Walter  
Sarah Maston, *BOD Ex-O*

**GUESTS: None**

**MEMBERS NOT PRESENT:**

Tony Welter  
Malcolm Knight, CO

**ASHRAE STAFF:**

Mike Vaughn, MORTS

**Table of Contents**

Motions .....	iii
Action Items.....	iv
List of Attachments .....	v
List of Acronyms.....	v
1. Call to Order.....	1
2. ASHRAE Code of Ethics Commitment.....	1
3. Presentation of George C. Briley ASHRAE Journal Article Award 11AM to 11:15 AM.....	1
4. Review of Agenda.....	1
5. Minutes.....	1
6. Chair’s Report.....	1
7. Vice Chair Report.....	3
8. BOD Ex-Officio Report.....	3
9. Subcommittee Reports .....	4
10. Position Document Updates .....	6
11. Other Reports.....	6
12. Other Information – World Refrigeration Day is on Friday, June 26, 2020 this summer.....	6
13. Strategic Issues.....	6
14. Next Meeting.....	6
15. Adjournment.....	7

## MOTIONS

No.	Motion	Page
1	2020 Refrigeration Committee minutes from the 2020 winter meeting be approved. Motion Passed 9-0-2-1(12) CNV SG/WW	1
2	Motion to adjourn meeting - Motion Passed 10-0-1-1(12) CNV MD/YH	TBD

## ACTION ITEMS – Winter 2020 – Meeting

No.	Responsibility	Action Item	Status/ Page
1	Staff	Revise committee Rules of Board (ROB), Reference Manual (REF), and Manual of Procedures (MOP) to reference new committee name and acronym (Refrigeration Technology Committee for Comfort, Process, Cold-Chain) – REF-CPCC	Done / 1
2	Ayman/Staff	Poll for Awards Subcommittee spring meeting with help from staff	New / 2
3	Ayman/Staff	Investigate why Donald A. Siller Refrigeration Award is administered by Chapter Technology Committee (CTCC) and not REF-CPCC. <u>Answer:</u> This award recognizes exceptional performance by a <u>Chapter Refrigeration Chair</u> for planning activities and providing technology transfer about refrigeration.	New / 2
4	Maston	Find out reasons why the Comfort Cooling Award was cancelled by Members Council and the Board in Orlando.	New / 2
5	Subc. Chairs / Staff	Work with staff to poll for a subcommittee spring meeting for all seven subcommittees	New / 3
6	Maston/Staff	Check to see why Past Chair is not a position on SY 20-21 roster. Can past chair be non-voting consultant/not reimbursed for transportation?	New / 3
7	Staff	Add to agenda for next REF-CPCC meeting (Virtual Annual) a discussion on how to formalize permanent representatives on REF-CPCC for international bodies.	New / 3
8	Staff	Set-up web meeting for the 1 <sup>st</sup> week May for Rajan, Yunho, Martin, Didier & Sarah to discuss Organizational representatives on REF-CPCC.	New / 3
9	All Members	Help to find speakers for World Refrigeration Day (WRD) webinar if possible & help promote webinar. 90-minute webinar with 5-7 speakers. Ayman heading webinar Subc. so pass-on possible speaker names to him.	New / 3
10	Staff	Double check subcommittee rosters to make sure they have been updated to include all new volunteers from Orlando meeting	Done / 3

11	Staff	Add Bill Walter and Adan Ayub to R in ASHRAE Subc. and share R-ASHRAE webpage link with R in ASHRAE Subc. Link: <a href="https://www.ashrae.org/technical-resources/refrigeration">https://www.ashrae.org/technical-resources/refrigeration</a>	Done / 3
12	Staff	Add latest TC Scopes document to REF-CPCC Basecamp	Done / 3
13	Gill/Staff	Send e-mail request to full REF-CPCC roster and meeting attendees asking for program ideas for 2021 Winter meeting	New / 3
14	Chair/Gill/Ayman/ IIAR rep.	Form small working group to implement recommendation to add Ammonia to Refrigerants and Responsible Use Position Document. Doug Scott volunteered help find IIAR Rep. May 2020 Target end date for this effort.	New / 3
15	Gill/ Staff	Send information on Real Zero Refrigerant Training – Free online training course – open to all - send to all.	New / 5
16	Hon	Work with the Government Affairs Committee Chair to establish Liaisons between with REF-CPCC and GAC.	New / 7

