



MINUTES

EXECUTIVE COMMITTEE MEETING

Palmer House Hilton Hotel
Chicago, Illinois
January 24, 28 & 29, 2015

Note: These draft minutes have not been approved and are not the official, approved record until approved by the Executive Committee.

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 January 24, 28 & 29, 2015

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DRAFT

PRINCIPAL MOTIONS
Executive Committee Meeting
January 24, 28 & 29, 2015

- | No. - Pg. | Motion |
|------------------|--|
| 1 – 6 | that ExCom recommends the Board of Directors approve the memorandum of understanding between the Department of Energy (DOE) and ASHRAE. |
| 2 – 7 | that ExCom accepts the ASHRAE-UNEP Global Cooperation Agreement – 2015-2016 Work Plan. |
| 3 – 7 | that ExCom recommends the Board of Directors approve the membership of the Georgian Association of Refrigerating, Cryogenic and Air-conditioning Engineers NGO to the ASHRAE Associate Society Alliance. |

DRAFT

ACTION ITEMS

Executive Committee Meeting
January 24, 28 & 29, 2015

Item	Responsible	Summary of Action	Status
1 – 2	Olesen	(Carryover) Work with Technology Council to develop a plan and process for internationalization of ASHRAE standards. <i>(1/2014: The work is progressing and a copy of the plan will be submitted to ExCom upon completion. 10/4/2014: MBO for Tech Council, to be completed by June Annual Meeting 2015. 1/2015: Ongoing.)</i>	_____
2 – 2	Littleton	(Carryover) Develop a multi-year staffing plan to deal with ongoing work load increases. <i>(1/2014: Waiting until after the completion of the strategic plan. 3/2014: Ongoing. 10/4/2014: Integrating IAQA impact into the plan. 1/2015: Ongoing but able to integrate IAQA's requested 7.5 FTEs.)</i>	_____
3 – 2	Underwood/ Gulledge	(Carryover) Appoint a committee to work on policy and procedures for managing and monitoring MOUs, so that required actions are taken and they produce meaningful collaboration. <i>(10/2014: Gulledge and Underwood will work on a committee roster. 1/2015: Ongoing.)</i>	_____
4 – 2	Phoenix	(Carryover) Review committee roster for the Technical Committee Streamlining Ad Hoc and send appointment letters. <i>(1/2015: A request for names has been issued to populate the committee.)</i>	_____
5 – 2	ExCom	(Carryover) Send ideas to President Tom Phoenix for the next project for the Building Performance Alliance (BPA Ad Hoc Committee). <i>(1/2015 Send Suggestions.)</i>	_____
6 – 2	Phoenix	(Carryover) Finalize BPA project and committee roster and send appointment letters. <i>(1/2015: Ongoing.)</i>	_____
7 – 2	Phoenix	(Carryover) Contact Larry Staples regarding the status and future of "Think Tank." <i>(1/2015: Spoke with Mr. Staples but still ongoing.)</i>	_____
8 – 2	Littleton	(Carryover) Draft Chapter MOU Policy to clarify the ASHRAE stance on chapters signing MOUs. <i>(1/2015: Ongoing.)</i>	_____
9 – 2	Underwood/ Wentz	Attend the NIBS Conference in 2016.	_____
10 – 4	Gulledge/ Vallort	Finish the roadmap for transferring the reporting function used for committee appointment out of PEAC.	_____
11 – 6	Vallort	Work with Littleton on the Winter Meeting VIP Strategy discussion.	_____
12 – 6	Olesen	Review the Ebies criteria with Technology Council and send comments to ExCom.	_____

Item	Responsible	Summary of Action	Status
13 – 7	Littleton	Schedule a conference call this spring to discuss the Ebies Award criteria with Olesen, Boyce and Underwood and feasibility of ASHRAE participation.	_____
14 – 7	Phoenix	Send meeting notes from the UNEP conference to ExCom members.	_____
15 – 7	Littleton	Research the Climate and Clean Air Coalition and its goals and initiatives.	_____
16 – 7	Littleton	Contact UNEP officials regarding ASHRAEs acceptance of the cooperation agreement.	_____
17 – 8	Littleton	Set up a Teamup calendar for the Executive Committee.	_____
18 – 8	Phoenix	Request the commissioning documents from Henry Green, NIBS.	_____
19 – 8	Littleton	Research the DOE Commissioning requirements and the impact on ASHRAE and Standard 202.	_____
20 – 8	Phoenix	Forward Mr. Samuel Taylor's contact information to ExCom.	_____
21 – 8	Littleton	Research the 2016 STEM Conference and Building Innovation Conference.	_____
22 – 9	Phoenix	Send an ASHRAE representative to the AIA Meeting in Atlanta this spring.	_____
23 – 9	Underwood	Forward the Red Seal program information to ExCom.	_____
24 – 9	Littleton	Study the HVAC&R Workforce Development Foundation and determine how ASHRAE can be effective.	_____
25 – 9	Wentz	Discuss with the bEQ Committee the status of their marketing efforts.	_____
26 – 10	Olesen	Work with the Refrigeration Committee to be the contact point for GRMI.	_____
27 – 10	Underwood	Discuss with Members Council the DL program and honorarium concerns.	_____
28 – 10	Gulledge	Send to ExCom the list of DL visits this last year.	_____
29 – 10	Littleton	Add the President-Elect and Treasurer to the Presidential Member breakfast invitation list.	_____
30 – 10	Littleton	Develop a set of talking points regarding the RP 1603 termination.	_____
31 – 11	Littleton	Check into ASHRAE's financial responsibility and involvement with IIR.	_____

Item	Responsible	Summary of Action	Status
32 – 11	Underwood	Continue the support of the Global Alliance during his presidency.	_____
33 – 11	Littleton	Request that Claire Ramspeck give a standards presentation at the BOD Orientation.	_____

DRAFT



EXECUTIVE COMMITTEE MEETING

Palmer House Hilton Hotel
Chicago, Illinois
January 24, 28 & 29, 2015

MEMBERS PRESENT: Thomas H. Phoenix, President
T. David Underwood, President-Elect
Timothy G. Wentz, Treasurer
Darryl K. Boyce, Vice President
Charles E. Gullede III, Vice President
Bjarne W. Olesen, Vice President
James K. Vallort, Vice President

STAFF PRESENT: Jeff H. Littleton, Executive Vice President
Mary D. Townsend, Executive Assistant

January 24, 2015

Guests:

Burns Bradford, Leadership U
Lucy Huang, Leadership U
Richard Kimball, Leadership U
Ted Zachwieja, Leadership U
Nancy Burgett
Tyler Burgett

ASHRAE Staff:

Joyce Abrams
Vanita Gupta
Claire Ramspeck
Lilas Pratt

January 28, 2015

Burns Bradford, Leadership U
Lucy Huang, Leadership U
Richard Kimball, Leadership U
Ted Zachwieja, Leadership U

Vanita Gupta
Mark Ames
Lilas Pratt
Jim Scarborough

January 29, 2015

Ted Zachwieja, Leadership U

Call to Order

President Phoenix called the Executive Committee meeting to order on Saturday, January 24, 2015 at 8:31 a.m. ExCom members, staff, and guests attended as listed above.

Review of the Agenda

The following items were added to the agenda under New Business:

- Indoor Pool Off-gassing Program with CDC
- Global Refrigerant Management Initiative
- Distinguished Lecturer Program Distribution
- Issues from the Presidential Members Breakfast
- RP 1603 Termination
- ASHRAE's Relationship to IIR
- Future of the ASHRAE IEQ-GA Ad Hoc
- Global Expansion of ASHRAE
- Spring Board Orientation

Approval of Minutes

Mr. Underwood moved

that the minutes of the October 4 & 5, 2014 meeting be approved.

MOTION PASSED (Unanimous voice vote, CNV)

Review of Action Items – October 4 & 5, 2014

Action items 1-8 are ongoing and listed in the action item list at the beginning of the minutes. Updates are included where possible.

AI 1-8

Report of the President Attachment A

President Phoenix reported that his attached travel report reflects visits made year to date and are submitted for officer review. Highlights include the NIBS Conference, a visit to CIBSE in England and the Chillventa Expo in Nuremberg, Germany. He visited Bermuda Island where there is interest in starting an ASHRAE chapter. A group of ten potential members arranged an event where Mr. Phoenix made a HVAC presentation. These were 65 participants. While in Bermuda, he met with the Minister of Facilities for the government and the bEQ program was discussed. They have submitted two bEQ applications and are preparing others to submit. Mr. Terry Townsend gave a bEQ training session during the visit.

Mr. Phoenix recommended that Mr. Underwood and Mr. Wentz attend the NIBS Conference in 2016.

AI-9

Reports of Officers' CRC and Intersociety Visits

Mr. Olesen attended Roomvent 2014 in Brazil. Conference attendance was low. The next conference will be held in Copenhagen, Denmark and they are anticipating strong attendance. Mr. Olesen was able to attend a chapter meeting in Porto Alegre and gave a presentation.

Mr. Underwood reported that he met with officials from the City of Toronto. They are receptive to Standard 189.1 and have shown interest in bEQ. Mr. Townsend will be setting up a bEQ presentation with the City of Toronto. Mr. Underwood was a distinguished lecturer in Evansville, Indiana and he attended the BOMA Conference in Scottsdale, Arizona.

Report of the Treasurer Attachment B

2014-15 Financial Update

Mr. Wentz reported that the General Fund budget for 2014-2015 showed a surplus of \$678,000 and the budget forecast reflects a total surplus of \$1.2 million. The consolidated statement showing a surplus of \$1.2 million would be an ASHRAE record. All councils are tracking in line with original projections. The major variations are the record square footage at the Mexico Expo, the square footage sold at McCormick Place in Chicago and the IAQA management fees. Advertisers in print sales are down about \$90,000 and this should be reviewed to see if this is a trend.

2015-16 Budget

The Finance Committee has been working on the 2015-2016 budget. At present there is deficit projected of \$670,000.

ASHRAE Investments Report

Mr. Wentz reported that there have been wide fluctuations in the investments and much of this can be attributed to the stock market. As of December 31, 2014 there was \$13.2 million in general reserves.

Finance Committee Report

The Finance Committee report will be presented to the BOD. Highlights include:

- The Rule of the Board targets a General Reserve Fund balance that is between 1/3 and 2/3rds. Reserves are closer to the two-thirds level. We have a two year window to deal with this but should be discussing options.
- The funding of items that will be required by the strategic plan should be a part of budget planning for 2015-16.
- The Research Reserve Fund as of December 31, 2014 had total assets of \$6,322,501.

Reports of Bodies Reporting to ExCom

National Council of Examiners for Engineering and Surveying (NCEES)

Mr. Littleton reported that Dick Hayter, ASHRAE representative to NCEES was unable to attend the Chicago meeting. Mr. Hayter wanted to convey that Vermont legislators are being contacted regarding the issue of the requirement for a master's degree. Although this issue was turned down nationally, individual states may still decide to require a master's degree to obtain a PE license.

CLIMA Ad Hoc Committee Attachment C

Mr. Olesen reported that the CLIMA conference will be held in Denmark in May 2016. The call is out for papers and a significant student competition is being planned.

Advanced Energy Design Guide Steering Committee (AEDG) Attachment D

Mr. Olesen reported the latest update on the distribution of the AEDG's.

- 551,951 total copies are in circulation.
- 525,896 copies were downloaded as of January 5, 2015.
- 26,055 titles are distributed in print.
- 138,765 registrant accounts for free AEDG downloads.
- March 2015 – Publication target for the final draft of the Grocery AEDG.
- Working with the Developing Economies Ad Hoc to explore the feasibility of applying the guide to developing countries.
- Providing input for ASHRAE's response to the request from DOE for information (RFI) on the definition of zero energy buildings.
- Work continues on two research projects –
 - 1627-RP *An Evaluation of the Actual Energy Performance of Small Office and K-12 School Buildings Designed in Accordance with ASHRAE AEDGs.*
 - 1651 RP *Development of Maximum Technically Achievable Energy Targets for Commercial Buildings (Ultra Low Energy Use Building Set).*

President-Elect Advisory Committee

Mr. Underwood reported that PEAC will be meeting Tuesday, Jan. 27th in Chicago. The transition for PEAC to become only an advisory committee for the President-Elect will not take place until the postponed motion from Seattle is approved by the Board at the Wednesday meeting. The current vice chairs of councils are working on a roadmap that will support the changes in PEAC and provide direction for the reporting function used for committee appointments. The current vice chairs to councils Mr. Gulledge and Mr. Vallort and the incoming vice chairs will be participating in the spring committee appointment process.

Mr. Gulledge and Mr. Vallort will finish the roadmap for transferring the reporting function used for committee appointments out of PEAC.

AI-10

Foundation Trustees Attachment E

Mr. Littleton reported that the Foundation Trustees are recommending for Board approval the following motions:

- That the ASHRAE Board of Directors approve increasing the number of voting Foundation Board of Trustee members from 15 to 25. The Foundation would like to increase the number of board members to add representatives of influential HVAC companies and major donors. The fiscal impact of the motion will be approximately \$12,000 annually to attend two meetings.
- That the ASHRAE Board of Directors approve that when an individual establishes a Gift Annuity they will receive the recognition for the original gift amount.
- That the ASHRAE Board of Directors approve that the ASHRAE Foundation, Research Promotion Executive Committee and the Development Committee have a strategic planning meeting at ASHRAE headquarters in spring 2015.

Mr. Littleton reported that the strategic planning meeting will be organized by the Development Committee and held at the ASHRAE headquarters. This will be an opportunity to meet the new ASHRAE Development Director, set fundraising goals and work toward increased coordination of Research Promotion and Foundation fundraising activities. The fiscal impact of the spring strategic planning meeting in Atlanta will be \$25,000.

Scholarship Trustees Attachment F

Mr. Littleton reported that the Scholarship Trustees awarded \$70,000 in scholarships at the Chicago meeting. The Scholarship Trustees are recommending that the ASHRAE Board of Directors approve a one-year First Year Engineering Scholarship and the changes to the Rules of the Board to comply with the new scholarship. Currently the funds are in the General Scholarship account so there is no additional fiscal impact. The scholarship will be supported by designing and re-naming one of the two existing General Scholarships for students applying at the end of their first year of college.

College of Fellow/Life Members Attachment G and H

Reports for the College of Fellows and Life Members are attached.

Joint Expo Policy Committee Attachment I

Mr. Wentz reported for the Joint Exposition Policy Committee on the status of the following AHR events:

- AHR 2016 – Orlando: 377,629 square feet has been sold, which is more than the previous meeting in Orlando. Some 878 signed exhibitor contracts, excluding co-exhibitors.
- AHR 2019 – Atlanta: The current show dates are January 15 – 17, 2019.
- AHR Expo Mexico 2014: The expo was held in Mexico City. 72,824 total square feet was sold.
- AHR Expo Mexico 2015: The show will be held in Guadalajara. The square footage 41, 425 feet of space was sold and there were 178 exhibitors.

Mr. Wentz reported that there is concern about the start date for the Las Vegas, Nevada Winter Meeting in January 2017. It may be too close to the beginning of the New Year.

Unfinished Business

IAQA Consolidation

Mr. Phoenix reported that ExCom has agreed to recommend to the Board of Directors the consolidation of ASHRAE and IAQA, the IAQA bylaws that have been submitted by the transition team and the due diligence report.

Sunday Board Luncheon Review

Mr. Phoenix reviewed with officers the Leadership Luncheon that will be held before the Sunday Board meeting in Chicago and the list of invited guests.

DOE/ASHRAE Memorandum of Understanding Attachment J

Mr. Underwood moved

- (1) that ExCom recommends the Board of Directors approve the memorandum of understanding between the Department of Energy (DOE) and ASHRAE.

MOTION 1 PASSED (Unanimous voice vote, CNV)

Restructuring of PEAC Motion Attachment K

Mr. Wentz reported that the postponed motion from the Seattle meeting regarding the restructuring of the President-Elect Advisory Committee will be presented at the Wednesday Board meeting. The motion restructures the President-Elect Advisory Committee (PEAC) which now will be comprised of seven ASHRAE members selected by the Treasurer that will serve during the year he/she is ASHRAE President-Elect. The President-Elect and the Treasurer will be in addition to the seven members selected by the Treasurer. An approved motion would make these changes effective July 1, 2015. The new motion will include the Executive Vice President as a committee member.

Mr. Wentz reported that this is a major change in the way that PEAC has been operating. The motion has been on review for 60 days and there have been many positive comments. The two major impacts of this change are that PEAC will be advisory and the committee performance review and appointment process will be handled outside of PEAC.

Winter Meeting VIP Strategy Attachment L

Mr. Littleton reported that the ASHRAE staff has developed a strategy for inviting VIPs to the meetings, providing them benefits and developing guidelines. This document includes the current policies and procedures and recommendations for the future.

Discussion included:

- VIP categories and dealing with the last minute requests by VIPS to attend the meeting.
- Leadership Luncheon becoming a larger event that may include AASA. This could increase the total number of attendees. The luncheon mightn also include formal introductions of VIPs and remove this event from the Members Night Out agenda.
- Handwritten notes from the President weloming the VIP to the meeting were suggested

Mr. Valort will work with Mr. Littleton on the Winter Meeting VIP Strategy discussion.

AI-11

Ebies Award – Urban Green Council Attachment M

Mr. Phoenix reported that the Urban Green Council has requested that ASHRAE reconsider the criteria for the Ebies Awards and participation by ASHRAE.

Mr. Olesen will review the Ebies criteria with Technology Council and send comments to ExCom.

AI-12

Mr. Littleton will schedule a conference call this spring to discuss the Ebies Award criteria with Mr. Olesen, Mr. Boyce and Mr. Underwood and feasibility of ASHRAE participation.

AI-13

UNEP Climate and Clean Air Coalition

Mr. Phoenix has been contacted by Dr. Shamila Nair-Bedouelle from UNEP regarding the potential for ASHRAE to join the Climate and Clean Air Coalition. She will be sending more information to ASHRAE regarding this effort.

Mr. Wentz reported that it may be helpful to use UNEP to achieve some of the goals of the Developing Economies Ad Hoc.

Mr. Phoenix will send meeting notes from the UNEP conference to ExCom members.

AI-14

Mr. Littleton will research the Climate and Clean Air Coalition and its goals and initiatives.

AI-15

UNEP/ASHRAE Work Plan Attachment N

Mr. Phoenix reported that UNEP would like ASHRAE to approve the UNEP/ASHRAE Work Plan Cooperation Agreement. UNEP and ASHRAE will work together to foster relationships between industry and policy-makers in developing countries. This will include feedback on feasibility of alternative refrigerants, equipment efficiency and help addressing the specific needs of the developing countries.

Mr. Underwood moved

- (2) that ExCom accepts the ASHRAE – UNEP Global Cooperation Agreement 2015-2016 Work Plan.

MOTION 2 PASSED (Unanimous voice vote, CNV)

Mr. Littleton will contact UNEP officially regarding ASHRAE's acceptance of the cooperation agreement.

AI-16

New BusinessGARCAE AASA Approval Attachment O

Mr. Wentz moved

- (3) that ExCom recommends the Board of Directors approve the membership of the Georgian Association of Refrigerating, Cryogenic and Air-conditioning Engineers NGO to the ASHRAE Associate Society Alliance.

MOTION 3 PASSED (Unanimous voice vote, CNV)

Use of Teamup Calendar Software Attachment P

Mr. Phoenix introduced a new calendar software that does not require a Google account. He has been using it and finds that it is user friendly and a potential option for the Officer Travel Calendar. Teamup is a shared online calendar application for groups and projects. Teamup is designed to focus on the needs of organizing people and things in a group conceptl.

Mr. Littleton will set up a Teamup calendar for the Executive Committee.

AI-17

Department of Energy Commissioning Guidelines (Better Building Task Force)

Mr. Phoenix reported that DOE is attempting to make commissioning part of their regulatory environment and have contracted with the National Institute of Building Sciences (NIBS) to manage this process. There are varying responses to this change in the commissioning world. NEBB has signed on and they are adjusting their exams to pick up the changes. BCA is also considering the changes. ACG currently is waiting before making any adjustments. In addition, ASHRAE Guideline 0 is referenced in the DOE regulations.

Mr., Phoenix will request the commissioning documents from Henry Green, NIBS.

AI-18

Mr. Littleton will research the impact on ASHRAE and Standard 202.

AI-19

2016 STEM Conference

Mr. Phoenix reported that he attended the NIBS Building Innovation Conference earlier this month (January) and attendance was down. The 2016 Building Innovation Conference and 2016 STEM Conference will be held at the same time next year. ASHRAE should consider sponsorship and participation. Mr. Phoenix met Mr. Samuel Taylor who is retired from DOE and now a consultant for the department. He is very enthusiastic about this event and is active in BuildingScienceEducation.net This may be a great opportunity for ASHRAE.

Mr. Phoenix will forward Mr. Samuel Taylor's contact information to ExCom.

AI-20

Mr. Littleton will research the 2016 STEM Conference and Building Innovation Conference.

AI-21

Members Council Referrals Attachment Q

Mr. Phoenix reported that there are two referrals from Members Council.

- That the Society President is requested to appoint an ad hoc committee to study moving training back to the CRC level and eliminate centralized training.
- That chapter committee chairs for Research Promotion, Membership Promotion, Refrigeration Chair and YEA Chair (those not currently allowed reimbursement) be allowed as current chairs the same transportation reimbursement for CRC Regional meetings effective July 1, 2015.

Mr. Phoenix has appointed a new ad hoc called, "Effect of Centralized Training on CRCs" with Ginger Scoggins as chair. They will meet for the first time in Chicago. They will be addressing these and other issues.

American Institute of Architects (AIA) Meeting in Atlanta

Mr. Underwood reported that the AIA Meeting will take place in Atlanta on May 14 – 16, 2015. They are looking forward to an ASHRAE representative attending this meeting.

Mr. Phoenix will send an ASHRAE representative to the AIA Meeting in Atlanta this spring.

AI - 22

US AID – Support for Vietnam HVAC Society (VISRAE)

Mr. Littleton reported that we are in the early stages of discussing the Vietnam HVAC Society and potential support. Any substantive support would require a grant. This item is for information only at this time. The initial conference call indicates more work ahead.

HVAC&R Work Force Foundation Attachment R

Mr. Littleton reported that ASHRAE belongs to the HVAC&R Work Force Foundation and are part of a group of organizations that are providing support. They have hired a part time executive director and are establishing the HVAC&R Body of Knowledge. The goal is to prepare more people for a career in the technical positions in the HVAC industry. There has been a growing discussion that ASHRAE should be more involved in this area.

Mr. Underwood reported that there is a program in Canada that is similar and called the Red Seal Program. Mr. Underwood will forward the Red Seal program information to ExCom.

AI - 23

Mr. Littleton will study the HVAC&R Workforce Development Foundation and determine how ASHRAE can be effective.

AI - 24

National Sanitation Foundation

Mr. Littleton reported that ASHRAE has met twice with the National Sanitation Foundation and there is increasing discussion about a memorandum of understanding with ASHRAE. The group is currently working on a water borne hazards standard and they would like ASHRAE to be a co-sponsor. They have discussed a joint training program with ASHRAE.

Alliance to Save Energy's Systems Efficiency Initiative Attachment S

Mr. Littleton reported that the alliance is looking for organizations to support their Systems Efficiency Initiative. Mr. Phoenix has been ask to be on a steering committee, whose first meeting will be on February 23rd. He is not able to go.

BOMA 360 2014-2015 Report Attachment T

Mr. Phoenix reported that he was approached several times at the BOMA conference about bEQ. There is a perception that ASHRAE is not marketing this program effectively. bEQ is a tool and not a label and these concerns were sent to Godfrey to include in their survey.

Mr. Underwood reported that BOMA has a similar benchmark tool in Canada.

Mr. Wentz will discuss with bEQ Committee the status of their marketing efforts.

AI - 25

CDC Indoor Pool Off-gassing

Mr. Littleton reported that ASHRAE has been ask to host a CDC Indoor Pool Off-gassing meeting at the ASHRAE headquarters on February 1, 2015. ExCom members agreed this should take place.

Global Resource Management Inc (GRMI – Global) Attachment U

Mr. Littleton reported that ASHRAE has agreed to participate in GRMI. We have sent them a draft charter. A meeting was held on Sunday, January 25th in Chicago.

Mr. Olesen will work with the Refrigeration Committee to be the contact point for GRMI.

AI - 26

Distinguished Lecturer Program

Mr. Phoenix reported that concerns have been expressed about the DL program. He suggested a closer examination of the program to ensure that it continues to be a help to chapters. There are 75 lecturers in the program and it would be good to see how many are participating or invited to participate. There are honorariums paid and a review of the program would indicate if there is any oversight needed.

Mr. Underwood will discuss with Members Council the DL program and honorarium concerns.

AI – 27

Mr. Gullede will send to ExCom the list of DL visits this last year.

AI – 28

Issues from Presidential Members

Mr Phoenix reported on the Presidential Member breakfast . He would recommend that the President-Elect and Treasurer attend this event in the future.

Mr. Littleton will add the President-Elect and Treasurer to the Presidential Member breakfast invitation list.

AI – 29

Mr. Phoenix shared some of the concerns expressed by Presidential Members:

- ASHRAE needs to be involved in work force development. We have many partners that are engaged in this and ASHARE should develop a long term plan for work force development and stay involved,. Engineers will be developing at the strategic level but those that install and repair are a major force in the future.
- ASHRAE's strategic approach to the future of engineering.
- ASHRAE's participation in the global water shortage problem. This is becoming a world wide crisis and it is within the realm of ASHRAE's work.

RP 1603 Termination

Mr. Olesen expressed concern on how ASHRAE will handle the announcement of the termination of RP-1603. He has assigned RAC an action item to complete a report identifying lessons learned from this project and its termination.

Mr. Littleton will develop a set of talking points regarding the RP 1603 termination.

AI – 30

ASHRAE's Relationship to International Institute of Refrigeration

Mr. Olesen reported his concern about ASHRAE's relationship to IIR. IIR has not been attending the UNEP meetings and they seem to be functioning at a low level.

Mr. Littleton reported that ASHRAE files the IIR tax returns and there has been a contribution of \$10,000 from ASHRAE toward the initial \$90,000 they were seeking. Mr. Van Baxter at the Oak Ridge Laboratory in Tennessee is the contact. Gloria Cofer, former EA to the Board was working with IIR.

Mr. Littleton will check into ASHRAE's financial responsibility and involvement with IIR.

AI – 31

Future of the ASHRAE IEQ-GA Ad Hoc

Mr. Olesen reported the following information about the ASHRAE IEQ-GA Ad Hoc:

- The ad hoc met on January 9th via conference call. They will meet again on Tuesday, January 27th in Chicago. Representatives from 13 organizations will attend. These are ASHRAE, IAQA, REHVA, AIVC, AWMA, AIHA, USGBC, ICA, CIE, NAFA, IICRC, EPA and ACGIH.
- IEA-GA plans to submit a proposal for an ASHRAE PD on Indoor Environmental Quality. The PD would be developed according to ASHRAE's PD procedures but developed with the intent it might be approved by IEQ-GA member organizations.
- The bylaws to govern the operation of the ad hoc have been drafted and continue to be developed.
- The IEQ-GA is seeking to add lighting and acoustic organizations as full members in addition to trade and government organizations as affiliate members.,
- The ad hoc will be presenting a seminar for the Atlanta ASHRAE meeting.
- IEQ-GA will meet at ASHRAE IAQ 2016 conference.
- IEQ-GA will help to develop programs for the conference. IEQ-GA will prepare programs for other IAQ related conferences to promote its activities.

Mr. Olesen requests that ASHRAE continue its support of the Global Alliance for another year or longer.

Mr. Underwood will continue the support of the Global Alliance during his presidency.

AI – 32

Spring Board Orientation

Mr. Underwood reported that the Board Orientation for officer nominees will be held in early March at ASHRAE headquarters. One area that has not been reviewed in the past is the standards process. The Board of Directors makes the policies and approves standards but many are unfamiliar with how the standards process works. He would like to include the standards process in the training session.

Mr. Littleton will request that Claire Ramspeck give a standards presentation at the BOD Orientation.

AI - 33

Information Items

NATE Report to the Board Attachment V

ASHRAE/GCCA Report Attachment W

DOE Better Buildings Task Force Attachment X

Marketing Report Attachment Y

Future Meetings

2015-2016 CRC Schedule Attachment Z

2015 Spring ExCom Meeting

The Spring Executive Committee Meeting is scheduled for Thursday, March 26 through Sunday, March 29, 2015 at the Sanderling Resort in Duck, North Carolina. The itinerary will be sent to members in early March.

Officers' Spring 2015 Travel Assignments

Mr. Phoenix requested that officers send a schedule of what trips they would be available to attend that remain on the spring calendar.

Final Review of Action Items

Mr. Phoenix reported that the ExCom action items will be sent with the meeting minutes.

Executive Session

The Executive Committee had several sessions during the three day meeting and all discussions are covered in the Executive Session minutes.

Adjournment

Mr. Phoenix thanked everyone for coming. The meeting was adjourned on Thursday, January 29, 2015



Jeff H. Littleton, Secretary

Mdt/2015-03-09

Distribution: Board of Directors
Staff Directors

Attachments: A. Report of the President
B. Report of the Treasurer
C. CLIMA 2016 Report
D. AEDG Steering Committee Report
E. Foundation Trustees Report
F. Scholarship Trustees Report
G. College of Fellows Report

- H. Life Members Report
- I. Joint Expo Policy Committee
- J. DOE/ASHRAE Memorandum of Understanding
- K. Restructuring of PEAC Postponed Motion
- L. Winter Conference VIP Policies and Procedures Proposal
- M. Ebies Award – Urban Green Council
- N. UNEP/ASHRAE Work Plan
- O. GARCAE AASA Application
- P. Teamup Calendar Software
- Q. Members Council Referrals
- R. HVAC&R Work Force Foundation
- S. Alliance to Save Energy's Systems Efficiency Initiative
- T. BOMA 360 2014-2015 Report
- U. GRMI – Global
- V. NATE Report to the Board
- W. ASHRAE/GCCA Report
- X. DOE Better Buildings Force
- Y. Marketing Report
- Z. 2015-2016 CRC Schedule

DRAFT



Report of ASHRAE President Tom Phoenix
ASHRAE Travel from July 1, 2014
to January 30, 2015

Date	Meeting	Location	Comments
July 13-16, 2014	Purdue University Conference	West Lafayette, IN	
July 24-26, 2014	Leadership Retreat	Greensboro, NC	
July 30-Aug 3, 2014	Region VII CRC	New Orleans, LA	
August 6-11, 2014	Region X CRC	Honolulu, HI	
August 12-17, 2014	Region XIII CRC	Taipei, Taiwan	
August 20, 2014	ICC Roundtable	Washington, DC	
September 9-12, 2014	ASHRAE/IBPSA Conference	Atlanta, GA	
September 17-22, 2014	Region-at-Large CRC	Madrid, Spain	
October 1-5, 2014	Fall BOD and ExCom Meetings	Atlanta, GA	
October 6-11, 2014	CIBSE/IMechE Meetings	London, England	
October 13-16, 2014	Chillventa Expo	Nuremberg, Germany	
October 21-24, 2014	USGBC Greenbuild	New Orleans, LA	
October 27-29, 2014	DC Leadership Meetings	Washington, DC	
Oct 31-Nov 2, 2014	IAQA Transition Team	Atlanta, GA	
November 5, 2014	Arkansas Chapter	Little Rock, AR	
November 6, 2014	NW Arkansas Section	Springdale, AR	
November 13-14, 2014	East Tennessee Chapter	Knoxville, TN	50th Anniversary
November 15-19 2014	AHRI Annual Meeting	Carlsbad, CA	
November 23-24, 2014	ASHRAE Headquarters	Atlanta, GA	Volunteer time Ad-Hoc
December 3-4, 2014	Bermuda Ministries & Others	Hamilton, Bermuda	bEQ Presentation

December 14-16, 2014	ASHRAE Headquarters	Atlanta, GA	189/IGCC Meetings
January 7-9, 2015	NIBS Building Innovation 2015	Washington, DC	
January 13, 2015	Boston Chapter Visit	Boston, MA	
January 14, 2015	Central NY Chapter Visit	Syracuse, NY	
January 15, 2015	Champlain Valley Chapter Visit	Burlington, VT	
January 21-29, 2015	ASHRAE Winter Meeting	Chicago, IL	

**ASHRAE
GENERAL, RESEARCH, COF AND LIFE MEMBERS FUNDS
STATEMENT OF FINANCIAL POSITION - COMPARATIVE
December 31, 2014**

	12/31/14	One Year Ago 12/31/13	Two Years Ago 12/31/12	Three Years Ago 12/31/11	Four Years Ago 12/31/10	Five Years Ago 12/31/09	Six Years Ago 12/31/08
1 Cash	\$1,383,660	\$1,631,329	\$1,508,701	\$2,053,220	\$1,550,802	\$1,519,308	\$3,223,468
2 Marketable Securities at Market Value	18,332,734	17,349,012	14,553,223	12,745,610	12,701,873	11,077,201	9,516,456
3 Accounts Receivable	1,010,764	947,736	1,257,999	1,272,876	1,054,237	703,565	811,853
4 Less: Allowance for Uncollectable Accounts	(185,206)	(90,109)	(150,971)	(126,572)	(119,732)	(67,770)	(119,439)
5 Miscellaneous Receivables & Deposits	10,594	10,650	14,191	13,579	16,223	19,483	36,457
6 Inventory	555,392	579,665	479,360	401,344	491,731	427,244	526,605
7 Prepaid Expense	438,001	562,359	525,783	382,417	783,707	580,459	523,601
8 Property and Equipment-Remaining Value	6,517,196	7,080,454	7,579,493	7,950,158	8,684,395	9,155,262	9,785,172
9 Due To (From) Other Funds	170						
10 TOTAL ASSETS	28,063,135	28,071,266	25,767,779	24,692,632	25,163,236	23,414,752	24,304,173
11 Accounts Payable & Accrued Expenses	5,361,913	5,571,836	5,708,001	5,511,968	5,800,498	4,899,090	4,966,161
12 Refundable Advances	9,898	969	1,691	10,807	3,623	626,096	582,376
13 Deferred Income	6,985,489	6,709,977	6,263,203	6,184,417	6,087,108	4,920,514	7,270,134
14 TOTAL LIABILITIES	12,357,300	12,282,782	11,972,895	11,707,192	11,891,229	10,445,700	12,818,671
15 Net Assets Beginning of Year	18,367,630	16,741,805	16,304,968	16,657,249	14,141,076	14,003,661	16,471,978
16 Net Assets -Surplus/(Deficit) for Current Yr	(2,661,795)	(953,321)	(2,510,084)	(3,671,809)	(869,069)	(1,034,609)	(4,986,476)
18 TOTAL LIABILITIES & NET ASSETS	28,063,135	28,071,266	25,767,779	24,692,632	25,163,236	23,414,752	24,304,173
19 NET ASSETS TO DATE	15,705,835	15,788,484	13,794,884	12,985,440	13,272,007	12,969,052	11,485,502

**ASHRAE CONSOLIDATED (excl Foundation)
STATEMENT OF REVENUES & EXPENSES
For the Six Months Ending December 31, 2014**

in thousands US dollars

MONTH OF DEC			Fiscal YTD Through Month of DEC				TWELVE MONTHS ENDING JUNE 30						DRAFT	DRAFT	
Actual	Actual	Budget	Actual	Budget	Actual	Budget	roll up	Actual	Actual	Budget	Actual	Forecast	Budget	DRAFT	DRAFT
FY 13-14	FY 14-15	FY 14-15	FY 13-14	FY 13-14	FY 14-15	FY 14-15	acct / Description	FY 11-12	FY 12-13	FY 13-14	FY 13-14	FY 14-15	FY 14-15	FY 15-16	FY 16-17
\$628.5	\$633.4	\$612.6	\$3,628.8	\$3,670.2	\$3,671.2	\$3,604.0	REVENUES								
240.7	230.0	324.7	1,741.0	1,926.0	1,597.4	1,948.3	31 Membership Dues Earned Income	\$7,057.7	\$7,221.9	\$7,577.8	\$7,325.3	\$7,544.6	\$7,544.6	\$7,744.7	\$7,973.8
330.0	360.7	365.7	1,669.1	1,734.3	1,597.2	1,773.8	32 Publication Sales Income	4,282.1	3,323.4	3,852.0	3,803.6	3,861.5	3,896.5	3,636.9	3,686.2
1.4	3.0	1.4	8.6	8.0	14.2	8.4	34 Advertising Income - Display	3,869.2	3,856.1	3,850.0	3,773.1	3,806.0	3,897.0	3,904.3	3,922.5
31.7	36.8	51.7	220.1	290.0	297.2	310.0	34 Advertising Income - Classified	18.1	19.3	16.1	26.5	16.9	16.9	18.0	18.8
0.7	1.9		68.9	153.2	155.2	192.2	34 Advertising Income - On-line	431.0	525.4	580.0	470.4	620.0	620.0	630.0	651.5
11.8	27.7	13.3	65.8	80.0	96.0	80.0	35.1 Meeting & Seminar Income	1,398.1	1,535.2	1,775.1	1,965.7	1,631.3	1,666.3	1,556.2	1,583.1
30.8	20.3	120.9	538.5	480.0	636.5	725.2	35.2 Certification Registration	143.2	138.7	160.0	148.5	175.0	160.0	175.0	180.0
			35.0	10.0	21.8	90.0	35.3 Education Registration	1,117.5	1,011.3	1,150.0	1,301.6	1,455.4	1,450.4	1,447.8	1,533.6
133.0	119.9	114.8	400.5	500.2	445.6	503.9	37 Special Project Income	1,127.9	519.3	15.0	105.0	240.0	240.0	89.8	
			10.0	40.0	10.0	10.0	38 Contribution Income	2,019.2	1,845.8	2,088.1	1,945.6	2,222.9	2,160.9	2,249.4	2,325.8
85.5	73.8	74.0	512.8	524.9	442.9	443.7	41.1 AHR Exposition Income	4,179.4	3,949.9	4,148.3	3,973.0	5,080.3	4,857.9	4,145.6	4,387.8
23.5	27.4	31.8	111.4	154.3	242.0	193.6	41.2 Contributions and Matching Gifts	70.0	70.0	56.2	130.0	115.0	115.0	117.4	119.6
					145.9	60.0	41.3 Exposition Income - Other Countries		116.3			145.9	60.0	60.0	90.0
							44 Reserve Transfers	648.5	701.3	1,049.8	1,025.5	887.5	887.5	793.0	878.9
							46 Miscellaneous Income	734.0	286.4	332.6	340.7	692.1	414.0	340.7	355.3
1,517.6	1,534.9	1,710.9	9,010.5	9,571.1	9,373.1	9,943.1	TOTAL REVENUES	27,095.9	25,120.3	26,651.0	26,334.5	28,494.4	27,987.0	26,908.8	27,706.9
							EXPENSES:								
576.2	588.6	607.7	3,777.5	3,800.8	3,848.4	3,949.9	51 Salary Expense	6,932.8	7,328.8	7,601.6	7,523.6	7,822.2	7,899.7	8,225.0	8,471.7
185.1	195.4	190.8	1,127.6	1,082.7	1,205.7	1,144.7	52 Payroll Taxes, Benefits, Personnel Exp	2,057.1	2,212.2	2,165.4	2,257.7	2,254.0	2,289.5	2,396.9	2,522.5
301.9	277.0	315.5	1,483.4	1,939.5	1,420.1	1,892.7	61 Publishing and Promotion Expense	4,558.6	3,641.9	3,879.0	3,569.1	3,779.6	3,785.4	3,721.6	3,683.7
84.5	35.1	64.6	419.7	389.9	526.4	499.2	64 Meetings & Conferences Expense	1,849.2	1,789.8	2,273.1	2,293.1	2,231.1	2,205.1	2,049.8	2,032.2
70.1	66.0	209.6	852.6	951.9	879.1	1,198.4	66 Travel Expense	1,722.2	1,743.5	1,903.8	2,265.6	2,384.5	2,398.9	2,515.0	2,343.4
11.6	16.4	12.0	67.6	72.8	73.2	71.7	68 Awards, Certif, Logo Cost of Goods Sold	195.1	132.4	145.7	119.7	153.4	143.4	149.2	153.7
285.9	284.7	201.7	1,219.3	1,587.9	1,332.3	1,670.9	71 Research Projects & Grants Expense	2,531.3	2,462.4	3,097.6	2,649.6	2,898.9	2,898.9	2,841.6	3,057.8
			50.0	130.0	6.1		73 Special Projects Expense	726.1	466.2	260.0	50.0	160.0	160.0		
6.9	6.3	5.0	53.4	29.1	25.2	29.9	76 Public Relations Expense	69.3	70.3	58.1	129.1	59.9	59.9	62.3	64.1
47.3	53.2	45.8	260.5	266.8	285.4	274.9	78 Occupancy & Insurance	517.3	501.5	533.6	563.4	553.7	549.8	575.9	595.7
114.8	170.3	160.7	724.8	1,011.7	794.8	964.5	82 Office Expense and Organizational Dues	1,845.5	1,709.6	1,997.3	1,746.9	1,953.1	1,929.0	1,955.6	2,014.6
107.0	162.0	151.2	727.9	839.4	678.8	907.2	84 Outside Services Expense	1,544.8	1,430.1	1,733.8	1,528.0	1,823.0	1,814.3	1,782.5	1,688.3
22.1	121.3	37.1	93.1	258.8	211.7	222.7	88 Other Expense	520.5	529.8	516.1	542.9	532.0	530.2	529.6	548.7
(66.6)	(39.1)	(5.4)	(206.1)		(122.4)	(32.4)	88.1 Prepaid Expense (contra acct)	188.2			(18.3)	(64.9)	(64.9)		
5.0			5.0				89 Opportunity Fund	25.0		100.0	35.0	100.0	100.0	100.0	100.0
51.6	51.4	51.2	307.0	360.4	304.5	307.1	90 Depreciation Expense	893.9	695.6	720.8	660.9	614.2	614.2	543.5	543.9
							91 Allocation of Overhead & BOD			0.1					
1,803.4	1,988.6	2,047.5	10,963.3	12,721.7	11,469.3	13,101.4	TOTAL EXPENSES	26,176.9	24,714.1	26,986.0	25,916.3	27,254.7	27,313.4	27,448.5	27,820.3
(285.8)	(453.7)	(336.6)	(1,952.8)	(3,150.6)	(2,096.2)	(3,158.3)	SURPLUS (DEFICIT) before reserve income	919.0	406.2	(335.0)	418.2	1,239.7	673.6	(539.7)	(113.4)
			0.3		153.9	150.0	91.5 Headquarters Building Renewal Contributions	0.2			0.3				
98.2	62.0	25.0	317.8	250.0	210.2	150.0	91.7 Gain on Merger				153.9		300.0		
							92 Non-recurring Expenses	583.3	1,244.8	500.0	488.9				
							Reserve Investment Income:								
241.3	(55.0)	89.1	1,829.8	517.2	(66.2)	534.9	95 Investmt Income - Reserves (net of exp)	(95.8)	1,977.1	1,034.3	2,721.8	1,069.7	1,069.7	1,118.2	1,155.9
(85.5)	(73.8)	(61.5)	(512.8)	(524.9)	(442.9)	(368.7)	96 Transfer Reserves Portion Used Currently	(648.5)	(701.3)	(1,049.8)	(1,025.5)	(737.5)	(737.5)	(767.0)	(790.0)
155.8	(128.8)	27.6	1,317.0	(7.7)	(509.1)	166.2	Remaining Reserve Investment Income	(744.3)	1,275.8	(15.5)	1,696.3	332.2	332.2	351.2	365.9
(228.2)	(644.5)	(334.0)	(953.3)	(3,408.3)	(2,661.6)	(3,142.1)	OVERALL SURPLUS (DEFICIT) after reserve income	(408.4)	437.2	(850.5)	1,625.9	1,425.8	705.8	(188.5)	252.5