#### LIST OF ATTACHMENTS

No.	Attachment
A	REF-CPCC SY 19-20 MBOs & Subcommittee Rosters – Revised Feb. 2020
B	REF-CPCC Rules of Board – Revised Feb. 2020
C	REF-CPCC Manual of Procedures – Revised 2020
D	REF-CPCC Reference Manual – Revised Feb. 2020
E	REF-CPCC Awards Presentation
F	Rome Declaration of the Montreal Protocol
G	United Nations Environmental Assembly – UNEA food lost & waste – Cold-Chain Connection
H	CTTC Update Presentation
I	World Refrigeration Day Presentation

#### LIST OF ACRONYMS

AI	Action Item	MORTS	Manager of Research & Technical Services
ASHRAE	American Society of Heating, Refrigerating and Air-conditioning Engineers	MOU	Memorandum of Understanding
BOD	Board of Directors	MTG	Multidisciplinary Task Group
CNV	Chair Not Voting	OPS	TechC Operations Subcommittee
CTTC	Chapter Technology Transfer Committee	PAOE	Presidential Award of Excellence
DRSC	TechC Document Review Subcommittee	PD	Position Document
Ex-O	Ex-Officio	RatRU	Refrigerants and their Responsible Use
GCCA	Global Cold Chain Alliance	REF-CPCC	Refrigeration Technology Committee for Comfort, Process, and Cold-Chain
IIR	International Institute of Refrigeration	SY	Society Year
IoR	Institute of Refrigeration	TAC	Technical Activities Committee
MBO	Management by Objectives	TC	Technical Committee
MOP	Manual of Procedures	UNEP	United Nations Environment Programme

**Refrigeration Committee Technology Committee  
for  
Comfort, Process, and Cold-Chain  
(REF-CPCC)  
Winter Meeting,  
Sunday February 2<sup>nd</sup>, 2020  
Orlando, FL**

**1. CALL TO ORDER**

Chair Rajan Rajendran called the meeting to order at 8:00 AM ET. Members and guests introduced themselves. Staff confirmed quorum.

**2. 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: [www.ashrae.org/about-ashrae/ashrae-code-of-ethics](http://www.ashrae.org/about-ashrae/ashrae-code-of-ethics).)

**3. PRESENTATION OF GEORGE C. BRILEY ASHRAE JOURNAL ARTICLE AWARD & PHOTOGRPH** – Target time for Photographer & recipients – 11 AM to 11:15 AM

**4. REVIEW OF AGENDA**

Ayman Eltalouny and Charles Hon both asked to make presentations on UNEP and CTTC, respectively. Both presentations are now posted to REF-CPCC Basecamp for viewing.

**5. MINUTES**

**MOTION #1**

It was moved (YH) and seconded (CH) that,

- (1) the minutes from the 2019 REF Fall Meeting be approved.

**BACKGROUND:** Minutes were distributed in a September 16<sup>th</sup> email from staff.

**MOTION 1 PASSED:** 10-0-1-1 (12), CNV

**6. CHAIR'S REPORT** – Rajendran

**The primary purpose of the REF-CPCC fall meeting was to take the first steps towards forming the following new subcommittees for REF-CPCC by identifying subcommittee chairs and recruiting subcommittee members both from within REF-CPCC and from the list of interested parties that attended past REF- CPCC meetings:**

New REF-CPCC Subcommittee Structure:

1. Program - Chair: **Stephen Gill** – Members: Coulomb, Kazachki, Ravi, Miyara, Hwang
2. Research – Chair: **Yunho Hwang** – Members: Ayub, Nawaz, Chakroun
3. HVAC – Chair: **Walid Chakroun**– Members: Hourahan, Abdelaziz, Kujak
4. Cold Chain – Chair: **Dustin Lilya** – Members: Ayub, Hon, Scott
5. R in ASHRAE – Chair: **Didier Coulomb** – Members: Rajendran, Selbert, Walter, Ayub
6. Refrigeration Technology Report – Chair: **Martin Dieryckx** – Members: Rajendran, Welter, Kazachki, Zha, Ayub
7. Award Subcs – Briley and Garland- Chair: **Ayman Eltalouny** – Members: Dieryckx, Hon, Mitroga

This meeting our primary focus will be to seek approval from higher bodies for our new procedure documents (ROB, MOP, and Reference Manual) and on recruiting additional members to serve on our new subcommittee structure.