GENERAL (Fund 2)
STATEMENT OF REVENUES & EXPENSES
For the Six Months Ending December 31, 2014

in thousands US dollars

MONTH OF DEC			Fiscal YTD Through Month of DEC				TWELVE MONTHS ENDING JUNE 30						DRAFT	DRAFT	
Actual	Actual	Budget	Actual	Budget	Actual	Budget	roll up	Actual	Actual	Budget	Actual	Forecast	Budget	DRAFT	DRAFT
FY 13-14	FY 14-15	FY 14-15	FY 13-14	FY 13-14	FY 14-15	FY 14-15	acct / Description	FY 11-12	FY 12-13	FY 13-14	FY 13-14	FY 14-15	FY 14-15	FY 15-16	FY 16-17
\$616.0	\$620.8	\$599.6	\$3,556.2	\$3,596.2	\$3,597.7	\$3,525.7	REVENUES								
240.7	230.0	324.7	1,741.0	1,926.0	1,597.4	1,948.3	31 Membership Dues Earned Income	\$6,926.9	\$7,077.4	\$7,425.8	\$7,178.7	\$7,388.0	\$7,388.0	\$7,581.9	\$7,806.1
330.0	360.7	365.7	1,669.1	1,734.3	1,597.2	1,773.8	32 Publication Sales Income	4,282.1	3,323.4	3,852.0	3,803.6	3,861.5	3,896.5	3,636.9	3,686.2
1.4	3.0	1.4	8.6	8.0	14.2	8.4	34 Advertising Income - Display	3,869.2	3,856.1	3,850.0	3,773.1	3,806.0	3,897.0	3,904.3	3,922.5
31.7	36.8	51.7	220.1	290.0	297.2	310.0	34 Advertising Income - Classified	18.1	19.3	16.1	26.5	16.9	16.9	18.0	18.8
0.7	1.9		68.9	153.2	155.2	192.2	34 Advertising Income - On-line	431.0	525.4	580.0	470.4	620.0	620.0	630.0	651.5
11.8	27.7	13.3	65.8	80.0	96.0	80.0	35.1 Meeting & Seminar Income	1,398.1	1,535.2	1,775.1	1,965.7	1,631.3	1,666.3	1,556.2	1,583.1
30.8	20.3	120.9	538.5	480.0	636.5	725.2	35.2 Certification Registration	143.2	138.7	160.0	148.5	175.0	160.0	175.0	180.0
			30.0	5.0	21.8	90.0	35.3 Education Registration	1,117.5	1,011.3	1,150.0	1,301.6	1,455.4	1,450.4	1,447.8	1,533.6
2.5	0.9	3.3	12.4	19.0	12.3	19.8	37 Special Project Income	645.3	60.9	10.0	50.0	240.0	240.0	89.8	
							38 Contribution Income	30.0	31.3	38.1	47.2	39.5	39.5	30.4	31.0
			10.0	40.0	10.0	10.0	41.1 AHR Exposition Income	4,179.4	3,949.9	4,148.3	3,973.0	5,080.3	4,857.9	4,145.6	4,387.8
					145.9	60.0	41.2 Contributions and Matching Gifts	(1,815.2)	(1,940.9)	(1,933.0)	(1,859.2)	(1,699.5)	(1,699.5)	(1,932.6)	(2,001.8)
40.8	26.2	26.2	244.6	251.5	157.2	157.2	41.3 Exposition Income - Other Countries		116.3			145.9	60.0	60.0	90.0
23.5	27.4	31.5	111.3	152.8	242.0	192.1	44 Reserve Transfers	385.2	510.9	503.0	489.2	314.5	314.5	550.0	621.4
							46 Miscellaneous Income	734.0	286.4	329.5	341.9	688.9	410.9	337.4	351.9
1,329.9	1,355.7	1,538.3	8,276.5	8,736.0	8,580.6	9,092.7	TOTAL REVENUES	22,344.8	20,501.6	21,904.9	21,710.2	23,763.7	23,318.4	22,230.7	22,862.1
							EXPENSES:								
535.1	547.1	565.7	3,508.7	3,536.9	3,573.9	3,676.8	51 Salary Expense	6,406.4	6,814.3	7,073.8	6,988.0	7,273.2	7,353.7	7,654.1	7,883.8
173.1	183.0	179.0	1,050.3	1,009.6	1,127.7	1,068.3	52 Payroll Taxes, Benefits, Personnel Exp	1,917.0	2,070.3	2,019.2	2,105.2	2,101.0	2,136.6	2,237.1	2,357.9
300.9	272.2	306.9	1,455.2	1,920.5	1,408.7	1,841.6	61 Publishing and Promotion Expense	4,503.3	3,596.3	3,841.0	3,524.7	3,677.3	3,683.1	3,618.3	3,654.5
84.5	35.1	64.6	419.6	386.8	510.7	499.2	64 Meetings & Conferences Expense	1,835.4	1,778.3	2,257.3	2,286.6	2,215.6	2,189.6	2,032.9	2,014.8
69.8	65.2	198.4	773.9	895.5	806.4	1,130.9	66 Travel Expense	1,603.1	1,634.3	1,791.0	2,138.0	2,249.4	2,263.8	2,374.6	2,202.1
11.6	6.3	9.3	35.6	56.3	28.0	56.0	68 Awards, Certif, Logo Cost of Goods Sold	161.7	99.4	112.6	86.9	112.0	112.0	116.5	120.0
	(5.0)		97.0	98.7	86.8	115.0	71 Research Projects & Grants Expense	73.7	106.3	119.0	106.5	122.6	122.6	127.5	131.3
			50.0	115.0	6.1		73 Special Projects Expense	243.6	7.8	230.0	50.0	160.0	160.0		
6.9	6.3	5.0	53.4	29.0	25.2	29.8	76 Public Relations Expense	69.3	70.3	57.9	129.1	59.7	59.7	62.0	63.9
47.3	53.2	45.8	260.5	266.8	285.4	274.9	78 Occupancy & Insurance	517.3	501.5	533.6	563.4	553.7	549.8	575.9	595.7
111.7	166.6	156.2	698.4	984.2	766.6	937.0	82 Office Expense and Organizational Dues	1,798.5	1,668.6	1,942.3	1,704.0	1,898.0	1,873.9	1,898.3	1,955.6
107.0	162.0	151.2	727.9	839.4	678.4	907.2	84 Outside Services Expense	1,544.8	1,430.1	1,733.8	1,528.0	1,822.6	1,814.3	1,782.5	1,688.3
18.4	118.1	32.0	82.0	228.8	200.7	191.8	88 Other Expense	477.8	493.0	456.1	496.8	470.2	468.4	465.4	482.5
(66.6)	(39.1)	(5.4)	(206.1)		(122.4)	(32.4)	88.1 Prepaid Expense (contra acct)	188.2			(18.3)	(64.9)	(64.9)		
5.0			5.0				89 Opportunity Fund	25.0		100.0	35.0	100.0	100.0	100.0	100.0
51.6	51.4	51.2	307.0	360.4	304.5	307.1	90 Depreciation Expense	893.9	695.6	720.8	660.9	614.2	614.2	543.5	543.9
(49.2)	(61.5)	(66.0)	(343.4)	(374.3)	(382.1)	(396.0)	91 Allocation of Overhead & BOD	(657.8)	(649.4)	(748.6)	(730.0)	(828.5)	(792.0)	(818.2)	(818.8)
1,407.1	1,560.9	1,693.9	8,975.0	10,353.6	9,304.6	10,607.2	TOTAL EXPENSES	21,601.2	20,316.7	22,239.8	21,654.8	22,536.1	22,644.8	22,770.4	22,975.5
(77.2)	(205.2)	(155.6)	(698.5)	(1,617.6)	(724.0)	(1,514.5)	SURPLUS (DEFICIT) before reserve income	743.6	184.9	(334.9)	55.4	1,227.6	673.6	(539.7)	(113.4)
			0.3				91.5 Headquarters Building Renewal Contributions	0.2			0.3				
98.2	62.0	25.0	317.8	250.0	210.2	150.0	92 Non-recurring Expenses	583.3	1,244.8	500.0	488.9	300.0	300.0		
							Reserve Investment Income:								
157.4	(35.3)	59.9	1,194.8	349.0	(40.3)	359.5	95 Investmt Income - Reserves (net of exp)	(0.3)	1,277.1	698.0	1,778.1	719.0	719.0	747.7	770.2
(40.8)	(26.2)	(43.2)	(244.6)	(251.5)	(157.2)	(259.0)	96 Transfer Reserves Portion Used Currently	(385.2)	(510.9)	(503.0)	(489.2)	(518.1)	(518.1)	(538.8)	(555.0)
116.6	(61.5)	16.7	950.2	97.5	(197.5)	100.5	Remaining Reserve Investment Income	(385.5)	766.2	195.0	1,288.9	200.9	200.9	208.9	215.2
(58.8)	(328.7)	(163.9)	(65.8)	(1,770.1)	(1,131.7)	(1,564.0)	OVERALL SURPLUS (DEFICIT) after reserve income	(225.0)	(293.7)	(639.9)	855.7	1,128.5	574.5	(330.8)	101.8

BOARD OF DIRECTORS 2-5nn
STATEMENT OF REVENUES & EXPENSES
For the Six Months Ending December 31, 2014

in thousands US dollars

MONTH OF DEC			Fiscal YTD Through Month of DEC				TWELVE MONTHS ENDING JUNE 30						DRAFT	DRAFT	
Actual	Actual	Budget	Actual	Budget	Actual	Budget	roll up	Actual	Actual	Budget	Actual	Forecast	Budget	Budget	Budget
FY 13-14	FY 14-15	FY 14-15	FY 13-14	FY 13-14	FY 14-15	FY 14-15	acct / Description	FY 11-12	FY 12-13	FY 13-14	FY 13-14	FY 14-15	FY 14-15	FY 15-16	FY 16-17
\$0.8	\$0.3	\$0.7	\$3.6	\$8.6	\$9.0	\$4.0	REVENUES								
	26.0	3.3	1.0	7.5	117.0	20.0	38 Contribution Income	\$6.7	\$14.9	\$17.2	\$4.5	\$8.0	\$8.0	\$8.0	\$8.0
							46 Miscellaneous Income		3.0	15.0	2.5	273.0	40.0		5.0
0.8	26.3	4.0	4.6	16.1	126.0	24.0	TOTAL REVENUES	6.7	17.9	32.2	7.0	281.0	48.0	8.0	13.0
60.2	79.2	66.8	377.0	480.4	539.3	434.3	EXPENSES:								
19.1	23.6	18.7	109.6	133.1	153.1	121.6	51 Salary Expense	687.3	771.5	960.9	735.7	1,124.6	868.6	1,039.3	1,070.5
1.3		8.1	51.7	50.8	2.5	48.7	52 Payroll Taxes, Benefits, Personnel Exp	200.3	224.1	266.2	214.4	313.5	243.2	291.0	299.7
2.9	5.7	2.0	24.8	13.0	22.4	3.9	61 Publishing and Promotion Expense	18.2	32.8	101.5	69.4	97.5	97.5	103.4	104.4
47.4	29.8	81.5	349.4	315.8	296.1	489.3	64 Meetings & Conferences Expense	40.6	39.0	38.2	71.0	58.8	58.8	61.6	65.7
		0.3	1.1	1.7	4.7	1.8	66 Travel Expense	595.9	650.8	631.6	1,017.9	988.6	978.6	1,051.8	943.6
				3.7			68 Awards, Certif, Logo Cost of Goods Sold	17.9	9.2	3.4	9.1	3.5	3.5	3.7	3.8
0.4			1.2				71 Research Projects & Grants Expense	7.0	7.0	7.3	7.1	7.5	7.5	7.8	8.1
2.6	7.4	2.9	16.3	16.1	35.0	17.5	76 Public Relations Expense						1.2		
11.4	20.6	11.4	41.6	55.5	83.9	68.4	82 Office Expense and Organizational Dues	39.8	42.2	32.1	42.6	52.3	35.1	37.4	37.4
		0.1	0.2	1.2		0.6	84 Outside Services Expense	72.5	92.4	111.0	69.2	255.8	136.9	191.6	120.3
5.0			5.0				88 Other Expense	0.4	5.3	2.5	0.5	2.5	2.5	10.6	2.7
0.3	0.3	0.3	2.1	2.0	2.0	1.5	89 Opportunity Fund	25.0		100.0	35.0	100.0	100.0	100.0	100.0
(150.7)	(166.7)	(211.3)	(979.9)	(1,129.4)	(1,138.8)	(1,267.7)	90 Depreciation Expense	4.1	4.1	4.0	4.1	3.1	3.1		
(0.1)	(0.1)	(19.2)	0.1	(56.1)	0.2	(80.1)	91 Allocation of Overhead & BOD	(1,709.0)	(1,878.5)	(2,258.7)	(2,277.4)	(3,007.7)	(2,535.3)	(2,898.2)	(2,756.2)
0.9	26.4	23.2	4.5	72.2	125.8	104.1	TOTAL EXPENSES	(0.1)	(0.1)	(0.2)					
							SURPLUS (DEFICIT) before reserve income	6.7	18.0	32.2	7.2	281.0	48.0	8.0	13.0
0.9	26.4	23.2	4.5	72.2	125.8	104.1	OVERALL SURPLUS (DEFICIT) after reserve income	6.7	18.0	32.2	7.2	281.0	48.0	8.0	13.0

OVERHEAD 2-9nn
STATEMENT OF REVENUES & EXPENSES
For the Six Months Ending December 31, 2014

in thousands US dollars

MONTH OF DEC			Fiscal YTD Through Month of DEC				TWELVE MONTHS ENDING JUNE 30						DRAFT	DRAFT	
Actual	Actual	Budget	Actual	Budget	Actual	Budget	roll up	Actual	Actual	Budget	Actual	Forecast	Budget	Budget	Budget
FY 13-14	FY 14-15	FY 14-15	FY 13-14	FY 13-14	FY 14-15	FY 14-15	acct / Description	FY 11-12	FY 12-13	FY 13-14	FY 13-14	FY 14-15	FY 14-15	FY 15-16	FY 16-17
							REVENUES								
						145.9	41.1 AHR Exposition Income	\$4,179.4	\$3,949.9	\$4,148.3	\$3,973.0	\$5,080.3	\$4,857.9	\$4,145.6	\$4,387.8
						60.0	41.2 Contributions and Matching Gifts	(1,885.2)	(2,010.9)	(2,003.0)	(1,989.2)	(1,814.5)	(1,814.5)	(2,050.0)	(2,121.4)
							41.3 Exposition Income - Other Countries		116.3			145.9	60.0	60.0	90.0
40.8	26.2	26.2	244.6	251.5	157.2	157.2	44 Reserve Transfers	385.2	510.9	503.0	489.2	314.5	314.5	550.0	621.4
2.2	(3.8)	4.9	12.0	28.5	(4.8)	29.3	46 Miscellaneous Income	27.6	17.0	56.9	24.0	31.5	58.6	31.7	32.0
43.0	22.4	31.1	256.6	280.0	298.3	246.5	TOTAL REVENUES	2,707.0	2,583.2	2,705.2	2,497.0	3,757.7	3,476.5	2,737.3	3,009.8
							EXPENSES:								
122.5	128.7	153.0	874.5	886.3	841.7	994.3	51 Salary Expense	1,395.9	1,693.5	1,772.6	1,784.0	1,762.9	1,988.6	1,917.2	1,974.7
38.6	38.4	60.0	257.6	255.0	319.4	296.1	52 Payroll Taxes, Benefits, Personnel Exp	441.4	513.4	510.0	534.2	521.5	592.2	585.7	657.1
0.4	0.4	3.1	2.1	18.2	2.8	18.7	61 Publishing and Promotion Expense	155.4	8.2	36.4	5.1	37.5	37.5	39.0	40.1
(1.2)	0.5	1.1	4.2	6.2	4.4	6.3	64 Meetings & Conferences Expense	15.4	19.6	12.4	7.8	12.8	12.8	13.3	13.7
2.6	1.4	7.0	42.1	40.6	47.8	41.8	66 Travel Expense	88.6	95.1	81.2	92.4	83.6	83.6	87.0	89.6
6.5	6.3	4.8	52.2	27.8	25.2	28.7	76 Public Relations Expense	69.2	61.8	55.7	127.9	57.3	57.3	59.6	61.4
43.8	50.6	42.6	243.2	248.2	269.3	255.6	78 Occupancy & Insurance	484.0	464.8	496.3	527.1	515.2	511.2	535.8	554.4
3.1	61.4	28.2	190.0	185.8	204.4	169.4	82 Office Expense and Organizational Dues	316.5	310.9	345.5	328.2	338.7	338.7	352.4	363.9
46.1	54.4	44.8	286.0	259.3	270.4	268.6	84 Outside Services Expense	471.1	429.4	518.5	478.7	491.6	537.3	502.0	513.9
19.5	11.5	5.8	41.2	33.6	47.7	34.6	88 Other Expense	65.3	60.7	67.3	93.5	69.3	69.3	72.1	74.2
43.9	44.0	45.9	261.0	314.5	260.1	275.3	90 Depreciation Expense	802.0	603.5	629.0	568.8	550.5	550.5	543.5	543.9
(325.2)	(397.6)	(398.3)	(2,254.1)	(2,262.5)	(2,293.3)	(2,389.5)	91 Allocation of Overhead & BOD	(4,415.9)	(4,261.0)	(4,524.9)	(4,547.6)	(4,440.9)	(4,779.0)	(4,707.6)	(4,886.9)
0.6	(2.0)			13.0	(0.1)	(0.1)	TOTAL EXPENSES	(111.1)	(0.1)		0.1				
42.4	22.4	33.1	256.6	267.0	298.4	246.6	SURPLUS (DEFICIT) before reserve income	2,818.1	2,583.3	2,705.2	2,496.9	3,757.7	3,476.5	2,737.3	3,009.8
				0.3			91.5 Headquarters Building Renewal Contributions	0.2			0.3				
3.9	6.6		11.6		18.0		92 Non-recurring Expenses	111.0	86.0		14.0				
							Reserve Investment Income:								
157.4	(35.3)	59.9	1,194.8	349.0	(40.3)	359.5	95 Investmt Income - Reserves (net of exp)	(0.3)	1,277.1	698.0	1,778.1	719.0	719.0	747.7	770.2
(40.8)	(26.2)	(43.2)	(244.6)	(251.5)	(157.2)	(259.0)	96 Transfer Reserves Portion Used Currently	(385.2)	(510.9)	(503.0)	(489.2)	(518.1)	(518.1)	(538.8)	(555.0)
116.6	(61.5)	16.7	950.2	97.5	(197.5)	100.5	Remaining Reserve Investment Income	(385.5)	766.2	195.0	1,288.9	200.9	200.9	208.9	215.2
155.1	(45.7)	49.8	1,195.5	364.5	82.9	347.1	OVERALL SURPLUS (DEFICIT) after reserve income	2,321.8	3,263.5	2,900.2	3,772.1	3,958.6	3,677.4	2,946.2	3,225.0

MEMBERS COUNCIL (2-2nn & 2-8nn)
STATEMENT OF REVENUES & EXPENSES
For the Six Months Ending December 31, 2014

in thousands US dollars

MONTH OF DEC			Fiscal YTD Through Month of DEC				TWELVE MONTHS ENDING JUNE 30						DRAFT	DRAFT	
Actual	Actual	Budget	Actual	Budget	Actual	Budget	roll up	Actual	Actual	Budget	Actual	Forecast	Budget	Budget	Budget
FY 13-14	FY 14-15	FY 14-15	FY 13-14	FY 13-14	FY 14-15	FY 14-15	acct / Description	FY 11-12	FY 12-13	FY 13-14	FY 13-14	FY 14-15	FY 14-15	FY 15-16	FY 16-17
\$616.0	\$620.8	\$599.6	\$3,556.2	\$3,596.2	\$3,597.7	\$3,525.7	REVENUES								
0.7	1.9		68.9	153.2	155.2	192.2	31 Membership Dues Earned Income	\$6,926.9	\$7,077.4	\$7,425.8	\$7,178.7	\$7,388.0	\$7,388.0	\$7,581.9	\$7,806.1
	0.2	1.5		3.9	0.3	9.1	35.1 Meeting & Seminar Income	1,398.1	1,535.2	1,775.1	1,965.7	1,631.3	1,666.3	1,556.2	1,583.1
			10.0	15.0	10.0	10.0	38 Contribution Income	6.6	0.5	7.9	25.6	18.1	18.1	8.4	8.7
5.9	0.4	3.1	20.7	23.6	87.5	21.6	41.2 Contributions and Matching Gifts	20.0	20.0	20.0	20.0	20.0	20.0	20.4	21.0
							46 Miscellaneous Income	130.1	74.1	71.2	103.0	147.1	69.9	67.2	73.7
622.6	623.3	604.2	3,655.8	3,791.9	3,850.7	3,758.6	TOTAL REVENUES	8,481.7	8,707.2	9,300.0	9,293.0	9,204.5	9,162.3	9,234.1	9,492.6
							EXPENSES:								
89.1	84.3	85.9	579.8	561.8	557.9	558.6	51 Salary Expense	1,108.8	1,132.4	1,123.6	1,175.4	1,115.9	1,117.2	1,215.3	1,251.8
25.9	28.7	24.1	166.8	155.7	162.3	156.5	52 Payroll Taxes, Benefits, Personnel Exp	333.9	348.3	311.3	342.6	311.2	312.9	340.4	350.6
12.1	12.5	35.7	142.0	189.0	121.6	214.1	61 Publishing and Promotion Expense	349.8	325.6	378.0	339.3	428.3	428.3	327.5	330.5
71.5	26.1	32.0	264.2	222.6	317.3	309.0	64 Meetings & Conferences Expense	1,453.1	1,388.7	1,887.6	1,841.9	1,754.3	1,743.3	1,559.2	1,524.7
11.4	19.8	73.2	285.1	372.6	345.7	380.1	66 Travel Expense	620.8	571.7	745.3	667.6	758.3	760.3	791.4	804.7
11.6	6.3	8.7	34.4	52.7	22.9	52.3	68 Awards, Certif, Logo Cost of Goods Sold	141.7	88.5	105.3	76.6	104.6	104.6	108.8	112.0
	(5.0)		97.0	95.0	86.8	115.0	71 Research Projects & Grants Expense	66.7	99.3	111.7	99.4	115.0	115.0	119.6	123.2
32.3	11.4	34.0	129.1	205.6	140.1	204.3	82 Office Expense and Organizational Dues	346.5	317.4	411.2	330.0	408.5	408.5	414.9	421.6
14.4	14.9	14.6	43.4	58.9	38.9	87.6	84 Outside Services Expense	146.3	169.2	172.8	178.1	175.3	175.3	178.4	182.9
18.1	18.0	14.6	104.8	117.5	125.9	87.5	88 Other Expense	220.9	237.6	235.0	259.2	260.1	258.3	241.5	262.2
(66.6)	(39.1)		(206.1)		(142.7)		88.1 Prepaid Expense (contra acct)	(7.5)			2.0				
106.7	125.0	135.0	740.8	797.0	773.3	810.3	91 Allocation of Overhead & BOD	1,409.1	1,428.0	1,594.0	1,603.9	1,684.0	1,620.5	1,742.3	1,743.6
326.5	302.9	457.8	2,381.3	2,828.4	2,550.0	2,975.3	TOTAL EXPENSES	6,190.1	6,106.7	7,075.8	6,916.0	7,115.5	7,044.2	7,039.3	7,107.8
296.1	320.4	146.4	1,274.5	963.5	1,300.7	783.3	SURPLUS (DEFICIT) before reserve income	2,291.6	2,600.5	2,224.2	2,377.0	2,089.0	2,118.1	2,194.8	2,384.8
296.1	320.4	146.4	1,274.5	963.5	1,300.7	783.3	OVERALL SURPLUS (DEFICIT) after reserve income	2,291.6	2,600.5	2,224.2	2,377.0	2,089.0	2,118.1	2,194.8	2,384.8

PUBLISHING & EDUCATION COUNCIL (2-4nn & 5-5nn)
STATEMENT OF REVENUES & EXPENSES
For the Six Months Ending December 31, 2014

in thousands US dollars

MONTH OF DEC		Fiscal YTD Through Month of DEC					TWELVE MONTHS ENDING JUNE 30						DRAFT	DRAFT	
Actual	Actual	Budget	Actual	Budget	Actual	Budget	roll up	Actual	Actual	Budget	Actual	Forecast	Budget	Budget	Budget
FY 13-14	FY 14-15	FY 14-15	FY 13-14	FY 13-14	FY 14-15	FY 14-15	acct / Description	FY 11-12	FY 12-13	FY 13-14	FY 13-14	FY 14-15	FY 14-15	FY 15-16	FY 16-17
\$240.7	\$230.0	\$324.7	\$1,741.0	\$1,926.0	\$1,597.4	\$1,948.3	REVENUES								
330.0	360.7	365.7	1,669.1	1,734.3	1,597.2	1,773.8	32 Publication Sales Income	\$4,282.1	\$3,323.4	\$3,852.0	\$3,803.6	\$3,861.5	\$3,896.5	\$3,636.9	\$3,686.2
1.4	3.0	1.4	8.6	8.0	14.2	8.4	34 Advertising Income - Display	3,869.2	3,856.1	3,850.0	3,773.1	3,806.0	3,897.0	3,904.3	3,922.5
31.7	36.8	51.7	220.1	290.0	297.2	310.0	34 Advertising Income - Classified	18.1	19.3	16.1	26.5	16.9	16.9	18.0	18.8
11.8	27.7	13.3	65.8	80.0	96.0	80.0	34 Advertising Income - On-line	431.0	525.4	580.0	470.4	620.0	620.0	630.0	651.5
30.8	20.3	120.9	538.5	480.0	636.5	725.2	35.2 Certification Registration	143.2	138.7	160.0	148.5	175.0	160.0	175.0	180.0
						90.0	35.3 Education Registration	1,117.5	1,011.3	1,150.0	1,301.6	1,455.4	1,450.4	1,447.8	1,533.6
1.6	0.5	1.1	8.8	6.5	3.0	6.7	37 Special Project Income				45.0	230.0	230.0		
				25.0			38 Contribution Income	16.7	15.8	13.0	17.0	13.4	13.4	13.9	14.3
15.3	4.7	18.2	64.6	81.4	35.0	109.0	41.2 Contributions and Matching Gifts	50.0	50.0	50.0	110.0	95.0	95.0	97.0	98.6
							46 Miscellaneous Income	570.9	185.9	162.8	195.3	213.1	218.1	213.2	215.2
663.3	683.7	897.0	4,316.5	4,631.2	4,276.5	5,051.4	TOTAL REVENUES	10,498.7	9,125.9	9,833.9	9,891.0	10,486.3	10,597.3	10,136.1	10,320.7
							EXPENSES:								
171.0	170.7	176.7	1,123.8	1,092.8	1,091.7	1,148.6	51 Salary Expense	2,132.5	2,157.9	2,185.7	2,232.8	2,183.3	2,297.2	2,364.0	2,434.9
62.1	67.3	53.0	356.6	323.2	338.7	342.6	52 Payroll Taxes, Benefits, Personnel Exp	629.0	673.8	646.5	717.3	651.8	685.3	707.7	728.9
286.8	258.6	259.8	1,254.2	1,661.5	1,281.5	1,558.9	61 Publishing and Promotion Expense	3,979.5	3,229.1	3,323.0	3,105.4	3,112.0	3,117.8	3,146.2	3,177.2
11.4	1.6	28.0	117.1	136.5	163.1	168.0	64 Meetings & Conferences Expense	305.0	320.1	275.1	354.7	364.3	349.3	372.5	383.5
5.5	6.8	17.9	47.4	93.3	63.0	107.3	66 Travel Expense	148.4	170.6	186.6	196.9	192.2	214.6	195.3	199.1
		0.2	0.1	1.2	0.5	1.2	68 Awards, Certif, Logo Cost of Goods Sold	1.2	1.3	2.3	0.8	2.4	2.4	2.5	2.6
3.5	2.6	3.2	17.2	18.6	16.2	19.3	76 Public Relations Expense	0.1	8.5						
72.7	86.3	82.6	349.2	527.8	384.5	495.4	78 Occupancy & Insurance	33.2	36.7	37.2	36.3	38.5	38.5	40.1	41.3
33.1	72.1	75.5	335.7	436.6	283.9	453.3	82 Office Expense and Organizational Dues	1,012.5	909.3	1,055.6	894.2	997.6	990.7	988.7	1,024.7
(19.2)	88.5	11.5	(64.2)	76.4	27.1	69.1	84 Outside Services Expense	715.2	718.0	873.2	744.5	841.6	906.6	851.8	810.8
5.1	4.8	3.4	30.5	30.5	28.9	20.3	88 Other Expense	191.2	122.6	151.2	143.7	138.1	138.1	141.1	143.3
207.7	253.1	277.7	1,441.4	1,489.1	1,518.8	1,666.1	90 Depreciation Expense	61.0	61.0	61.0	61.0	40.6	40.6		
							91 Allocation of Overhead & BOD	2,683.0	2,722.7	2,978.3	3,048.4	3,296.1	3,332.1	3,442.0	3,476.4
839.7	1,012.4	989.5	5,009.0	5,887.5	5,197.9	6,050.1	TOTAL EXPENSES	11,891.8	11,131.6	11,775.7	11,536.0	11,858.5	12,113.2	12,251.9	12,422.7
(176.4)	(328.7)	(92.5)	(692.5)	(1,256.3)	(921.4)	(998.7)	SURPLUS (DEFICIT) before reserve income	(1,393.1)	(2,005.7)	(1,941.8)	(1,645.0)	(1,372.2)	(1,515.9)	(2,115.8)	(2,102.0)
(176.4)	(328.7)	(92.5)	(692.5)	(1,256.3)	(921.4)	(998.7)	OVERALL SURPLUS (DEFICIT) after reserve income	(1,393.1)	(2,005.7)	(1,941.8)	(1,645.0)	(1,372.2)	(1,515.9)	(2,115.8)	(2,102.0)

TECHNOLOGY COUNCIL
STATEMENT OF REVENUES & EXPENSES
For the Six Months Ending December 31, 2014

in thousands US dollars

MONTH OF DEC			Fiscal YTD Through Month of DEC				TWELVE MONTHS ENDING JUNE 30						DRAFT	DRAFT	
Actual	Actual	Budget	Actual	Budget	Actual	Budget	roll up	Actual	Actual	Budget	Actual	Forecast	Budget	Budget	Budget
FY 13-14	FY 14-15	FY 14-15	FY 13-14	FY 13-14	FY 14-15	FY 14-15	acct / Description	FY 11-12	FY 12-13	FY 13-14	FY 13-14	FY 14-15	FY 14-15	FY 15-16	FY 16-17
		2.0	\$30.0	\$5.0	\$21.8		REVENUES								
			13.0	11.8	7.2	12.1	37 Special Project Income	\$645.3	\$60.9	\$10.0	\$5.0	\$10.0	\$10.0	\$89.8	
							46 Miscellaneous Income	5.4	6.4	23.6	17.0	24.3	24.3	25.3	26.0
		2.0	43.0	16.8	29.0	12.1	TOTAL REVENUES	650.7	67.3	33.6	22.0	34.3	34.3	115.1	26.0
							EXPENSES:								
92.3	84.1	83.2	553.6	515.5	543.3	541.0	51 Salary Expense	1,081.9	1,059.0	1,031.1	1,060.1	1,086.6	1,082.1	1,118.3	1,151.9
27.3	25.0	23.3	159.7	142.6	154.2	151.5	52 Payroll Taxes, Benefits, Personnel Exp	312.4	310.8	285.2	296.7	302.9	303.0	312.3	321.6
0.2	0.6	0.2	5.2	1.0	0.3	1.1	61 Publishing and Promotion Expense	0.4	0.5	2.1	5.5	2.1	2.1	2.2	2.3
	1.2	1.5	9.3	8.5	3.5	11.9	64 Meetings & Conferences Expense	21.4	10.9	44.1	11.3	25.4	25.4	26.4	27.2
2.9	7.3	18.7	50.0	73.2	53.8	112.4	66 Travel Expense	149.3	146.0	146.3	163.2	226.7	226.7	249.1	165.1
		0.1		0.7		0.8	68 Awards, Certif, Logo Cost of Goods Sold	0.9	0.4	1.5	0.4	1.5	1.5	1.6	1.6
			50.0	115.0	6.1		73 Special Projects Expense	243.6	7.8	230.0	50.0	160.0	160.0		
		0.2		1.1		1.2	76 Public Relations Expense			2.2		2.3	2.3	2.4	2.5
0.9	0.1	8.4	13.9	49.0	2.7	50.4	82 Office Expense and Organizational Dues	83.2	88.8	97.9	109.0	100.8	100.8	104.9	108.0
2.0		4.9	21.1	29.1	1.3	29.2	84 Outside Services Expense	139.6	21.1	58.1	57.5	58.4	58.4	58.7	60.4
				0.1			88 Other Expense		66.8	0.1		0.1	0.1	0.1	0.1
		(5.4)			20.3	(32.4)	88.1 Prepaid Expense (contra acct)	195.7			(20.3)	(64.9)	(64.9)		
2.2	2.2	1.7	13.5	13.4	13.5	10.0	90 Depreciation Expense	26.8	27.0	26.8	27.0	20.0	20.0		
112.3	124.7	130.8	708.4	731.3	758.0	784.8	91 Allocation of Overhead & BOD	1,375.0	1,339.4	1,462.7	1,442.7	1,639.9	1,569.6	1,603.2	1,604.3
240.1	245.2	267.6	1,584.7	1,680.5	1,557.0	1,661.9	TOTAL EXPENSES	3,630.2	3,078.5	3,388.1	3,203.1	3,561.8	3,487.1	3,479.2	3,445.0
(240.1)	(245.2)	(265.6)	(1,541.7)	(1,663.7)	(1,528.0)	(1,649.8)	SURPLUS (DEFICIT) before reserve income	(2,979.5)	(3,011.2)	(3,354.5)	(3,181.1)	(3,527.5)	(3,452.8)	(3,364.1)	(3,419.0)
94.3	55.4	25.0	306.2	250.0	192.2	150.0	92 Non-recurring Expenses	472.3	1,158.8	500.0	474.8	300.0	300.0		
(334.4)	(300.6)	(290.6)	(1,847.9)	(1,913.7)	(1,720.2)	(1,799.8)	OVERALL SURPLUS (DEFICIT) after reserve income	(3,451.8)	(4,170.0)	(3,854.5)	(3,655.9)	(3,827.5)	(3,752.8)	(3,364.1)	(3,419.0)

COLLEGE OF FELLOWS 6-590
STATEMENT OF REVENUES & EXPENSES
For the Six Months Ending December 31, 2014

in thousands US dollars

MONTH OF DEC			Fiscal YTD Through Month of DEC				TWELVE MONTHS ENDING JUNE 30						DRAFT	DRAFT	
Actual	Actual	Budget	Actual	Budget	Actual	Budget	roll up	Actual	Actual	Budget	Actual	Forecast	Budget	Budget	Budget
FY 13-14	FY 14-15	FY 14-15	FY 13-14	FY 13-14	FY 14-15	FY 14-15	acct / Description	FY 11-12	FY 12-13	FY 13-14	FY 13-14	FY 14-15	FY 14-15	FY 15-16	FY 16-17
	\$1.1				\$1.1		REVENUES								
	1.1				1.1		38 Contribution Income						\$2.0		
							TOTAL REVENUES						2.0		
							EXPENSES:								
	1.1				1.1		SURPLUS (DEFICIT) before reserve income						2.0		
					14.8		91.7 Gain on Merger						14.8		
	1.1				15.9		OVERALL SURPLUS (DEFICIT) after reserve income						16.8		

LIFE MEMBERS7-595
STATEMENT OF REVENUES & EXPENSES
For the Six Months Ending December 31, 2014

in thousands US dollars

MONTH OF DEC			Fiscal YTD Through Month of DEC				TWELVE MONTHS ENDING JUNE 30						DRAFT	DRAFT	
Actual	Actual	Budget	Actual	Budget	Actual	Budget	roll up	Actual	Actual	Budget	Actual	Forecast	Budget	Budget	Budget
FY 13-14	FY 14-15	FY 14-15	FY 13-14	FY 13-14	FY 14-15	FY 14-15	acct / Description	FY 11-12	FY 12-13	FY 13-14	FY 13-14	FY 14-15	FY 14-15	FY 15-16	FY 16-17
	\$4.1				\$30.4		REVENUES								
	4.1				30.4		38 Contribution Income					\$60.0			
							TOTAL REVENUES					60.0			
	10.0				10.0		EXPENSES:					10.0			
					0.4		68 Awards, Certif, Logo Cost of Goods Sold					0.4			
	10.0				10.4		84 Outside Services Expense								
							TOTAL EXPENSES					10.4			
	(5.9)				20.0		SURPLUS (DEFICIT) before reserve income					49.6			
					139.1		91.7 Gain on Merger					139.1			
	(1.0)				(1.7)		Reserve Investment Income:								
							95 Investmt Income - Reserves (net of exp)								
	(1.0)				(1.7)		Remaining Reserve Investment Income								
	(6.9)				157.4		OVERALL SURPLUS (DEFICIT) after reserve income					188.7			
05 RE COUNCIL														01/14/15	08:26 AM

ASHRAE CONSOLIDATED (excl Foundation)
ASHRAE Major Variations
For the Six Months Ending December 31, 2014

MONTH OF DEC			Fiscal YTD Through Month of DEC				TWELVE MONTHS ENDING JUNE 30						Variance	
Actual	Actual	Budget	Actual	Budget	Actual	Budget	roll up	Actual	Actual	Budget	Actual	Forecast	Budget	Budget vs
FY 13-14	FY 14-15	FY 14-15	FY 13-14	FY 13-14	FY 14-15	FY 14-15	acct / Description	FY 11-12	FY 12-13	FY 13-14	FY 13-14	FY 14-15	FY 14-15	Forecast 2015
\$628.5	\$633.4	\$612.6	\$3,628.8	\$3,670.2	\$3,671.2	\$3,604.0	REVENUES							
240.7	230.0	324.7	1,741.0	1,926.0	1,597.4	1,948.3	31 Membership Dues Earned Income	\$7,057.7	\$7,221.9	\$7,577.8	\$7,325.3	\$7,544.6	\$7,544.6	
330.0	360.7	365.7	1,669.1	1,734.3	1,597.2	1,773.8	32 Publication Sales Income	4,282.1	3,323.4	3,852.0	3,803.6	3,861.5	3,896.5	
1.4	3.0	1.4	8.6	8.0	14.2	8.4	34 Advertising Income - Display	3,869.2	3,856.1	3,850.0	3,773.1	3,806.0	3,897.0	
31.7	36.8	51.7	220.1	290.0	297.2	310.0	34 Advertising Income - Classified	18.1	19.3	16.1	26.5	16.9	16.9	
0.7	1.9		68.9	153.2	155.2	192.2	34 Advertising Income - On-line	431.0	525.4	580.0	470.4	620.0	620.0	
11.8	27.7	13.3	65.8	80.0	96.0	80.0	35.1 Meeting & Seminar Income	1,398.1	1,535.2	1,775.1	1,965.7	1,631.3	1,666.3	
30.8	20.3	120.9	538.5	480.0	636.5	725.2	35.2 Certification Registration	143.2	138.7	160.0	148.5	175.0	160.0	
			35.0	10.0	21.8	90.0	35.3 Education Registration	1,117.5	1,011.3	1,150.0	1,301.6	1,455.4	1,450.4	
133.0	119.9	114.8	400.5	500.2	445.6	503.9	37 Special Project Income	1,127.9	519.3	15.0	105.0	240.0	240.0	
			10.0	40.0	10.0	10.0	38 Contribution Income	2,019.2	1,845.8	2,088.1	1,945.6	2,222.9	2,160.9	
85.5	73.8	74.0	512.8	524.9	442.9	443.7	41.1 AHR Exposition Income	4,179.4	3,949.9	4,148.3	3,973.0	5,080.3	4,857.9	
23.5	27.4	31.8	111.4	154.3	242.0	193.6	41.2 Contributions and Matching Gifts	70.0	70.0	56.2	130.0	115.0	115.0	
							41.3 Exposition Income - Other Countries		116.3			145.9	60.0	
							44 Reserve Transfers	648.5	701.3	1,049.8	1,025.5	887.5	887.5	
							46 Miscellaneous Income	734.0	286.4	332.6	340.7	692.1	414.0	
1,517.6	1,534.9	1,710.9	9,010.5	9,571.1	9,373.1	9,943.1	TOTAL REVENUES	27,095.9	25,120.3	26,651.0	26,334.5	28,494.4	27,987.0	
							EXPENSES:							
576.2	588.6	607.7	3,777.5	3,800.8	3,848.4	3,949.9	51 Salary Expense	6,932.8	7,328.8	7,601.6	7,523.6	7,822.2	7,899.7	
185.1	195.4	190.8	1,127.6	1,082.7	1,205.7	1,144.7	52 Payroll Taxes, Benefits, Personnel Exp	2,057.1	2,212.2	2,165.4	2,257.7	2,254.0	2,289.5	
301.9	277.0	315.5	1,483.4	1,939.5	1,420.1	1,892.7	61 Publishing and Promotion Expense	4,558.6	3,641.9	3,879.0	3,569.1	3,779.6	3,785.4	
84.5	35.1	64.6	419.7	389.9	526.4	499.2	64 Meetings & Conferences Expense	1,849.2	1,789.8	2,273.1	2,293.1	2,231.1	2,205.1	
70.1	66.0	209.6	852.6	951.9	879.1	1,198.4	66 Travel Expense	1,722.2	1,743.5	1,903.8	2,265.6	2,384.5	2,398.9	
11.6	16.4	12.0	67.6	72.8	73.2	71.7	68 Awards, Certif, Logo Cost of Goods Sold	195.1	132.4	145.7	119.7	153.4	143.4	
285.9	284.7	201.7	1,219.3	1,587.9	1,332.3	1,670.9	71 Research Projects & Grants Expense	2,531.3	2,462.4	3,097.6	2,649.6	2,898.9	2,898.9	
			50.0	130.0	6.1		73 Special Projects Expense	726.1	466.2	260.0	50.0	160.0	160.0	
6.9	6.3	5.0	53.4	29.1	25.2	29.9	76 Public Relations Expense	69.3	70.3	58.1	129.1	59.9	59.9	
47.3	53.2	45.8	260.5	266.8	285.4	274.9	78 Occupancy & Insurance	517.3	501.5	533.6	563.4	553.7	549.8	
114.8	170.3	160.7	724.8	1,011.7	794.8	964.5	82 Office Expense and Organizational Dues	1,845.5	1,709.6	1,997.3	1,746.9	1,953.1	1,929.0	
107.0	162.0	151.2	727.9	839.4	678.8	907.2	84 Outside Services Expense	1,544.8	1,430.1	1,733.8	1,528.0	1,823.0	1,814.3	
22.1	121.3	37.1	93.1	258.8	211.7	222.7	88 Other Expense	520.5	529.8	516.1	542.9	532.0	530.2	
(66.6)	(39.1)	(5.4)	(206.1)		(122.4)	(32.4)	88.1 Prepaid Expense (contra acct)	188.2			(18.3)	(64.9)	(64.9)	
5.0			5.0				89 Opportunity Fund	25.0		100.0	35.0	100.0	100.0	
51.6	51.4	51.2	307.0	360.4	304.5	307.1	90 Depreciation Expense	893.9	695.6	720.8	660.9	614.2	614.2	
							91 Allocation of Overhead & BOD			0.1				
1,803.4	1,988.6	2,047.5	10,963.3	12,721.7	11,469.3	13,101.4	TOTAL EXPENSES	26,176.9	24,714.1	26,986.0	25,916.3	27,254.7	27,313.4	
(285.8)	(453.7)	(336.6)	(1,952.8)	(3,150.6)	(2,096.2)	(3,158.3)	SURPLUS (DEFICIT) before reserve income	919.0	406.2	(335.0)	418.2	1,239.7	673.6	
			0.3				91.5 Headquarters Building Renewal Contributions	0.2			0.3			
					153.9		91.7 Gain on Merger					153.9		
98.2	62.0	25.0	317.8	250.0	210.2	150.0	92 Non-recurring Expenses	583.3	1,244.8	500.0	488.9	300.0	300.0	
							Reserve Investment Income:							
241.3	(55.0)	89.1	1,829.8	517.2	(66.2)	534.9	95 Investmt Income - Reserves (net of exp)	(95.8)	1,977.1	1,034.3	2,721.8	1,069.7	1,069.7	
(85.5)	(73.8)	(61.5)	(512.8)	(524.9)	(442.9)	(368.7)	96 Transfer Reserves Portion Used Currently	(648.5)	(701.3)	(1,049.8)	(1,025.5)	(737.5)	(737.5)	
155.8	(128.8)	27.6	1,317.0	(7.7)	(509.1)	166.2	Remaining Reserve Investment Income	(744.3)	1,275.8	(15.5)	1,696.3	332.2	332.2	
(228.2)	(644.5)	(334.0)	(953.3)	(3,408.3)	(2,661.6)	(3,142.1)	OVERALL SURPLUS (DEFICIT) after reserve income	(408.4)	437.2	(850.5)	1,625.9	1,425.8	705.8	