**AI #1** Staff – Revise committee procedure documents based upon feedback from TechC OPS Subc. Chair prior to meeting- Status: Complete

**MOTION #2**

It was moved (YH) and seconded by (AE) that,

- (2) Refrigeration Committee recommends to TechC Operations Subcommittee that the Refrigeration Committee Rules of the Board be modified as noted in **ATTACHMENT B**.

**BACKGROUND:** Committee name, acronym, scope, and purpose is changed to allow for broader advancement of refrigeration technology and its application.

**MOTION 2 PASSED:** 10-0-1-1 (12), CNV

**MOTION #3**

It was moved (BW) and seconded by (CH) that,

- (3) Refrigeration Committee recommends to TechC Operations Subcommittee that the Refrigeration Committee Manual of Procedures be modified as noted in **ATTACHMENT C**

**BACKGROUND:** In addition to updating Committee name and acronym, Section E - Subcommittees of MOP was modified to allow for greater participation at the subcommittee level from members and volunteers who are not voting members at the REF-CPCC level, but wish to serve and vote at the subcommittee level of REF-CPCC. All subcommittee meetings will be held via web meetings to keep subcommittee participation costs low.

**MOTION 3 PASSED:** 10-0-1-1 (12), CNV

**MOTION #4**

It was moved (BW) and seconded by (CH) that,

Refrigeration Committee recommends to TechC Operations Subcommittee that the Refrigeration Committee Reference Manual be modified as noted in **ATTACHMENT D**.

**BACKGROUND:** In addition to updating committee name and acronym, Section E - Subcommittees of Reference Manual was modified to list the eight new subcommittees of REF-CPCC. All subcommittee meetings will be held via web meetings to keep subcommittee participation costs low.

**MOTION 4 PASSED:** 10-0-1-1 (12), CNV

**AI #2** Chair/Staff – Need better communication method to reach ASHRAE Regions. Invite all seven current Regional Refrigeration Vice Chairs (RVCs) to next REF-CPCC meeting - Status: New

**AI #3** Chair/Staff - Explore the possibility of having a representative from each region on REF-CPCC or a regular newsletter in order to better communicate with regions. Note: A motion to add RVCs to REF was rejected by Members Council a few years ago - Status: New

**AI #4** Chair/Gill/Staff - Investigate if REF-CPCC membership and Program Subc. can help identify Distinguished Lecturer (DL) topics & speakers and then take up with CTTC for approval. - Status: New

**AI #5** Staff - Check with Steve H. to see if we still have a list of potential DL topics and speakers that was created in the past or list of research topics created in past. - Status: New

**AI #6** Ayman/Didier/Staff - Re-educate Society on new scope for REF-CPCC with help from ASHRAE Marketing and R in ASHRAE webpage. - Status: New

**AI #7** Staff - Get list of current RVCs from Trent and add to distribution list for REF-CPCC interested parties- Status: Complete

**AI #8** Didier/Staff - R in ASHRAE subc. create regular communication document targeted to RVCs. Also, develop training session material for RVCs at CRCs – Invite to attend REF-CPCC meetings too. - Status: New

**AI #9** Staff - Get current Distinguished Lecturer list and post to REF-CPCC Basecamp. - Status: New

**AI #10** Staff - Get copy of TC Chair Breakfast meeting Presentation and post to REF-CPCC Basecamp - Status: New

**AI #11** Staff - Add Bill Walter and Adan Ayub to R in ASHRAE Subc. and share R-ASHRAE webpage link with R in ASHRAE Subc. - Status: New

**AI #12** Staff - Add latest TC Scopes document to REF-CPCC Basecamp - Status: New

**AI #13** Staff - Send e-mail request to full REF-CPCC roster and meeting attendees asking for program ideas for discussion in Austin and presentation in Chicago 2021 - Status: New

**AI #14** Staff - Form small working group to implement recommendation to add Ammonia to Refrigerants and Responsible Use Position Document. Doug Scott volunteered help find IIAR Rep. May 2020 target end date for this effort. - Status: New

**AI #15** Gill/Staff - Send information on Real Zero Refrigerant Training – Free online training course - Status: New

## **7. VICE CHAIR'S REPORT** – Hwang

Vice Chair Hwang reviewed the REF-CPCC fiscal report with the committee.

The Society is in a deficit spending year and shortfalls will be made-up from reserves this year and next year. In year #3 (Chicago winter meeting) we will have a surge in revenue because this is always our highest grossing meeting and we expect that will allow us to replenish our reserves that we are spending from now to make up for budget shortfalls now.

The committee ROB, MOP, and Reference Manual have all now been updated to reflect the new committee name, acronym, and subcommittee structure and scope.

## **8. BOD Ex-Officio REPORT** – Maston

REF-CPCC Board ExO, Sarah Maston, gave presentation to the committee to update them on Society activities & accomplishments since our last Society meeting in Kansas City, MO. Presentation is posted to REF-CPCC Basecamp for viewing.

## **9. SUBCOMMITTEE REPORTS**

### 1. Staff update on New Subcommittees:

Now that ALL subcommittee Chair positions are filled, we will next ask each chair to finalize their scope statement and identify one or two objectives that they wish to accomplish this Society Year using the forms in **ATTACHMENT A**.

Lastly, we will share these completed forms for each subcommittee with the REF-CPCC Interested Parties list and with the Section 10 TCs to see if we can recruit additional members from outside REF-CPCC to serve on these new subcommittees. In order to make participation easy and inclusive, ALL REF-CPCC subcommittees will meet via web meetings only and all subcommittee members will have a vote at the subcommittee level.

Subcommittee Chairs will then report in person to REF-CPCC on subcommittee activities at Society meetings. **If this approach is acceptable to TechC, we will need to work with TechC OPS to delete section E1.6 from the draft REF-CPCC MOP, which requires REF-CPCC subcommittees to meet at the Annual and Winter meeting.**

It is expected that this new subcommittee structure will also make it easier to identify and recruit Board elected members for REF-CPCC by creating a large pool of interested volunteers that vote and work at the subcommittee level only, but don't receive transportation reimbursement from ASHRAE since all REF-CPCC subcommittees meetings will be held via web meetings.

See **ATTACHMENT A** for further information on each Subcommittee and membership of each.

### 2. TC reorganization effort and the new REF-CPCC subcommittee structure

Maston reported TAC is still working on their TC reorganization plan. Kansas City was the first meeting where the TC Chair Breakfast was held in one room on Sunday morning instead of splitting up by section.

Staff was asked to arrange for REF-CPCC representative to speak to TC Chairs at the TC Breakfast in Orlando (**Fall AI #3**). REF-CPCC representative explained to TCs changes to REF subcommittee structure and invited interested TC members to join REF-CPCC Subcommittees and to serve as liaison between REF-CPCC and their TC.

### 3. MTG RAC Plant Assessment Guide

REF-CPCC joined the new MTG.RAC Plant Assessment Guide and named Carlos Mitroga as voting member and Walid Chakroun as alternate. Both have since been added to the MTG.RAC roster and should be getting MTG meeting information now.

### 4. Program Subcommittee

Subcommittee Chair: Stephen Gill reported that February 10<sup>th</sup> is the deadline for Austin Conference program submissions. The topic of recruiting more distinguished lecturers on Refrigeration Technology topics was also discussed.

AI#4

### 5. Research Subcommittee

Subcommittee Chair: Yunho Hwang reported that committee does not have any active research projects underway or in development yet but mentioned that the next generation compressor might be based on electro-chemical compression if we wish to explore this



technology further. Goal is to create collaborative research program with TCs. Adnan Ayub, Walid Chakroun, and Kashif Nawaz volunteered to join the subc. during meeting.

6. Awards Subcommittee

Subcommittee Chair: Ayman Eltalouny reported SY18-19 Briley Award was presented at this meeting to Dr. Abu-Heiba of Oak Ridge National lab for his ASHRAE Journal article *Setting Charge Limits for Flammable Refrigerants* published in the July 2018 (Vol. 60 (7)) edition of the ASHRAE Journal.

The subcommittee also reported that they conducted a 5-year review of the Comfort Cooling Award and Milt Garland Award at the request of Honors and Award Committee. No nominations for the Milt Garland award or the Comfort Cooling Award were submitted in the last 4 years, but the subc. recommended that both awards continue.

**Note: Staff learned at the Wednesday Board meeting in Orlando that Honors and Awards Committee recommended to the Board through Members Council that the Comfort Cooling Award should be dropped due to low interest. The Board approved H&A's recommendation.**

We now have as pass through awards from Honors & Awards Committee the Briley Award and the Milt Garland Award to select.

See **ATTACHMENT E** for further information on REF-CPCC Awards

**MOTION #5**

It was moved (AY) and seconded by (CH) that,

That presentation of the two current REF-CPCC awards (Briley and Garland) and possibly REF Chapter Chair level award be presented at the Plenary session.