GENERAL (Fund 2)
ASHRAE Major Variations
For the Six Months Ending December 31, 2014

MONTH OF DEC			Fiscal YTD Through Month of DEC				TWELVE MONTHS ENDING JUNE 30						Variance	Comments		
Actual	Actual	Budget	Actual	Budget	Actual	Budget	Actual	Actual	Budget	Actual	Forecast	Budget	Budget vs			
FY 13-14	FY 14-15	FY 14-15	FY 13-14	FY 13-14	FY 14-15	FY 14-15	FY 11-12	FY 12-13	FY 13-14	FY 13-14	FY 14-15	FY 14-15	Forecast 2015			
roll up							acct / Description									
REVENUES																
\$616.0	\$620.8	\$599.6	\$3,556.2	\$3,596.2	\$3,597.7	\$3,525.7	31	Membership Dues Earned Income	\$6,926.9	\$7,077.4	\$7,425.8	\$7,178.7	\$7,388.0	\$7,388.0	\$0.0	
240.7	230.0	324.7	1,741.0	1,926.0	1,597.4	1,948.3	32	Publication Sales Income	4,282.1	3,323.4	3,852.0	3,803.6	3,861.5	3,896.5	(\$35.0)	Handbook sales lagging, reflecting trend. Student sales especially lower
330.0	360.7	365.7	1,669.1	1,734.3	1,597.2	1,773.8	34	Advertising Income - Display	3,869.2	3,856.1	3,850.0	3,773.1	3,806.0	3,897.0	(\$91.0)	Several large advertisers had budget reduced or reallocated. January issue budget set high
1.4	3.0	1.4	8.6	8.0	14.2	8.4	34	Advertising Income - Classified	18.1	19.3	16.1	26.5	16.9	16.9	\$0.0	
31.7	36.8	51.7	220.1	290.0	297.2	310.0	34	Advertising Income - On-line	431.0	525.4	580.0	470.4	620.0	620.0	\$0.0	
0.7	1.9		68.9	153.2	155.2	192.2	35.1	Meeting & Seminar Income	1,398.1	1,535.2	1,775.1	1,965.7	1,631.3	1,666.3	(\$35.0)	Efficient Building Design conference -more sponsors and less registrations
11.8	27.7	13.3	65.8	80.0	96.0	80.0	35.2	Certification Registration	143.2	138.7	160.0	148.5	175.0	160.0	\$15.0	Improved follow up and outreach to core markets
30.8	20.3	120.9	538.5	480.0	636.5	725.2	35.3	Education Registration	1,117.5	1,011.3	1,150.0	1,301.6	1,455.4	1,450.4	\$5.0	
			30.0	5.0	21.8	90.0	37	Special Project Income	645.3	60.9	10.0	50.0	240.0	240.0	\$0.0	
2.5	0.9	3.3	12.4	19.0	12.3	19.8	38	Contribution Income	30.0	31.3	38.1	47.2	39.5	39.5	\$0.0	
			10.0	40.0	10.0	10.0	41.1	AHR Exposition Income	4,179.4	3,949.9	4,148.3	3,973.0	5,080.3	4,857.9	\$222.4	Budgeted 420,000 sq ft sold exhibit space. Sales to date are 470,000
							41.2	Contributions and Matching Gifts	(1,815.2)	(1,940.9)	(1,933.0)	(1,859.2)	(1,699.5)	(1,699.5)	\$0.0	
40.8	26.2	26.2	244.6	251.5	157.2	157.2	41.3	Exposition Income - Other Countries		116.3			145.9	60.0	\$85.9	Mexico exhibit space record sales @ 75,000 sq.ft.
							44	Reserve Transfers	385.2	510.9	503.0	489.2	314.5	314.5	\$0.0	
23.5	27.4	31.5	111.3	152.8	242.0	192.1	46	Miscellaneous Income	734.0	286.4	329.5	341.9	688.9	410.9	\$278.0	Efficient Building Design conference -more sponsors/less registrations and IAQA management fees
1,329.9	1,355.7	1,538.3	8,276.5	8,736.0	8,580.6	9,092.7	TOTAL REVENUES			22,344.8	20,501.6	21,904.9	21,710.2	23,763.7	23,318.4	
EXPENSES:																
535.1	547.1	565.7	3,508.7	3,536.9	3,573.9	3,676.8	51	Salary Expense	6,406.4	6,814.3	7,073.8	6,988.0	7,273.2	7,353.7	(\$80.5)	Open positions
173.1	183.0	179.0	1,050.3	1,009.6	1,127.7	1,068.3	52	Payroll Taxes, Benefits, Personnel Exp	1,917.0	2,070.3	2,019.2	2,105.2	2,101.0	2,136.6	(\$35.6)	Open positions
300.9	272.2	306.9	1,455.2	1,920.5	1,408.7	1,841.6	61	Publishing and Promotion Expense	4,503.3	3,596.3	3,841.0	3,524.7	3,677.3	3,683.1	(\$5.8)	
84.5	35.1	64.6	419.6	386.8	510.7	499.2	64	Meetings & Conferences Expense	1,835.4	1,778.3	2,257.3	2,286.6	2,215.6	2,189.6	\$26.0	
69.8	65.2	198.4	773.9	895.5	806.4	1,130.9	66	Travel Expense	1,603.1	1,634.3	1,791.0	2,138.0	2,249.4	2,263.8	(\$14.4)	
11.6	6.3	9.3	35.6	56.3	28.0	56.0	68	Awards, Certif, Logo Cost of Goods Sold	161.7	99.4	112.6	86.9	112.0	112.0	\$0.0	
	(5.0)		97.0	98.7	86.8	115.0	71	Research Projects & Grants Expense	73.7	106.3	119.0	106.5	122.6	122.6	\$0.0	
			50.0	115.0	6.1		73	Special Projects Expense	243.6	7.8	230.0	50.0	160.0	160.0	\$0.0	
6.9	6.3	5.0	53.4	29.0	25.2	29.8	76	Public Relations Expense	69.3	70.3	57.9	129.1	59.7	59.7	\$0.0	
47.3	53.2	45.8	260.5	266.8	285.4	274.9	78	Occupancy & Insurance	517.3	501.5	533.6	563.4	553.7	549.8	\$3.9	
111.7	166.6	156.2	698.4	984.2	766.6	937.0	82	Office Expense and Organizational Dues	1,798.5	1,668.6	1,942.3	1,704.0	1,898.0	1,873.9	\$24.1	
107.0	162.0	151.2	727.9	839.4	678.4	907.2	84	Outside Services Expense	1,544.8	1,430.1	1,733.8	1,528.0	1,822.6	1,814.3	\$8.3	See each department to see variances
18.4	118.1	32.0	82.0	228.8	200.7	191.8	88	Other Expense	477.8	493.0	456.1	496.8	470.2	468.4	\$1.8	
(66.6)	(39.1)	(5.4)	(206.1)		(122.4)	(32.4)	88.1	Prepaid Expense (contra acct)	188.2			(18.3)	(64.9)	(64.9)	\$0.0	
5.0			5.0				89	Opportunity Fund	25.0		100.0	35.0	100.0	100.0	\$0.0	
51.6	51.4	51.2	307.0	360.4	304.5	307.1	90	Depreciation Expense	893.9	695.6	720.8	660.9	614.2	614.2	\$0.0	
(49.2)	(61.5)	(66.0)	(343.4)	(374.3)	(382.1)	(396.0)	91	Allocation of Overhead & BOD	(657.8)	(649.4)	(748.6)	(730.0)	(828.5)	(792.0)	(\$36.5)	
1,407.1	1,560.9	1,693.9	8,975.0	10,353.6	9,304.6	10,607.2	TOTAL EXPENSES			21,601.2	20,316.7	22,239.8	21,654.8	22,536.1	22,644.8	(\$108.7)
(77.2)	(205.2)	(156.6)	(698.5)	(1,617.6)	(724.0)	(1,514.5)	SURPLUS (DEFICIT) before reserve income			743.6	184.9	(334.9)	55.4	1,227.6	673.6	\$554.0
98.2	62.0	25.0	317.8	250.0	210.2	150.0	91.5	Headquarters Building Renewal Contributions	0.2			0.3				
							92	Non-recurring Expenses	583.3	1,244.8	500.0	488.9	300.0	300.0	\$0.0	
Reserve Investment Income:																
157.4	(35.3)	59.9	1,194.8	349.0	(40.3)	359.5	95	Investmt Income - Reserves (net of exp)	(0.3)	1,277.1	698.0	1,778.1	719.0	719.0	\$0.0	
(40.8)	(26.2)	(43.2)	(244.6)	(251.5)	(157.2)	(259.0)	96	Transfer Reserves Portion Used Currently	(385.2)	(510.9)	(503.0)	(489.2)	(518.1)	(518.1)	\$0.0	
116.6	(61.5)	16.7	950.2	97.5	(197.5)	100.5	Remaining Reserve Investment Income			(385.5)	766.2	195.0	1,288.9	200.9	200.9	\$0.0
(58.8)	(328.7)	(163.9)	(65.8)	(1,770.1)	(1,131.7)	(1,564.0)	OVERALL SURPLUS (DEFICIT) after reserve income			(225.0)	(293.7)	(639.9)	855.7	1,128.5	574.5	\$554.0

BOARD OF DIRECTORS 2-5nn
ASHRAE Major Variations
For the Six Months Ending December 31, 2014

MONTH OF DEC			Fiscal YTD Through Month of DEC			
Actual FY 13-14	Actual FY 14-15	Budget FY 14-15	Actual FY 13-14	Budget FY 13-14	Actual FY 14-15	Budget FY 14-15
\$0.8	\$0.3	\$0.7	\$3.6	\$8.6	\$9.0	\$4.0
	26.0	3.3	1.0	7.5	117.0	20.0
0.8	26.3	4.0	4.6	16.1	126.0	24.0
60.2	79.2	66.8	377.0	480.4	539.3	434.3
19.1	23.6	18.7	109.6	133.1	153.1	121.6
1.3		8.1	51.7	50.8	2.5	48.7
2.9	5.7	2.0	24.8	13.0	22.4	3.9
47.4	29.8	81.5	349.4	315.8	296.1	489.3
		0.3	1.1	1.7	4.7	1.8
				3.7		
0.4			1.2			
2.6	7.4	2.9	16.3	16.1	35.0	17.5
11.4	20.6	11.4	41.6	55.5	83.9	68.4
		0.1	0.2	1.2		0.6
5.0			5.0			
0.3	0.3	0.3	2.1	2.0	2.0	1.5
(150.7)	(166.7)	(211.3)	(979.9)	(1,129.4)	(1,138.8)	(1,267.7)
(0.1)	(0.1)	(19.2)	0.1	(56.1)	0.2	(80.1)
0.9	26.4	23.2	4.5	72.2	125.8	104.1
0.9	26.4	23.2	4.5	72.2	125.8	104.1

TWELVE MONTHS ENDING JUNE 30						Variance	Comments
Actual FY 11-12	Actual FY 12-13	Budget FY 13-14	Actual FY 13-14	Forecast FY 14-15	Budget FY 14-15	Budget vs Forecast 2015	
REVENUES							
	\$6.7	\$14.9	\$17.2	\$4.5	\$8.0	\$8.0	\$0.0
46	Miscellaneous Income	3.0	15.0	2.5	273.0	40.0	\$233.0 IAQA management fees
TOTAL REVENUES	6.7	17.9	32.2	7.0	281.0	48.0	\$233.0
EXPENSES:							
51	Salary Expense	687.3	771.5	960.9	735.7	1,124.6	\$256.0 Allocation of IAQA salaries from other departments
52	Payroll Taxes, Benefits, Personnel Exp	200.3	224.1	266.2	214.4	313.5	\$70.3 IAQA allocations
61	Publishing and Promotion Expense	18.2	32.8	101.5	69.4	97.5	\$0.0
64	Meetings & Conferences Expense	40.6	39.0	38.2	71.0	58.8	\$0.0
66	Travel Expense	595.9	650.8	631.6	1,017.9	988.6	\$10.0
68	Awards, Certif, Logo Cost of Goods Sold	17.9	9.2	3.4	9.1	3.5	\$0.0
71	Research Projects & Grants Expense	7.0	7.0	7.3	7.1	7.5	\$0.0
76	Public Relations Expense				1.2		\$0.0
82	Office Expense and Organizational Dues	39.8	42.2	32.1	42.6	52.3	\$17.2
84	Outside Services Expense	72.5	92.4	111.0	69.2	255.8	\$118.9 IAQA contractors
88	Other Expense	0.4	5.3	2.5	0.5	2.5	\$0.0
89	Opportunity Fund	25.0		100.0	35.0	100.0	\$0.0
90	Depreciation Expense	4.1	4.1	4.0	4.1	3.1	\$0.0
91	Allocation of Overhead & BOD	(1,709.0)	(1,878.5)	(2,258.7)	(2,277.4)	(3,007.7)	(\$472.4)
TOTAL EXPENSES		(0.1)		(0.2)			
SURPLUS (DEFICIT) before reserve income	6.7	18.0	32.2	7.2	281.0	48.0	
OVERALL SURPLUS (DEFICIT) after reserve income	6.7	18.0	32.2	7.2	281.0	48.0	\$233.0

OVERHEAD 2-9nn
ASHRAE Major Variations
For the Six Months Ending December 31, 2014

MONTH OF DEC			Fiscal YTD Through Month of DEC				TWELVE MONTHS ENDING JUNE 30						Variance	Comments	
Actual FY 13-14	Actual FY 14-15	Budget FY 14-15	Actual FY 13-14	Budget FY 13-14	Actual FY 14-15	Budget FY 14-15	roll up acct / Description	Actual FY 11-12	Actual FY 12-13	Budget FY 13-14	Actual FY 13-14	Forecast FY 14-15	Budget FY 14-15		Budget vs Forecast 2015
							REVENUES								
					145.9	60.0	41.1 AHR Exposition Income	\$4,179.4	\$3,949.9	\$4,148.3	\$3,973.0	\$5,080.3	\$4,857.9	\$222.4	Budgeted 420,000 sq ft sold exhibit space. Sales to date are 470,000
					157.2	157.2	41.2 Contributions and Matching Gifts	(1,885.2)	(2,010.9)	(2,003.0)	(1,989.2)	(1,814.5)	(1,814.5)	\$0.0	
40.8	26.2	26.2	244.6	251.5	157.2	157.2	41.3 Exposition Income - Other Countries		116.3			145.9	60.0	\$85.9	Mexico exhibit space record sales @ 75,000 sq.ft.
2.2	(3.8)	4.9	12.0	28.5	(4.8)	29.3	44 Reserve Transfers	385.2	510.9	503.0	489.2	314.5	314.5	\$0.0	
							46 Miscellaneous Income	27.6	17.0	56.9	24.0	31.5	58.6	(\$27.1)	
43.0	22.4	31.1	256.6	280.0	298.3	246.5	TOTAL REVENUES	2,707.0	2,583.2	2,705.2	2,497.0	3,757.7	3,476.5	\$281.2	
							EXPENSES:								
122.5	128.7	153.0	874.5	886.3	841.7	994.3	51 Salary Expense	1,395.9	1,693.5	1,772.6	1,784.0	1,762.9	1,988.6	(\$225.7)	Salary allocation to IAQA
38.6	38.4	60.0	257.6	255.0	319.4	296.1	52 Payroll Taxes, Benefits, Personnel Exp	441.4	513.4	510.0	534.2	521.5	592.2	(\$70.7)	Tax allocation to IAQA
0.4	0.4	3.1	2.1	18.2	2.8	18.7	61 Publishing and Promotion Expense	155.4	8.2	36.4	5.1	37.5	37.5	\$0.0	
(1.2)	0.5	1.1	4.2	6.2	4.4	6.3	64 Meetings & Conferences Expense	15.4	19.6	12.4	7.8	12.8	12.8	\$0.0	
2.6	1.4	7.0	42.1	40.6	47.8	41.8	66 Travel Expense	88.6	95.1	81.2	92.4	83.6	83.6	\$0.0	
6.5	6.3	4.8	52.2	27.8	25.2	28.7	76 Public Relations Expense	69.2	61.8	55.7	127.9	57.3	57.3	\$0.0	
43.8	50.6	42.6	243.2	248.2	269.3	255.6	78 Occupancy & Insurance	484.0	464.8	496.3	527.1	515.2	511.2	\$4.0	
3.1	61.4	28.2	190.0	185.8	204.4	169.4	82 Office Expense and Organizational Dues	316.5	310.9	345.5	328.2	338.7	338.7	\$0.0	
46.1	54.4	44.8	286.0	259.3	270.4	268.6	84 Outside Services Expense	471.1	429.4	518.5	478.7	491.6	537.3	(\$45.7)	Savings on software outside services - in house staff knowledgeable
19.5	11.5	5.8	41.2	33.6	47.7	34.6	88 Other Expense	65.3	60.7	67.3	93.5	69.3	69.3	\$0.0	
43.9	44.0	45.9	261.0	314.5	260.1	275.3	90 Depreciation Expense	802.0	603.5	629.0	568.8	550.5	550.5	\$0.0	
(325.2)	(397.6)	(398.3)	(2,254.1)	(2,262.5)	(2,293.3)	(2,389.5)	91 Allocation of Overhead & BOD	(4,415.9)	(4,261.0)	(4,524.9)	(4,547.6)	(4,440.9)	(4,779.0)		
0.6		(2.0)		13.0	(0.1)	(0.1)	TOTAL EXPENSES	(111.1)	(0.1)		0.1				
42.4	22.4	33.1	256.6	267.0	298.4	246.6	SURPLUS (DEFICIT) before reserve income	2,818.1	2,583.3	2,705.2	2,496.9	3,757.7	3,476.5		
3.9	6.6		0.3	11.6	18.0		91.5 Headquarters Building Renewal Contributions	0.2			0.3				
							92 Non-recurring Expenses	111.0	86.0		14.0				
157.4	(35.3)	59.9	1,194.8	349.0	(40.3)	359.5	Reserve Investment Income:								
(40.8)	(26.2)	(43.2)	(244.6)	(251.5)	(157.2)	(259.0)	95 Investmt Income - Reserves (net of exp)	(0.3)	1,277.1	698.0	1,778.1	719.0	719.0	\$0.0	
							96 Transfer Reserves Portion Used Currently	(385.2)	(510.9)	(503.0)	(489.2)	(518.1)	(518.1)	\$0.0	
116.6	(61.5)	16.7	950.2	97.5	(197.5)	100.5	Remaining Reserve Investment Income	(385.5)	766.2	195.0	1,288.9	200.9	200.9	\$0.0	
155.1	(45.7)	49.8	1,195.5	364.5	82.9	347.1	OVERALL SURPLUS (DEFICIT) after reserve income	2,321.8	3,263.5	2,900.2	3,772.1	3,958.6	3,677.4	\$281.2	

MEMBERS COUNCIL (2-2nn & 2-8nn)
ASHRAE Major Variations
For the Six Months Ending December 31, 2014