**MOTION PASSED** 10-0-1-1 (12) CNV

7. Refrigeration Technology Report

Subcommittee Chair - Martin Dieryckx reported that Goal is to create every 2 years an update on refrigeration technology on the global level and to identify what technology is most important or promising now. Information from this report will also be shared with the TCs to help keep the Refrigeration Handbook Volume up to date and relevant to today's engineers. Target member for subcommittee is a manager of technical issues based anywhere in the world for broad international representation. Focus will not be on new refrigerants but on new and established technologies. Result from this subcommittee could possibly be the basis for an ASHRAE Tech Hour webinar presentation.

8. Cold-Chain

Subcommittee Chair – Dustin Lilya reported that a new application for cold chain technology is concrete cooling. Doug Scott, Adnan Ayub, Charlie Hon, volunteered to join the subc. It was also suggested that IIR and IIAR should be encouraged to join the subc. also

9. HVAC

Subcommittee Chair – Walid Chakroun reported that he plans to recruit at least three members and is finalizing subcommittee scope statement. First goal will be document latest technology related to heat pumps. Glenn Hourahan, Omar Abdelaziz and Steve Kujak volunteered to join the Subcommittee during the meeting. Walid also suggested that we should ask TechC to look at all information we have to help control Corona virus out-break and send to all regions.

## **10. POSITION DOCUMENT UPDATES REPORTS**

### **A. Refrigerants and Responsible Use PD**

Implement recommendation to add ammonia to Refrigerants and their responsible use PD  
Working Group members: Rajan, Steven Gill, IIAR representative identified by Doug Scott is Dave Rhule.

Scheduled to expire now June 21, 2021. April 1 or May Target end date for this effort.

### **B. Ammonia as a refrigerant PD – expired Feb. 1, 2020**

## **11. OTHER REPORTS**

### **A. Developing Economies – Didier Coulomb**

Rome Declaration about “*Contribution of the Montreal Protocol Food Loss Reduction through sustainable Cold Chain*” - signed by 76 Countries in Nov. 2019 – See **ATTACHMENT F** and link below for more information

<https://data.consilium.europa.eu/doc/document/ST-12432-2019-INIT/en/pdf>

**AI #16** Staff/Ayman – Add Dr. Alaa Olama – Montreal Protocol Technical Options Committee to REF-CPCC Cold Chain Subc.

**B.** United Nations Environmental Assembly (UNEA) Resolution about – “Promoting Sustainable Practices and Innovative Solutions for Curbing Food Loss and Waste” – **ATTACHMENT G**

**C.** CTTC Update – Hon – **ATTACHMENT H**

**D.** K-SAP Cooling as a service looking for pilot project in developing country  
Cooling as a Service (CaaS) is an innovative business model that enables customers to base their decision on lifecycle cost rather than on the purchase price of cooling equipment. The technology provider installs and maintains the cooling equipment, recovering the costs through periodic payments made by the customer.

### **MOTION #6**

It was moved (WC) and seconded by (AY) that,

That TechC should develop a Technical bulletin or information webpage to help in the containment of Corona Virus

**MOTION PASSED** 10-0-1-1 (12) CNV

**Note: TechC has since developed the following webpage on the Corona Virus:**

<https://www.ashrae.org/technical-resources/resources>

### **MOTION #7**

It was moved (SG) and seconded by (BW) that,

That a liaison between REF-CPCC and GAC be created with a volunteer representative from each committee. Charlie Hon will represent REF-CPCC. Motion Passed 10-0-1-1(12) CNV  
SG/BW

**MOTION 7 PASSED** 10-0-1-1 (12) CNV

**12. OTHER INFORMATION**

World Refrigeration Day is on Friday June 26, 2020 this summer – **ATTACHMENT I**

**13. STRATEGIC ISSUES**

**AI #17** Hon – Work with the Government Affairs Committee Chair to establish Liaisons between with REF-CPCC and GAC.

**14. NEXT MEETING** – June 28, 2020 – Austin, TX

**15. ADJOURNMENT**

**MOTION #8**

It was moved (YH) and seconded by (AE) that, the meeting adjourn

**MOTION 8 PASSED:** 10-0-1-1 (12), CNV

REFRIGERATION TECHNOLOGY COMMITTEE FOR COMFORT, PROCESS, AND COLD-CHAIN  
2019-2020 MBOs  
Rajan Rajendran, Chair  
Date: 8/6/2019

MBO #	MBO	Status	Date Due	Assigned To	Applicable initiative #	MBO Comments	Strategic Direction Specific Comments	Fiscal Impact
1	Reorganize subcommittee structure within REF	<u>New</u>	January 2020	Rajan R; Yunho Hwang; Bill W	3	1. Program subcommittee; 2. Research subcommittee; 3. HVAC subcommittee; 4. Cold Chain subcommittee; 5. R in ASHRAE Subcommittee; 6. Refrigeration Technology Report Subcommittee	#3a, b, c	None
2	Appoint a voting Representative and Alternate member to the new MTG.RAC - RAC Plant Assessment Guide	<u>New</u>	January 2020	Rajan R; Yunho Hwang	3	Join the MTG and participate to add value to ASHRAE	#3a, b, c	None
3	Take ownership of the new "R" in ASHRAE webpage for further implementation and on-going maintenance. Promote the new REF committee organization and name throughout society; put together the plan for a bi-annual report on refrigeration technology (last year's MBO)	<u>New</u>	October 2019	RAC Chair and Vice Chair Yunho Hwang; Michael Vaughn; Martin D;	2 & 3	Establish a subcommittee and work closely with ASHRAE staff to continue highlighting the R in ASHRAE; expand and add new content as relevant; at mid-year, revisit the website and looking for ways to improve; develop a plan and start implementation of the bi-annual Refrigeration Technology report	#2c; #3a, b, c	None
4	Update REF MOP and Reference Manual and secure TechC approval on update to REF MOP.	<u>New</u>	October 2019	Rajan R; Michael V	3	Have a draft ready for Tech Council approval in Fall 2019 meeting	#3a, b, c	None
5	Work with partnership organizations to identify and implement collaboration opportunities to promote HVAC&R	<u>New</u>	June 2020	Dieter C; Ayman E	1 & 2	Starting with list of interested parties, IOR, and working with the (to be established) Research subcommittee, identify suggested research topics focused on refrigeration technology and pass on to new RAP for consideration.	#1a, #1b, #2b	None
6	Better coordinate and communicate REF activities and information transfer to ASHRAE Chapter Refrigeration Committees, possibly in coordination with and support from Section 10 TCs.	<u>New</u>	June 2020	TBD	#3 & #4	Prepare short report after each Society meeting that goes to all Chapter Refrigeration Committee Chairs and highlights things such as upcoming Winter meeting Refrigeration program track, upcoming refrigeration conferences, and ASHRAE research in development, underway, or completed related to refrigeration	#3a & #3b	None
7	Create working group within REF to help develop a proposed 1st draft of work plan between ASHRAE & IIAR for inclusion in new ASHRAE/IIAR MOU prior to the MOU being finalized by ASHRAE and IIAR	<u>New</u>	June 2020	TBD	#2	Utilize technical experts within network of REF members and interested ASHRAE members that work for IIAR and serve on SSPCs 15 & 34 to develop a draft work plan prior to the MOU being finalized.	#2b	None

## **Goals and Initiatives for 2019-2024 Society Strategic Plan**

### Initiatives:

- #1 Resilient Building and Communities
- #2 Indoor Environmental Quality
- #3 Organizational Streamlining
- #4 Improve Chapter Engagement, Capacity and support

### Goals:

Goal 1: Position ASHRAE as an Essential Knowledge Resource for a Sustainable, High-Performance Built Environment

- #1a Position ASHRAE as an Essential Knowledge Resource for a Sustainable, High-Performance Built Environment
- #1b Expand capabilities globally to create, aggregate and disseminate essential information and knowledge focusing on emerging market trends and transformative approaches

Goal 2: Maximize Member Value and Engagement

- #2a Infuse enthusiasm, vitality and diversity throughout ASHRAE events and services
- #2b Expand the impact of collaboration and partnerships with industry organizations, universities and government agencies
- #2c Leverage technology to increase member engagement, awareness and value

Goal 3: Optimize ASHRAE's Organizational Structure to Maximize Performance

- #3a Prototype and launch new approaches that will increase ASHRAE's relevance and speed to market for key offerings
- #3b Optimize ASHRAE's organizational systems and structures to increase capacity, efficiency and effectiveness
- #3c Cultivate industry and member philanthropy to extend ASHRAE's impact and reach