MONTH OF DEC			Fiscal YTD Through Month of DEC				TWELVE MONTHS ENDING JUNE 30						Variance	Comments
Actual FY 13-14	Actual FY 14-15	Budget FY 14-15	Actual FY 13-14	Budget FY 13-14	Actual FY 14-15	Budget FY 14-15	roll up acct / Description	Actual FY 11-12	Actual FY 12-13	Budget FY 13-14	Actual FY 13-14	Forecast FY 14-15	Budget FY 14-15	
\$616.0	\$620.8	\$599.6	\$3,556.2	\$3,596.2	\$3,597.7	\$3,525.7	REVENUES							
	0.7	1.9	68.9	153.2	155.2	192.2	31 Membership Dues Earned Income	\$6,926.9	\$7,077.4	\$7,425.8	\$7,178.7	\$7,388.0	\$7,388.0	\$0.0
		0.2	10.0	3.9	0.3	9.1	35.1 Meeting & Seminar Income	1,398.1	1,535.2	1,775.1	1,965.7	1,631.3	1,666.3	(\$35.0)
		1.5	15.0	10.0	10.0	10.0	38 Contribution Income	6.6	0.5	7.9	25.6	18.1	18.1	\$0.0
							41.2 Contributions and Matching Gifts	20.0	20.0	20.0	20.0	20.0	20.0	\$0.0
	5.9	0.4	20.7	23.6	87.5	21.6	46 Miscellaneous Income	130.1	74.1	71.2	103.0	147.1	69.9	\$77.2
622.6	623.3	604.2	3,655.8	3,791.9	3,850.7	3,758.6	TOTAL REVENUES	8,481.7	8,707.2	9,300.0	9,293.0	9,204.5	9,162.3	\$42.2
							EXPENSES:							
	89.1	84.3	579.8	561.8	557.9	558.6	51 Salary Expense	1,108.8	1,132.4	1,123.6	1,175.4	1,115.9	1,117.2	(\$1.3)
	25.9	28.7	166.8	155.7	162.3	156.5	52 Payroll Taxes, Benefits, Personnel Exp	333.9	348.3	311.3	342.6	311.2	312.9	(\$1.7)
	12.1	12.5	142.0	189.0	121.6	214.1	61 Publishing and Promotion Expense	349.8	325.6	378.0	339.3	428.3	428.3	\$0.0
	71.5	26.1	264.2	222.6	317.3	309.0	64 Meetings & Conferences Expense	1,453.1	1,388.7	1,887.6	1,841.9	1,754.3	1,743.3	\$11.0
	11.4	19.8	285.1	372.6	345.7	380.1	66 Travel Expense	620.8	571.7	745.3	667.6	758.3	760.3	(\$2.0)
	11.6	6.3	34.4	52.7	22.9	52.3	68 Awards, Certif, Logo Cost of Goods Sold	141.7	88.5	105.3	76.6	104.6	104.6	\$0.0
		(5.0)	97.0	95.0	86.8	115.0	71 Research Projects & Grants Expense	66.7	99.3	111.7	99.4	115.0	115.0	\$0.0
	32.3	11.4	129.1	205.6	140.1	204.3	82 Office Expense and Organizational Dues	346.5	317.4	411.2	330.0	408.5	408.5	\$0.0
	14.4	14.9	43.4	58.9	38.9	87.6	84 Outside Services Expense	146.3	169.2	172.8	178.1	175.3	175.3	\$0.0
	18.1	18.0	104.8	117.5	125.9	87.5	88 Other Expense	220.9	237.6	235.0	259.2	260.1	258.3	\$1.8
	(66.6)	(39.1)	(206.1)	(142.7)	(142.7)		88.1 Prepaid Expense (contra acct)	(7.5)			2.0			\$0.0
	106.7	125.0	740.8	797.0	773.3	810.3	91 Allocation of Overhead & BOD	1,409.1	1,428.0	1,594.0	1,603.9	1,684.0	1,620.5	\$63.5
326.5	302.9	457.8	2,381.3	2,828.4	2,550.0	2,975.3	TOTAL EXPENSES	6,190.1	6,106.7	7,075.8	6,916.0	7,115.5	7,044.2	\$71.3
296.1	320.4	146.4	1,274.5	963.5	1,300.7	783.3	SURPLUS (DEFICIT) before reserve income	2,291.6	2,600.5	2,224.2	2,377.0	2,089.0	2,118.1	(\$29.1)
														\$0.0
296.1	320.4	146.4	1,274.5	963.5	1,300.7	783.3	OVERALL SURPLUS (DEFICIT) after reserve income	2,291.6	2,600.5	2,224.2	2,377.0	2,089.0	2,118.1	(\$29.1)

PUBLISHING & EDUCATION COUNCIL (2-4nn & 5-5nn)
ASHRAE Major Variations
For the Six Months Ending December 31, 2014

MONTH OF DEC		Fiscal YTD Through Month of DEC				TWELVE MONTHS ENDING JUNE 30						Variance	Comments		
Actual	Actual	Budget	Actual	Budget	Actual	Budget	roll up	Actual	Actual	Budget	Actual	Forecast	Budget	Budget vs	Comments
FY 13-14	FY 14-15	FY 14-15	FY 13-14	FY 13-14	FY 14-15	FY 14-15	acct / Description	FY 11-12	FY 12-13	FY 13-14	FY 13-14	FY 14-15	FY 14-15	Forecast 2015	
REVENUES															
\$240.7	\$230.0	\$324.7	\$1,741.0	\$1,926.0	\$1,597.4	\$1,948.3	32 Publication Sales Income	\$4,282.1	\$3,323.4	\$3,852.0	\$3,803.6	\$3,861.5	\$3,896.5	(\$35.0)	Handbook sales lagging, reflecting trend. Student sales especially lower.
330.0	360.7	365.7	1,669.1	1,734.3	1,597.2	1,773.8	34 Advertising Income - Display	3,869.2	3,856.1	3,850.0	3,773.1	3,806.0	3,897.0	(\$91.0)	Several large advertisers had budget reduced or reallocated.
1.4	3.0	1.4	8.6	8.0	14.2	8.4	34 Advertising Income - Classified	18.1	19.3	16.1	26.5	16.9	16.9	\$0.0	January issue budget set high.
31.7	36.8	51.7	220.1	290.0	297.2	310.0	34 Advertising Income - On-line	431.0	525.4	580.0	470.4	620.0	620.0	\$0.0	
11.8	27.7	13.3	65.8	80.0	96.0	80.0	35.2 Certification Registration	143.2	138.7	160.0	148.5	175.0	160.0	\$15.0	Improved follow up and outreach to core markets
30.8	20.3	120.9	538.5	480.0	636.5	725.2	35.3 Education Registration	1,117.5	1,011.3	1,150.0	1,301.6	1,455.4	1,450.4	\$5.0	
						90.0	37 Special Project Income				45.0	230.0	230.0	\$0.0	
1.6	0.5	1.1	8.8	6.5	3.0	6.7	38 Contribution Income	16.7	15.8	13.0	17.0	13.4	13.4	\$0.0	
				25.0			41.2 Contributions and Matching Gifts	50.0	50.0	50.0	110.0	95.0	95.0	\$0.0	
15.3	4.7	18.2	64.6	81.4	35.0	109.0	46 Miscellaneous Income	570.9	185.9	162.8	195.3	213.1	218.1	(\$5.0)	
663.3	683.7	897.0	4,316.5	4,631.2	4,276.5	5,051.4	TOTAL REVENUES	10,498.7	9,125.9	9,833.9	9,891.0	10,486.3	10,597.3	(\$111.0)	
EXPENSES:															
171.0	170.7	176.7	1,123.8	1,092.8	1,091.7	1,148.6	51 Salary Expense	2,132.5	2,157.9	2,185.7	2,232.8	2,183.3	2,297.2	(\$113.9)	
62.1	67.3	53.0	356.6	323.2	338.7	342.6	52 Payroll Taxes, Benefits, Personnel Exp	629.0	673.8	646.5	717.3	651.8	685.3	(\$33.5)	
286.8	258.6	259.8	1,254.2	1,661.5	1,281.5	1,558.9	61 Publishing and Promotion Expense	3,979.5	3,229.1	3,323.0	3,105.4	3,112.0	3,117.8	(\$5.8)	
11.4	1.6	28.0	117.1	136.5	163.1	168.0	64 Meetings & Conferences Expense	305.0	320.1	275.1	354.7	364.3	349.3	\$15.0	Increased number of outside North America offerings
5.5	6.8	17.9	47.4	93.3	63.0	107.3	66 Travel Expense	148.4	170.6	186.6	196.9	192.2	214.6	(\$22.4)	Committee travel reimbursement less than anticipated
		0.2	0.1	1.2	0.5	1.2	68 Awards, Certif, Logo Cost of Goods Sold	1.2	1.3	2.3	0.8	2.4	2.4	\$0.0	
3.5	2.6	3.2	17.2	18.6	16.2	19.3	76 Public Relations Expense	0.1	8.5					\$0.0	
72.7	86.3	82.6	349.2	527.8	384.5	495.4	78 Occupancy & Insurance	33.2	36.7	37.2	36.3	38.5	38.5	\$0.0	
							82 Office Expense and Organizational Dues	1,012.5	909.3	1,055.6	894.2	997.6	990.7	\$6.9	
33.1	72.1	75.5	335.7	436.6	283.9	453.3	84 Outside Services Expense	715.2	718.0	873.2	744.5	841.6	906.6	(\$65.0)	Several eLearning/Handbook Online projects delayed due to staff time availability.
(19.2)	88.5	11.5	(64.2)	76.4	27.1	69.1	88 Other Expense	191.2	122.6	151.2	143.7	138.1	138.1	\$0.0	
5.1	4.8	3.4	30.5	30.5	28.9	20.3	90 Depreciation Expense	61.0	61.0	61.0	61.0	40.6	40.6	\$0.0	
207.7	253.1	277.7	1,441.4	1,489.1	1,518.8	1,666.1	91 Allocation of Overhead & BOD	2,683.0	2,722.7	2,978.3	3,048.4	3,296.1	3,332.1	(\$36.0)	
839.7	1,012.4	989.5	5,009.0	5,887.5	5,197.9	6,050.1	TOTAL EXPENSES	11,891.8	11,131.6	11,775.7	11,536.0	11,858.5	12,113.2	(\$254.7)	
(176.4)	(328.7)	(92.5)	(692.5)	(1,256.3)	(921.4)	(998.7)	SURPLUS (DEFICIT) before reserve income	(1,393.1)	(2,005.7)	(1,941.8)	(1,645.0)	(1,372.2)	(1,515.9)	\$143.7	
(176.4)	(328.7)	(92.5)	(692.5)	(1,256.3)	(921.4)	(998.7)	OVERALL SURPLUS (DEFICIT) after reserve income	(1,393.1)	(2,005.7)	(1,941.8)	(1,645.0)	(1,372.2)	(1,515.9)	\$143.7	

TECHNOLOGY COUNCIL
ASHRAE Major Variations
For the Six Months Ending December 31, 2014

MONTH OF DEC			Fiscal YTD Through Month of DEC				TWELVE MONTHS ENDING JUNE 30						Variance	Comments	
Actual FY 13-14	Actual FY 14-15	Budget FY 14-15	Actual FY 13-14	Budget FY 13-14	Actual FY 14-15	Budget FY 14-15	roll up acct / Description	Actual FY 11-12	Actual FY 12-13	Budget FY 13-14	Actual FY 13-14	Forecast FY 14-15	Budget FY 14-15		Budget vs Forecast 2015
		2.0	\$30.0 13.0	\$5.0 11.8	\$21.8 7.2										
		2.0	43.0	16.8	29.0	12.1									
92.3	84.1	83.2	553.6	515.5	543.3	541.0	REVENUES								
27.3	25.0	23.3	159.7	142.6	154.2	151.5	37 Special Project Income	\$645.3	\$60.9	\$10.0	\$5.0	\$10.0	\$10.0	\$0.0	
0.2	0.6	0.2	5.2	1.0	0.3	1.1	46 Miscellaneous Income	5.4	6.4	23.6	17.0	24.3	24.3	\$0.0	
2.9	7.3	18.7	50.0	73.2	53.8	112.4	TOTAL REVENUES	650.7	67.3	33.6	22.0	34.3	34.3	\$0.0	
		0.1		0.7		0.8	EXPENSES:								
		0.2	50.0	115.0	6.1	1.2	51 Salary Expense	1,081.9	1,059.0	1,031.1	1,060.1	1,086.6	1,082.1	\$4.5	
0.9	0.1	8.4	13.9	49.0	2.7	50.4	52 Payroll Taxes, Benefits, Personnel Exp	312.4	310.8	285.2	296.7	302.9	303.0	(\$0.1)	
2.0		4.9	21.1	29.1	1.3	29.2	61 Publishing and Promotion Expense	0.4	0.5	2.1	5.5	2.1	2.1	\$0.0	
		(5.4)		0.1		(32.4)	64 Meetings & Conferences Expense	21.4	10.9	44.1	11.3	25.4	25.4	\$0.0	
2.2	2.2	1.7	13.5	13.4	13.5	10.0	66 Travel Expense	149.3	146.0	146.3	163.2	226.7	226.7	\$0.0	
112.3	124.7	130.8	708.4	731.3	758.0	784.8	68 Awards, Certif, Logo Cost of Goods Sold	0.9	0.4	1.5	0.4	1.5	1.5	\$0.0	
240.1	245.2	267.6	1,584.7	1,680.5	1,557.0	1,661.9	73 Special Projects Expense	243.6	7.8	230.0	50.0	160.0	160.0	\$0.0	
(240.1)	(245.2)	(265.6)	(1,541.7)	(1,663.7)	(1,528.0)	(1,649.8)	76 Public Relations Expense			2.2		2.3	2.3	\$0.0	
94.3	55.4	25.0	306.2	250.0	192.2	150.0	82 Office Expense and Organizational Dues	83.2	88.8	97.9	109.0	100.8	100.8	\$0.0	
							84 Outside Services Expense	139.6	21.1	58.1	57.5	58.4	58.4	\$0.0	
							88 Other Expense		66.8	0.1		0.1	0.1	\$0.0	
							88.1 Prepaid Expense (contra acct)	195.7			(20.3)	(64.9)	(64.9)	\$0.0	
							90 Depreciation Expense	26.8	27.0	26.8	27.0	20.0	20.0	\$0.0	
							91 Allocation of Overhead & BOD	1,375.0	1,339.4	1,462.7	1,442.7	1,639.9	1,569.6	\$70.3	
							TOTAL EXPENSES	3,630.2	3,078.5	3,388.1	3,203.1	3,561.8	3,487.1	\$74.7	
							SURPLUS (DEFICIT) before reserve income	(2,979.5)	(3,011.2)	(3,354.5)	(3,181.1)	(3,527.5)	(3,452.8)	(\$74.7)	
							92 Non-recurring Expenses	472.3	1,158.8	500.0	474.8	300.0	300.0	\$0.0	
							OVERALL SURPLUS (DEFICIT) after reserve income	(3,451.8)	(4,170.0)	(3,854.5)	(3,655.9)	(3,827.5)	(3,752.8)	(\$74.7)	

COLLEGE OF FELLOWS 6-590
ASHRAE Major Variations
For the Six Months Ending December 31, 2014

MONTH OF DEC			Fiscal YTD Through Month of DEC				roll up acct / Description	TWELVE MONTHS ENDING JUNE 30					Variance Budget vs Forecast 2015	Comments	
Actual FY 13-14	Actual FY 14-15	Budget FY 14-15	Actual FY 13-14	Budget FY 13-14	Actual FY 14-15	Budget FY 14-15		Actual FY 11-12	Actual FY 12-13	Budget FY 13-14	Actual FY 13-14	Forecast FY 14-15			Budget FY 14-15
	\$1.1				\$1.1										
	1.1				1.1										
	1.1				1.1						2.0			\$2.0	
											2.0				
	1.1				1.1						2.0			\$2.0	
					14.8						14.8			\$14.8	
														\$0.0	
														\$0.0	
	1.1				15.9						16.8			\$16.8	

05 RE COUNCIL

Position Performance Summary

From 11/30/2014 to 12/31/2014

ASHRAE, Inc. GENERAL Fund
Jeff Littleton

Description	11/30/2014 Value	Additions Purchases	Withdrawal Sales	Realized Gain (Loss)	Unrealized Gain (Loss)	Income Expenses	12/31/2014 Value	Actual Net (IRR)
---Equity Mutual Funds---								
DFA Intl Small Company	548,544	0	0	17,349	(32,162)	7,922	541,653	-1.26
DFA Intl Value I	551,141	0	0	0	(24,663)	4,003	530,481	-3.75
DFA Large Cap Int'l (EAFE)	562,911	0	0	0	(24,089)	3,285	542,107	-3.70
DFA U.S. Large Co (S&P 500)	1,468,450	0	0	0	(13,155)	8,566	1,463,861	-0.31
DFA U.S. Large Value	1,735,506	0	0	9,657	(6,510)	9,714	1,748,367	0.74
DFA U.S. Small Value	590,108	0	0	21,893	(10,789)	2,429	603,641	2.29
DFA US Small Cap I	591,164	0	0	16,797	(5,291)	2,124	604,794	2.31
Vanguard 500 Index	489,080	0	0	0	(3,800)	2,507	487,787	-0.26
Vanguard Mid-Cap Index	651,852	0	0	0	(5,567)	7,264	653,549	0.26
Vanguard Value Index	158,855	0	0	0	(388)	909	159,376	0.33
	7,347,612	0	0	65,696	(126,414)	48,723	7,335,617	
---Fixed Income Mutual Funds---								
DFA One-Year Fixed Income	379,673	0	0	239	(1,103)	207	379,016	-0.17
JPMorgan Strat Income	950,579	0	(2,504)	0	(4,038)	2,504	946,541	-0.16
Loomis Sayles Bond Inst'l	671,168	0	(21,769)	17,343	(30,252)	4,425	640,915	-1.29
Loomis Sayles Invst Grade	643,862	0	(12,104)	6,126	(15,355)	5,978	628,507	-0.51
PIMCO Total Return	1,911,693	0	(54,760)	14,578	(64,128)	40,183	1,847,566	-0.49
	4,556,976	0	(91,137)	38,286	(114,876)	53,296	4,442,545	
---Cash Equivalents---								
Schwab Money Fund	15,334	91,137	0	0	0	0	106,471	
	11,919,922	91,137	(91,137)	103,982	(241,290)	102,019	11,884,633	

Position Performance Summary

From 11/30/2014 to 12/31/2014

ASHRAE, Inc. RESEARCH Fund
Jeff Littleton

Description	11/30/2014 Value	Additions Purchases	Withdrawal Sales	Realized Gain (Loss)	Unrealized Gain (Loss)	Income Expenses	12/31/2014 Value	Actual Net (IRR)
---Equity Mutual Funds---								
DFA Intl Small Company	289,869	0	0	9,168	(16,996)	4,186	286,227	-1.26
DFA Intl Value I	291,198	0	0	0	(13,031)	2,115	280,282	-3.75
DFA Large Cap Int'l (EAFE)	296,872	0	0	0	(12,704)	1,733	285,900	-3.70
DFA U.S. Large Co (S&P 500)	1,034,355	0	0	0	(9,266)	6,034	1,031,122	-0.31
DFA U.S. Large Value	991,431	0	0	5,517	(3,719)	5,549	998,778	0.74
DFA U.S. Small Value	311,938	0	0	11,573	(5,703)	1,284	319,092	2.29
DFA US Small Cap I	312,252	0	0	8,872	(2,795)	1,122	319,452	2.31
Vanguard Mid-Cap Index	344,322	0	0	0	(2,941)	3,837	345,218	0.26
	3,872,237	0	0	35,130	(67,154)	25,860	3,866,072	
---Fixed Income Mutual Funds---								
DFA One-Year Fixed Income	256,908	0	0	162	(746)	140	256,463	-0.17
JPMorgan Strat Income	498,395	0	(1,313)	0	(2,117)	1,313	496,278	-0.16
Loomis Sayles Bond Inst'l	374,945	0	(12,161)	9,689	(16,900)	2,472	358,045	-1.29
Loomis Sayles Invst Grade	336,990	0	(6,335)	3,206	(8,037)	3,129	328,953	-0.51
PIMCO Total Return	993,038	0	(28,446)	7,572	(33,311)	20,873	959,727	-0.49
	2,460,276	0	(48,254)	20,629	(61,112)	27,927	2,399,466	
---Cash Equivalents---								
Schwab Money Fund	8,709	48,254	0	0	0	0	56,964	
	6,341,222	48,254	(48,254)	55,759	(128,266)	53,786	6,322,501	

Report to ExCom on CLIMA 2016 Advisory Committee

ASHRAE Advisory Committee for CLIMA 2016
Meeting of Jun 24, 2015

12th REHVA World Congress, May 22 -25, 2016
Aalborg, Denmark

Committee Membership

Constantinos A. Balaras, Chair; Edward K. C. Tsui; William P. Bahnfleth, Eckhard A. Groll; Tim J. McGinn; Per Kvols Heiselberg - Host Organization Liaison; W. Stephen Comstock - Staff Liaison

Action Items

None

Information for ExCom

1. The committee is proceeding with plans to work with CEC on selection of the best paper given at the 2016 ASHRAE Winter Conference by a submitter who is a graduate student at time of submission. Funds have been included in the committee budget to provide \$2,500 to enable the selected student to attend CLIMA 2016. Conditions of the award are that work must be based on the student's Thesis work, that the paper be a Conference Paper, and that the student be the first author listed. Before finalizing these requirements the committee will confirm with CEC that the requirements are not too restrictive and that CEC has procedures in place to make the selection.
2. REHVA has invited ASHRAE to participate with SHASE, CCHVAC, SAREK and ISHRAE to launch the REHVA World Student Competition at CLIMA 2016. REHVA already has an annual student competition among its member countries. What is envisioned is for each REHVA member country and the each of the partner organizations to select a student for the REHVA competition. The competing student's work should be a bachelor or master's thesis or be of equivalent level. PhD theses will not be accepted. The work will either have been done by individual students or a maximum group of two students. The applicants will present their work at the REHVA WORLD STUDENT COMPETITION session, which will be held during REHVA world congress CLIMA 2016. The travel and accommodation cost for the participants are to be covered by the participants or the association that selected them.

The ASHRAE CLIMA Committee will consider whether to participate and whether the ASHRAE Graduate Student award it is planning to organize would become the process to select the ASHRAE representative.

3. CLIMA will be organized to include:
 - a) Scientific sessions with presentations on recent research
 - b) Technical sessions on new developments in research.
 - c) Practical sessions on trends in practice.
 - d) Workshops

e) Industry forums relevant for industry

There will be oral presentations and poster presentations. The ASHRAE committee believes there were too many parallel sessions at the last CLIMA. Either time limits for oral presentations should be shortened or less presentations accepted in the interest of quality. It was also recommended that not too many presentations be shifted to poster sessions since that may make it difficult for some attendees to receive travel support from employers.

4. A small exhibition is planned for sponsors and other companies.
5. It was agreed that ASHRAE can hold one and possible two training courses (on Saturday afternoon and/or Sunday morning prior to CLIMA). Because of the likelihood of not recovering expenses, ASHRAE will not schedule courses if there are other parallel courses. The Organizing Committee representatives have responded positively to reserve one or two 3 hr time slot in the program for an ASHRAE course.
6. The ASHRAE Member reception is tentatively planned for the Monday evening of CLIMA (May 23, 2016).
7. Important dates are:
 - Abstract submission January 2015
 - Abstract submission ends November 2015
 - Accepted paper submission begins March 2015
 - Accepted paper submission ends December 2015
 - Registration Opens September 2015
 - CLIMA Congress is May 22-25 2016
8. Anticipated conference registration fees are:
 - Standard Fee 520 Euro
 - ASHRAE/REHVA Member 470
 - Students 200 Euro

June 24, 2015

Date

Costas Balaras

Costas A. Balaras, Chair

**REPORT TO EXECUTIVE COMMITTEE
From AEDG Steering Committee
Meeting of January 24, 2015**

Recommendations for ExCom Approval:

1. None.

Background:


Fiscal impact:

Information Items:

1. The latest update on the distribution of the Advanced Energy Design Guides (AEDGs):
 - 525,896 AEDGs downloaded as of January 5, 2015.
 - 26,055 titles distributed in print.
 - **551,951 total copies in circulation as of January 5, 2015**
 - 138,765 registrants account for free AEDG downloads.
2. The final draft of the Grocery AEDG was sent to ASHRAE Publications in December 2014. Galley Proof review began in January 2015. Once complete, the document will have hyperlinks added for easier navigation by users of the electronic copies. Publication is targeted for March 2015.
3. Once the Grocery Guide is published, the AEDG Steering Committee partner organizations will begin execution of the implementation and outreach plan (IOP).
4. The AEDG Steering Committee is providing input for the ASHRAE response to DOE's request for information (RFI) on the definition of zero energy buildings (ZEB). DOE has reported that the feasibility study on a K-12 School zero energy AEDG will not begin until after the completion of the work on the ZEB definition.
5. The AEDG Steering Committee is working with the Developing Economies Ad Hoc to explore the feasibility of applying the AEDGs to developing economy countries.
6. Work continues on 1627-RP *An Evaluation of the Actual Energy Performance of Small Office and K-12 School Buildings Designed in Accordance with the ASHRAE AEDGs*. The PMS and the contractor are working to identify additional buildings at this time. The AEDG SC is a co-sponsor for the project.
7. Work continues on 1651-RP *Development of Maximum Technically Achievable Energy Targets for Commercial Buildings (Ultra Low Energy Use Building Set)*. The contractor has completed the analysis of the individual equipment items and has begun the analysis of the equipment packages. The Energy Targets MTG is the cognizant committee for this project.

January 24, 2015

Date



Bjarne Olesen, ASHRAE Representative

**REPORT TO EXECUTIVE COMMITTEE
From ASHRAE Foundation
Meeting of Monday, January 26, 2015**

Motions to the Board of Directors:

1. Foundation Trustees recommend the ASHRAE Board of Directors approve increasing the number of voting Foundation Board of Trustee members from 15 to 25.
2. Foundation Trustees recommend the ASHRAE Board of Directors approve that when an individual establishes a Gift Annuity they will receive the recognition for the original gift amount.

Motions by the Foundation:

1. That the Foundation Board of Trustees change the term for chapters to fund a scholarship from three years to 5 years.
2. The Foundation Board of Trustees approve the nominating Committee for nominating the Foundation Executive Committee as follows: Barney Burroughs, Don Colliver and Jeff Clarke as members and the Alternates as Dick Hayter and Lane Jackins

Information Items:

1. Foundation Trustees appointed a subcommittee to define a Past President Scholarship Fund. Bill Harrison Chair, Damon Gowan Don Colliver and Barney Burroughs as members.
2. Foundation will have a Spring Foundation 2 day meeting at ASHRAE Headquarters that will include RP Executive Committee and the Development Committee

Date Monday, January 26, 2015

James E. Wolf
James E. Wolf, Chair

**REPORT TO EXECUTIVE COMMITTEE
From Scholarship Trustees
Meeting of Tuesday, January 27, 2015**

RECOMMENDATIONS FOR VOTE:

1. The scholarship trustees recommends ExCom and Board approve a one-year \$5,000 First Year Engineering Scholarship.

Background: Scholarship will be supported by designating and re-naming one of the two existing General Scholarships for students applying at the end of their first year of college. Current categories of applicants include high school seniors and engineering upper-classmen. This new category will eliminate the current comparison between first-year applicants submitting high school transcripts with upper-classmen who submit college transcripts. Selection of recipient will occur at the ASHRAE Annual Conference instead of the Winter Conference to give applicants time to submit grades from their first year of college.

Fiscal Impact: None. Funds will be re-allocated from the General Scholarship account which currently supports two scholarships.

2. The scholarship trustees recommends ExCom and Board approve the following revisions to 3.1.4 of the Scholarship Guidelines for a First Year Engineering Scholarship.

3.1 Scholarship Types and Criteria

3.1.4 First Year Engineering Scholarships

ASHRAE freshman engineering scholarship shall be available to full-time resident first year engineering students enrolled at a school with an ABET-accredited program and pursuing a course of study which has been traditionally a curriculum for the profession of HVAC or refrigeration and meet the following criteria:

- a. Must have a grade point average of at least 3.0 where 4.0 is the highest and/or a class standing of no less than the top 30% of the class (evidenced by an official transcript of grades and/or a statement from a school administrator.)
- b. Must be a student member of ASHRAE or start an ASHRAE student branch at their school.

3. The Scholarship Trustees recommend ExCom approve the following revisions to 11.3.3 and 11.4 of the Scholarship Manual of Procedures:

11.3.3 Sign and date the *Trustees Rating of All Applicants*. Make two copies, keep one for yourself, and send the other copy to the Scholarship Trustees Staff Liaison at ASHRAE headquarters **no later than January 10, one**

week prior to the scholarship meeting, at ASHRAE, 1791 Tullie Circle, NE, Atlanta, GA 30329-2305; or fax it to (404) 321-5478.

11.3.6 The Staff Liaison will complete a *Combined Summary Sheet* and distribute to the Scholarship Trustees at the Winter/Annual Conferences Meeting.

11.4 **In circumstances where a Scholarship Trustee is from the same school campus as a scholarship applicant, has written a letter of reference or completed a chapter evaluation form:**

The following procedure will be followed when evaluating applications and selecting a recipient:

- a. All trustees will complete and return a rating sheet of all scholarship applicants as noted in 11.3.3. above.
- b. A summary of the ratings from all trustees is prepared by the Staff Liaison
- ~~c. A separate summary is prepared, which does not include the ratings of the trustee who is from the same school as an applicant. This summary is for comparison with the summary from all trustees.~~
- d. Trustees meet in Executive Session at the Annual and Winter Conferences Meetings to discuss both summary rankings. Prior to any discussion of the applicants, the trustee whose school campus is noted on any of the applications will excuse him/herself from the discussion and leave the room.
- e. Trustees make a final selection of scholarship recipients.
- f. Trustee re-joins the meeting and is informed of the selection of scholarship recipient(s).

INFORMATION ITEMS:

1. The Scholarship Trustees selected the students listed below as recipients of the Society's Undergraduate Engineering, Regional, and University-specific Scholarships for the 2015-2016 academic year.

\$10,000 Willis H. Carrier Scholarship

Ivan Beentjes, University of Waterloo, Mechanical Engineering
Adel Njeim, City College of New York, Mechanical Engineering

\$10,000 Reuben Trane Scholarship (awarded over a two-year period at \$5,000 per year):

Kayland Adams, East Carolina University, Mechanical Engineering
Anna Schleifer, Clemson University, Mechanical Engineering
Jordan Shefchik, University of Wisconsin-Madison, Mechanical Engineering

\$5,000 Frank M. Coda Scholarship

Michael Schlosser, University of Windsor, Mechanical Engineering

\$5,000 Lynn G. Bellenger Scholarship

Caroline Feldman, University of Dayton, Mechanical Engineering

\$5,000 Alwin B. Newton Scholarship

Michael Newman, University of Manitoba, Mechanical Engineering

\$5,000 C. J. Peters University-Specific Scholarship

Brandon Comisarenco, University of Texas at Austin, Architectural Engineering

\$5,000 Duane Hanson Scholarship

Quentin Williams, California Maritime Academy, Mechanical Engineering

\$5,000 Legacy Scholarship

Zeb Pontius, Miami University, Mechanical Engineering

\$5,000 ASHRAE Region IV Benny Bootle Scholarship

Dana Ruth, North Carolina A&T State University, Architectural Engineering

\$5,000 General Scholarships

Scott Tucci, Missouri University of Science and Technology, Mechanical Engineering

Yirong Zhang, University of Illinois, Mechanical Engineering

\$3,000 Henry Adams Scholarship

Smart Maduka, University of Lagos, Mechanical Engineering

\$3,000 Region III Boggarm Setty Scholarship

Victoria Brinemugha, Pennsylvania State University, Architectural Engineering

\$3,000 Region VIII Scholarship

Caitlyn Kallus, University of Texas at Austin, Architectural Engineering

\$3,000 ASHRAE Minnesota Chapter Peter Potvin Scholarship

Matthew Hamilton, University of Wisconsin, Mechanical Engineering

The following available scholarships were not awarded for the reasons listed below:

The one-year \$3,000 Donald E. Nichols University-specific scholarship: no qualified applicant

The one-year \$3,000 J. Richard Mehalick University-specific scholarship: no qualified applicant

The one-year \$3,000 New Jersey Chapter scholarship: no qualified applicant

Date

David B. Meredith, Chair

College of Fellows
Report to BOD ExCom
From Meeting of January 25, 2015

Information Items

1. The COF reviewed the application and award guidelines for the upcoming COF Travel Award program and confirmed the current schedule.
2. Victor Goldschmidt, Development Committee Representative, was assigned an action item to briefed the group about the upcoming tasks of the Development Committee. He will prepare a full report prior to the Atlanta Annual Conference.
3. Wishes were sent to Dick Hayter for his full recovery.

Life Members Club
Report to BOD ExCom
From Meeting of January 27, 2015

<u>Members Present</u>	<u>Members Absent</u>	<u>Staff</u>
<u>Bill Harrison, Vice Chair</u>	Richard Hayter, Chair	Patricia Adelman
<u>Ken Cooper</u>		Megan Hezlep
<u>Damon Gowan</u>		
<u>George Menzies</u>		

Information Items

1. The LMC reviewed more than 25 applications for the 2014-15 EK Campbell Award and selected a winner. This name will be passed to Honors & Awards for their official approval. The winner will be notified in July 2015 and recognized during the Orlando 2016 Winter Conference.
2. Ken Cooper, Development Committee Representative, briefed the group about the upcoming tasks of the Development Committee and will prepare a full report for the Atlanta 2015 Annual Conference.
3. A subcommittee was formed to review the application and guidelines of the EK Campbell Award. A report will be given during the Atlanta Conference so the new guidelines are in place for the 2015-16 award.

**REPORT TO EXECUTIVE COMMITTEE
From ASHRAE/AHRI Joint Exposition Policy Committee
Meeting of January 25, 2015**

Information Items:

1. Status Report for AHR Expo 2015 – Chicago
 - 486,920 sq. ft. of space sold (14% over previous meeting in Chicago, which was 428,645 sq. ft.)
 - 2,120 total exhibiting companies (includes 594 international companies)
 - 390 new companies
 - 28,000 pre-registrants
2. Status Report for AHR Expo 2016 – Orlando
 - 377,629 sq. ft. of space sold (more than previous meeting in Orlando)
 - 878 signed exhibitor contracts (excludes co-exhibitors)
3. Status Report for AHR 2019 – Atlanta
 - Show dates: January 15-17 (Tuesday – Thursday)
 - IEC has an action item to negotiate for preferred Show days of Monday – Wednesday if available within the first two weeks of February
4. Status Report for AHR Expo Mexico - 2014 – Mexico City
 - 72,824 total sq. ft. of space sold
5. Status Report for AHR Expo Mexico – October 23-25, 2015 – Guadalajara
 - 41,425 sq. ft. of space sold
 - 178 exhibitors

The committee reviewed the following referral motion from Members Council. The committee voted unanimously not to approve the motion but will form a task group consisting of representatives from IEC, ASHRAE and AHRI to review possibilities and options for an AHR Exposition outside North America.

Region XIII (Singapore Chapter) – Motion 19.e (10/02/2014):

That Region XIII be allowed to support or endorse large exhibitions in their own countries, therefore the chapters can promote ASHRAE, publicize their activities and potentially increase membership during such exhibitions, especially if AHR Expo (IEC) does not have any large exhibition in the said country.

BACKGROUND: Currently, based on the rules by AHR Expo contract – International Exhibition Company (IEC), the local chapter cannot support the exhibition if it is more than 929 sq. meters of net exhibit space or more than 100 individual exhibits.

6. The committee unanimously approved an exhibitor space rate of \$37.70 per square foot for the 2016 AHR Expo Mexico in Monterrey.
7. IEC has set aside a pavilion at the 2016 AHR Expo exclusively for IAQA exhibitors and others focusing on indoor environmental quality. An initial set up of 12 booths can be expanded

incrementally by 12 more once a 12-booth section is sold by July 13, 2015. Twenty-seven booths have been sold to date.

8. Marketing Director Vanita Gupta was introduced to the committee and the committee discussed the potential of enhanced marketing for the AHR Expo.

9. List of future AHR Expos:

2016 Orlando – Jan. 25-27

2017 Las Vegas – Jan. 30-Feb. 1

2018 Chicago – Jan. 22-24

2019 Atlanta

2020 Chicago

2021 New York

2022 Las Vegas

January 25, 2014

Date



William A. Harrison, Chair

**Memorandum of Understanding
Between
The United States Department of Energy
And
The American Society of Heating, Refrigerating, and Air-Conditioning Engineers**

By this memorandum of understanding (MOU), the U.S. Department of Energy, Office of Energy Efficiency and Renewable Energy (EERE) and the American Society of Heating, Refrigerating, and Air-Conditioning Engineers (ASHRAE) agree to further their long-term relationship by working cooperatively:

- To improve the efficient use of energy,
- To improve the visible and widespread use of renewable energy sources, and
- To minimize the impact of energy use on the environment.

EERE enters into this MOU pursuant to the authority of section 646 of the Department of Energy Organization Act (Pub. L. 95-91, as amended; 42 U.S.C. § 7256) and Title III of the Energy Conservation and Production Act (Pub. L. 94-385, as amended; 42 U.S.C. 6831 *et seq.*).

EERE and ASHRAE are committed to working together toward the following goals:

- 1) Encourage the continued development of standards related to energy efficiency.
- 2) For each succeeding version of Standard 90.1 (Energy Standard for Buildings Except Low-Rise Residential Buildings) seek adoption of all technologically feasible and economically justified energy efficiency measures.
- 3) Promote and support the use of Standard 90.1 and other relevant standards through training programs, including self-directed learning, building interaction, and ASHRAE Chapter-oriented training.
- 4) Encourage adoption of Standard 90.1 in building codes and in the International Standards Organization (ISO) standards where positive Determinations have been issued.
- 5) Encourage advanced energy design guidance concepts, such as 50% Advanced Energy Design Guides.
- 6) Collaborate in the development and implementation of next-generation refrigerants that achieve Low-GWP (Global Warming Potential) targets and concurrently improve equipment energy efficiency.
- 7) Cooperate to provide and encourage the use of clear and consistent information to the building industry about building energy rating and labeling.
- 8) Cooperate to support the Better Buildings Initiative through such activities as the Better Buildings Alliance and the Better Buildings Case Competition.
- 9) Work within the building community and related professions to encourage the interoperability of building related software and integrated solutions among design disciplines, manufacturers, contractors, and building owners and operators to increase energy efficiency, health, and productivity in new and existing buildings.
- 10) Encourage participation of DOE personnel in ASHRAE activities.

- 11) Encourage communication of information regarding technology transfers to building owners and management about the interrelationships between mechanical systems and building operating costs, noting energy, indoor environmental quality workplace performance, client satisfaction, and public safety.

This MOU in no way restricts either of the parties from participating in any activity with other public or private agencies, organizations or individuals.

This MOU is neither a fiscal nor a funds obligation document. Nothing in this MOU authorizes or is intended to obligate the parties to expend, exchange, or reimburse funds, services, or supplies, or transfer or receive anything of value. The words “encourage,” “support,” and “cooperate” do not imply any material or financial assistance, transaction, or obligation by either party.

This MOU is strictly for internal purposes for each of the parties. It is not legally enforceable and shall not be construed to create any legal obligation on the part of either party. This MOU shall not be construed to provide a private right or cause of action for or by any person or entity.

This MOU is subject to, and will be carried out in compliance with, all applicable laws, regulations and other legal requirements.

The MOU will become effective upon signature by the Assistant Secretary for EERE and the President of ASHRAE. It may be modified or amended by written agreement between both parties, and such amendments shall become part of, and shall be attached to this MOU. This MOU shall terminate at the end of three (3) years unless revised or extended at that time by written agreement of the parties. It may be terminated at any time by either party upon 90 days written notice to the other. Its provisions will be reviewed periodically and amended/supplemented if mutually agreed upon in writing.

Dr. David Danielson
Assistant Secretary
Energy Efficiency and Renewable Energy
U.S. Department of Energy

Thomas H. Phoenix
President 2014-2015
ASHRAE

Date

Date

Restructuring of PEAC Motion Postponed from Seattle Annual Meeting:

(from the July 2, 2014 Board of Director Minutes)

Mr. Wentz presented the following motion for information in accordance with the Rules of the Board (2.101.005.5 A and B). This motion is to be submitted to the Board at least sixty (60) days before any action is taken.

that the Board of Directors approve the restructuring of President-Elect Advisory Committee (PEAC) which would be comprised of seven ASHRAE members, selected by Treasurer that will serve during the year he/she is ASHRAE President-Elect. The President-Elect and the Treasurer are in addition to the seven members selected by the Treasurer. This motion would take effect July 1, 2015. Society year.

Mr. Wentz provided background that the main objective of this motion is to modify PEAC so that this committee is better empowered to provide guidance, input and advice to the President-Elect for his/her upcoming presidential year. This motion also produces a more transparent environment in that the President-Elect's advisors will be a part of a standing committee. Allowing the President-Elect to select the members of PEAC will help ensure the advisors meet the following criteria:

- Necessary expertise to match presidential theme/strategic plan
- Wide spectrum of experiences and perspectives to augment President-Elect's background
- Capacity to provide needed feedback and alternative views or solutions

Additional information can be found in the attached Planning Committee Report to the Board.

Mr. Wentz will present a motion regarding the restructuring of the President-Elect Advisory Committee (PEAC) at the Winter Meeting in Chicago, January 2015,



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Winter Conference VIP Strategy

In response to ExCom Action Item due by Fri., Jan. 9, 2015

Current VIP Benefits

Pre-Conference/Invitation

- Complimentary registration for invited individual and spouse
- Complimentary tickets to social events for invited individual and spouse (only certain VIPs)
 - Welcome Party
 - President's Luncheon
 - Members' Night Out
- Invitation to the BOD Leadership Luncheon (only certain VIPs)
- Invitation to the Presidential Hospitality Reception
- Invitation for invited individual's spouse to attend the Spouse Brunch (only certain VIPs)
- Support with hotel reservations at the Headquarter Hotel (only certain VIPs)
- "Know Before You Go" email sent to VIPs before the meeting with important information

Onsite Hospitality

- ***NEW** "VIP Guest" name badge holder
- Introduced and Recognized as a VIP Guest at Members' Night Out
- Assigned, special seating at Members' Night Out
- Expedited registration with special envelope containing badges, tickets, special reminders, etc.
- Two drink tickets for each VIP and spouse at Members' Night Out

Current VIP Process/Deadlines

Deadline	Task	Responsible Parties
July	VIP list updated with current staff and volunteer representatives from past invited organizations	Seymour, Ames
August/September	Leadership reviews VIPs list, makes edits and sends individuals who should be invited to BOD lunch to Meetings Dept.	Littleton, President, ExCom
October	Formal invitation letters with registration form and housing form* are sent to VIPs	Seymour, Marshall
November/December	RSVP, registration form and housing form due to Meetings Dept.	Invitees
November	Presidential Hospitality Reception and Spouse Brunch Invitations sent out***	Seymour
January	VIP envelopes created for registration onsite to include badges, tickets, reminders, etc.	Seymour
January (Week Before Meeting)	Know Before You Go email sent to VIPs about what to expect	Seymour, Marshall
January (Onsite)	Distribute VIP envelopes at registration	Seymour, Keller



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Current VIP Groupings

* ASHRAE currently sends different invitation letters to three types of VIPs. Each group has their own version of the invitation letter and registration form. Not all VIP groups receive support with housing reservations so they do not all receive the housing form:

- **Individuals/Organizations invited to attend the BOD Leadership Luncheon** (complimentary registration and social events and receive support with housing)
- **Individuals/Organizations invited to attend the Conference** (Receive complimentary registration, social events and support with housing; not invited to BOD Leadership Luncheon)
- **ASHRAE Associate Society Alliance (AASA) Organizations** (Receive complimentary registration; not invited to BOD Leadership Luncheon, must pay for social events and do not receive support with housing.)

**All VIPs are invited to attend the Presidential Hospitality Reception. However, only spouses of those individuals invited to the BOD luncheon are invited to the Spouse Brunch on Sunday.

Policy and Procedure Recommendations for the Future

1. Substitution

- a. Policy: VIP invitations are non-transferrable. Substitution requests must be reviewed and approved by Society Executive Vice President (EVP).
- b. Process: If an invited organization requests a substitute to replace the invited representative, the meetings department will send the request to the EVP to review and approve. The meetings department will handle communication between the Society and the invited organization.

2. Additional Complimentary Representatives

- a. Policy: A request from an invited organization to send an additional person complimentary to the conference to accompany the invited guest must be reviewed and approved by the EVP.
- b. Process: If an invited organization requests to send an additional representative complimentary to the meeting, the meetings department will send the request to the EVP to review and approve. The EVP will decide if the requested guest will receive complimentary registration and/or complimentary tickets to social events. The meetings department will handle communication between the Society and the invited organization.

3. Board of Directors Leadership Luncheon

- a. Proposal #1: Expand the current Board of Directors Leadership Luncheon that takes place on Sunday to include all invited VIPs and AASA officers.
- b. Process: The meetings department will secure a large enough space to accommodate the Board of Directors and all invited VIPs and AASA officers to attend the Board of Directors Leadership Lunch on Sunday. The lunch will take place at the Headquarter



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Hotel. If the Headquarter Hotel does not have the appropriate space, the meetings department will find an off-site venue to host the lunch. For cost efficiency, the meetings department will search for an off-site venue in walking distance from the Headquarter Hotel. In the event that an off-site venue in walking distance cannot be secured, the meetings department will provide shuttles and adjust the schedule accordingly to transport attendees. The estimated impact to expanding the Board of Director's Leadership Luncheon is \$80 per person if the luncheon is at the headquarter hotel.

- c. Proposal #2: A small but nice gift will be given to all invited VIPs and AASA officers at the Board of Director's Leadership Luncheon.
- d. Process: The meetings department will select and order the gift for the BOD Leadership Luncheon.
- e. Proposal #3: All VIPs and AASA officers will be introduced at the Board of Director's Leadership Luncheon which will replace the introductions of all VIPs at Members' Night Out.
- f. Process: The emcee of the Board of Director's Leadership Luncheon will welcome the guests to the lunch and prompt guests to begin with the first course. The meetings department will check in with each ExCom member and create a list of present VIPs and AASA officers. The meetings department will provide the emcee with the list of VIPs and AASA officers in attendance. After the first course, the emcee will introduce every VIP and AASA representative.
- g. Policy #1: The Board of Directors Leadership Luncheon will be open to all invited VIPs and AASA officers only (spouses not included).
- h. Process: The meetings department will include in the pre-conference e-mail communication to VIPs and AASA officers that the Board of Directors Luncheon is open to invited attendees only.
- i. Policy #2: The invitation to attend the Board of Directors Leadership Luncheon is nontransferable. Substitution and additional representative requests must be reviewed and approved by the EVP.
- j. Process: If an invited organization requests a substitute to replace the invited representative, the meetings department will send the request to the EVP to review and approve. The meetings department will handle communication between the Society and the invited organization.

4. VIP List

- a. Policy #1: During the pre-conference review process, invited organizations who have not attended in the past two years will be subject to removal from the VIP list.



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- b. Process: The meetings department will indicate on the VIP list those organizations who have not attended in the past two years for ExCom review.
- c. Policy #2: Invited organizations who have not responded to an invitation in the past three years will be subject to removal from the VIP list.
- d. Process: The meetings department will indicate on the VIP list those organizations who have not responded to an invitation for the past three years for ExCom review.
- e. Policy #3: The VIP list will be reviewed by the President, ExCom and EVP and suggested changes should be sent to the meetings department by the first Tuesday in October.
- f. Process: The meetings department will compile the VIP list and indicate organizations who have not attended in the past two years and those organizations who have not responded to an invitation in the past three years. The meetings department will send the VIP list to the President, ExCom and EVP on or before the first Tuesday in September. The President, ExCom and EVP will submit any updates, edits and/or changes directly to the meetings department on the first Tuesday in October. Invitations will be sent on or before the second Tuesday in October. Additions to the VIP list after the first Tuesday in October will need to be sent to the President and copy to the EVP for review and approval. Invited organizations added to the VIP list after the first Tuesday in October may not be guaranteed a room at the Headquarter Hotel (availability pending).
- g. Proposal: The following deadline will be added to the President-Elect's guidebook:
 - i. First Tuesday in September - the meetings department will send the VIP list to the President, ExCom and EVP.
 - ii. First Tuesday in October – the President, ExCom will send any updates, edits and/or changes directly to the meetings department.
 - iii. Second Tuesday in October (on or before) – the meetings department will send VIP invitations.
- h. Policy #4: Requests from the Board of Directors to add an individual or organization to the VIP list after the final VIP list has been submitted to the meetings department (first Tuesday in October) will not be accepted. Exceptions must be approved by the President with a copy to the EVP.
- i. Process: If there is a request to add an individual or organization to the VIP list after the final VIP list has been submitted to the meetings department (first Tuesday in October), then the requester must submit an email directly to the President with a CC to the EVP for approval. The President will decide to accept or deny the request. If the request is accepted, the President and/or EVP will communicate to the meetings department and the meetings department will send the invitation.



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5. New VIP Benefits

- a. Proposal #1: Every VIP, including AASA officers, will receive a handwritten note of welcome signed by the EVP on behalf of the President and Board of Directors delivered to the VIP's hotel room if he or she is staying at the Headquarter Hotel.
- b. Proposal #2: Every VIP, including AASA officers, will receive a special "VIP Guest" name badge holder at the registration desk. Board Members will introduce themselves to and welcome each VIP Guest they see. The meetings department will send a list of VIPs who RSVPd to the Board of Directors before the conference for review. ASHRAE staff will include a reminder in the Board of Directors' itineraries about welcoming and introducing themselves to VIPs with the "VIP Guest" name badge holder.

Recommended Grouping of VIPs and Benefits

We recommend consolidating the invited organizations into two groups of people who receive an invitation to the Winter Conference:

- **"VIPs"**: The highest ranked employee or staff member (i.e. CEO, Executive Director) and the highest ranked volunteer (i.e. Board Chair, President) from selected organizations are invited to attend the ASHRAE Winter Conference.
- **"AASA Officer"**: The current President of each AASA member organization is invited to attend the ASHRAE Winter Conference.

Every **"VIP"** and **"AASA Officer"** will receive these base benefits:

- Complimentary registration for invited individual and spouse
- Invitation to the Presidential Hospitality Reception
- Invitation to Board of Directors Leadership Lunch on Sunday
- "Know Before You Go" email sent to VIPs before the meeting with important information
- ***NEW** "VIP Guest" name badge holder
- Introduced and Recognized as a VIP Guest at Board of Directors Leadership Lunch on Sunday
- Assigned, special seating at Members' Night Out
- Expedited registration with special envelope containing badges, tickets, special reminders, etc.
- Two drink tickets for each VIP and spouse at Members' Night Out
- ***NEW** A room-drop with a handwritten note signed by the current President welcoming them to the Conference.
- ***NEW** Identified and welcomed by Board Members at the Conference

Additional benefits for the **"VIP"** group are as follows:

- Complimentary tickets to social events for invited individual and spouse
- Support with hotel reservations at the Headquarter Hotel



December 29, 2014

William Bahnfleth
Society President
ASHRAE
1791 Tullie Cir.
Atlanta, Georgia 30329

Dear Bill:

On behalf of the ASHRAE New York Chapter, I wanted to send you a note in show of support of the partnering of ASHRAE Society and the Urban Green Council in reference to the EBie Awards. Steve Baumgartner forwarded some information along to me and I felt compelled to share the New York Chapter's position in the matter.

The local ASHRAE Chapter has been a staunch supporter of the EBie Awards since inception and while we, as a Chapter, will continue to support these activities locally, we feel Society level support and promotion paramount to the mission of the EBie awards. The Chapter considers Urban Green a synergistic partner in advancing our industry here in New York. The results of which can be seen through our successful education efforts of both HVAC and non-HVAC industry professionals, and our reputation as a leader in the building industry.

Given the critical nature of reuse and repositioning of existing buildings in urban centers, there is a clear need for ASHRAE leadership to promote bridging our technical knowledge to Urban Green's national outreach, which goes far beyond New York City limits.

Sincerely,

A handwritten signature in black ink, appearing to read "Lorey Flick Roberts".

Lorey Flick Roberts
President, ASHRAE –New York Chapter
lorey.flick@adsce.com

Re: Ebies Award – Urban Green Council Email Exchange

From: Russell Unger [<mailto:ru@urbangreencouncil.org>]
Sent: Wednesday, January 7, 2015 11:51 AM
To: Littleton, Jeff
Cc: Chris Anjesky
Subject: Re: Partnering on EBie Awards

Hi Jeff,

Happy New Year to you too!

I appreciate you giving further consideration to the EBie Awards, and understand that we reached out to you late. We'll reach this summer after this year's awards, and hopefully with more time we will be able to work out something for the following year.

If you can make it to NYC on June 22, we would love to have you as our guest at the 2015 EBie Awards. Unfortunately I won't be able to attend the conference but I hope it is excellent.

Sincerely,

Russell

From: <Littleton>, Jeff Littleton <JLittleton@ashrae.org>
Date: Tuesday, January 6, 2015 4:12 PM
To: Russell Unger <ru@urbangreencouncil.org>
Subject: Partnering on EBie Awards

Hi Russell,

Happy New Year!

Recognizing that the UGC is probably well on its way to rolling out the 2015 edition of the EBies, I wanted to let you know that ASHRAE's Executive Committee had a brief discussion about supporting or endorsing the program. They do not believe that ASHRAE can review the awards criteria in a timely fashion at this stage. We appreciate that UGC made some adjustments to the materials section. I'd suggest that we have a conference call after this cycle is complete to discuss the criteria and how ASHRAE can be involved moving forward. Thanks again for the opportunity.

Will you be able to join us for the ASHRAE Winter Conference and AHR Expo in Chicago later this month?

Thanks,
Jeff



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Jeff Littleton
Executive Vice President

ASHRAE
1791 Tullie Circle
Atlanta, GA 30329
Tel: 678-539-1100
JLittleton@ashrae.org
www.ASHRAE.org

Register today for the 2015 ASHRAE Winter Conference, January 24 - 28, Chicago. Learn more at www.ashrae.org/chicago

From: Russell Unger [<mailto:ru@urbangreencouncil.org>]
Sent: Friday, December 5, 2014 2:46 PM
To: Littleton, Jeff
Subject: Re: Partnering on EBie Awards

Hi Jeff,

Certainly. Please see the attached.

Thanks,

Russell

From: <Littleton>, Jeff Littleton <JLittleton@ashrae.org>
Date: Friday, December 5, 2014 10:11 AM
To: Russell Unger <ru@urbangreencouncil.org>
Subject: RE: Partnering on EBie Awards

Thanks, Russell. Can you please send the entire judging criteria so that we can have some context for the changes that were made?

Thanks,
Jeff



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Jeff Littleton
Executive Vice President

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Atlanta, GA 30329
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JLittleton@ashrae.org
www.ASHRAE.org

Register today for the 2015 ASHRAE Winter Conference, January 24 - 28, Chicago. Learn more at www.ashrae.org/chicago

From: Russell Unger [<mailto:ru@urbangreencouncil.org>]
Sent: Friday, December 5, 2014 9:57 AM
To: Littleton, Jeff; William Bahnfleth; Steven Baumgartner; Comstock, Steve; D.underwood@isothermengineering.com
Cc: Chris Anjesky; Cecil Scheib
Subject: Re: Partnering on EBie Awards

Hi Jeff,

Thanks very much. Looking forward to the continued conversation.

Sincerely,

Russell

From: <Littleton>, Jeff Littleton <JLittleton@ashrae.org>
Date: Friday, December 5, 2014 9:39 AM
To: Russell Unger <ru@urbangreencouncil.org>, William Bahnfleth <WBahnfleth@engr.psu.edu>, Steven Baumgartner <steven.baumgartner@burohappold.com>, "Comstock, Steve" <comstock@ashrae.org>, "D.underwood@isothermengineering.com" <D.underwood@isothermengineering.com>
Cc: Christina Anjesky <ca@urbangreencouncil.org>, Cecil Scheib <cs@urbangreencouncil.org>
Subject: Partnering on EBie Awards

Hi Russell,

Thank you for reaching out and for considering our comments. We will get these changes in front of our Executive Committee and come back to you.

Thanks again,
Jeff



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Jeff Littleton
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www.ASHRAE.org

Register today for the 2015 ASHRAE Winter Conference, January 24 - 28, Chicago. Learn more at www.ashrae.org/chicago

From: Russell Unger [<mailto:ru@urbangreencouncil.org>]
Sent: Thursday, December 4, 2014 4:55 PM
To: Littleton, Jeff; William Bahnfleth; Steven Baumgartner; Comstock, Steve;
D.underwood@isothermengineering.com
Cc: Chris Anjesky; Cecil Scheib
Subject: Re: Partnering on EBie Awards

Dear Jeff,

I hope you are well and apologize that I'm not reaching back out to you sooner. We are looking towards a January announcement of EBies 2015, and a group was working through the comments we heard from you.

We have some proposals for changing the EBie awards criteria to address the specifically concerns you raised. In brief:

- We would remove EBies criteria that "deselect" products. This includes low-VOC standards, GreenLabel, GreenSeal and GreenGuard certification, etc.
- For the commercial tenant award, we would slim the list to eliminate those items.
- For the whole building award, we would substitute an option for LCA.
- The changes are reflected in the attached.

Please let me know if you are interested in picking this conversation back up.

Sincerely,

Russell

From: <Littleton>, Jeff Littleton <JLittleton@ashrae.org>
Date: Friday, January 31, 2014 3:37 PM
To: Russell Unger <ru@urbangreencouncil.org>, William Bahnfleth <WBahnfleth@engr.psu.edu>, Steven Baumgartner <steven.baumgartner@burohappold.com>, "Comstock, Steve" <comstock@ashrae.org>, "D.underwood@isothermengineering.com" <D.underwood@isothermengineering.com>
Cc: Christina Anjesky <ca@urbangreencouncil.org>, Cecil Scheib <cs@urbangreencouncil.org>
Subject: RE: Partnering on EBie Awards

Hi Russell,

Following up on my note below, please find attached the materials section and related supplement used for ASHRAE Standard 189.1.

Many thanks,
Jeff

From: Littleton, Jeff
Sent: Friday, January 31, 2014 3:11 PM
To: 'Russell Unger'; William Bahnfleth; Steven Baumgartner; Comstock, Steve;
D.underwood@isothermengineering.com

Cc: Chris Anjesky; Cecil Scheib

Subject: RE: Partnering on EBie Awards

Hi Russell,

Thanks for your interest in having ASHRAE support EBies marketing. As I have mentioned previously, we have some concerns about the awards criteria and the same issues that would prevent us from sponsoring the awards would also prevent us from marketing them to our members. One possibility that has been discussed is to recommend that you review ASHRAE Standard 189.1's treatment of materials. I'll send you some related information soon. Again, we think retrofitting existing buildings is crucial and appreciate the goal of the awards programs to promote that important work.

Thanks,
Jeff

All-Rounder, All Together Now, Smooth Operator (building owners)

1. ~~By cost, at least 50% of building cleaning products, finishes and furnishing, and window treatment should consist of products for which life-cycle information is available and that have environmentally, economically, and socially preferable life-cycle impacts.~~

~~1. Paints, coatings and carpets in common areas have low volatile organic compounds. Paints and coatings meet Green Seal Standard GS-11, carpets meets CRI Green Label Plus Testing Program, and carpet cushions meet CRI Green Label Testing Program.~~

2. Bathroom tissue and paper towels contain a minimum of 30% post-consumer recovered fiber and 100% total recovered fiber and/or are certified to Forest Stewardship Council (FSC) standards.

~~3. Building standard specification for window treatment is Greenguard-certified (or equivalent) and PVC free.~~

Commented [CS1]: Based on LEED v4: [BD+C](#) and [Q&M](#).

It Takes a Village (commercial tenants)

1. All desktop computers, displays, integrated desktop computers, notebooks, thin clients, and workstation desktops must receive at least a Silver or Gold rating under the Electronics Products Environmental Assessment Tool (EPEAT™).

~~2. Computer power consumption is tracked and managed centrally by IT staff and, during non-working hours, all computers and monitors are either powered off or enter a low-power mode. (1 pt.)~~

~~23. All printers and copiers are ENERGY STAR® and have duplexing capability, and. (1 pt.)~~

4. Copiers and computer printer drivers are set to duplex by default.

35. Reprographic paper contains 30% or 100% post-consumer recycled content.

~~6. Paints and carpets have low volatile organic compounds. Paints and coatings meet Green Seal Standard GS-11, carpets meets CRI Green Label Plus Testing Program, and carpet cushions meet CRI Green Label Testing Program.~~

~~7. New furniture must achieve either a BIFMA level, Smart, or Cradle to Cradle certification and may not contain brominated or halogenated flame retardants.~~

48. Tap water is made available for drinking (point-of-use filters will be accepted) and bottled water is not supplied. Re-usable mugs, glasses, pitchers, plates, bowls, cutlery, and other food serving supplies are provided for use by employees and guests.



American Society of Heating, Refrigerating and
Air-Conditioning Engineers (ASHRAE)
&
United Nations Environment Programme (UNEP)



**2015-2016 Work Plan of
ASHRAE-UNEP Global Cooperation Agreement**

UNEP and ASHRAE signed a cooperation agreement in 2007 aiming to achieve several international goals including: phasing out use of Ozone Depleting Substances (ODS) in refrigeration and air-conditioning applications; quantifying climate benefits of using alternatives to ODS including aspects of reduced building energy consumption; and facilitating transfer and adoption of suitable technologies in developing countries. The agreement calls for establishing a work plan to highlight priorities and to stipulate relevant actions. This document is developed by the joint Liaison committee of ASHRAE and UNEP which is instated with the goals of:

1. Discuss and propose biennium work-plan for the cooperation between ASHRAE & UNEP;
2. Review regularly the progress of implementation of the work-plan and suggest follow-up or corrective actions;
3. Liaise with different ASHRAE committees, chapters and regions as well as with different UNEP programmes and regional offices;
4. Prepare, update and circulate regularly contacts list of focal points of ASHRAE's chapters and regions and of UNEP's regional offices; and
5. Prepare and circulate regular reports and information papers about progress of cooperation.

Goals and Actions included in the work-plan are going to be further examined by the ASHRAE-UNEP Liaison Committee in consultation with different relevant groups, in both organizations, to ensure best implementation of the set goals/actions.

Goal 1: Emissions Reduction, long-term Refrigerants and Energy Efficiency

Goal 1/Action 1

UNEP & ASHRAE will work together in building bridges between industry and policy-makers in developing countries regarding feedbacks on feasibility of alternative refrigerants and equipment efficiency including addressing specific needs of the developing countries.

○ **Suggested activities under this action item include:**

1. Exchange list of activities of both organizations aiming at exploring potential areas of cooperation and possible joint activities during the term of the work plan. The Liaison committee will complete this task by **15th February 2015**;
2. Explore organizing a joint international conference on a regular basis (suggested every 2 years) on areas of common interest to ASHRAE and UNEP with focus on the needs of developing countries. This can also be part of an existing regular conference that ASHRAE is already organizing or supporting. By **1st March 2015** ASHRAE to recommend which conference(s) might be good for UNEP to join or to recommend if new conference shall be considered. UNEP and ASHRAE, accordingly, to explore technical, financial and logistical resources required for such an event;
3. The Liaison Committee to arrange orientation sessions for ASHRAE regional officers and UNEP regional teams to ensure better involvement and cooperation. This will be made using different means of communication including emails, web-meetings and teleconferences; and
4. ASHRAE and UNEP to consider developing a generic workshop(s)/Seminar for replication by the UNEP regional teams and ASHRAE chapters/sections on issues of common interest to both organizations.

○ **Timeframe:** Activities 3 and 4 are continuing across the period of the work-plan i.e. 2015-2016

○ **Fiscal Impact:** There will be fiscal impact to this action; however, it should be discussed and agreed based on case-by-case and as part of the ASHRAE regions/chapters' activities and/or UNEP's global/regional activities.

Goal 1/Action 2

ASHRAE & UNEP will cooperate to compile research findings, resulted from ASHRAE Research Program, about Zero ODP & Low GWP alternatives and disseminate it to research centers, institutions and researchers in the developing countries

- **Suggested activities under this action item include:**
 1. ASHRAE to compile list of relevant research projects (proposed, completed or under contract) from different research programs and sort it by topic, providing abstracts by **1st April 2015**;
 2. From the list of completed ASHRAE research projects, UNEP to identify those for which UNEP would like to make abstracts of the research available; From the list of proposed ASHRAE research projects and projects under contract but not completed, UNEP to identify which projects it has interest in;
 3. UNEP to distribute the Abstracts through its network in developing countries; and
 4. UNEP to identify gaps in the ASHRAE Research Strategic Plan and suggest, in consultation with its stakeholders, inclusion of relevant research of interest to UNEP in the next cycle of ASHRAE Research Strategic Plan. To be completed by **30th June 2015**
- **Timeframe:** Repeated each ASHRAE Research Cycle
- **Fiscal Impact:** None

Goal 1/Action 3

ASHRAE & UNEP will explore opportunities to promote responsible and sound management of refrigerants

- **Suggested activities under this action item include:**
 1. ASHRAE assists in reviewing, if possible, UNEP related refrigerant management publications that are under preparation during 2015-2016 such publications on safe use of refrigerants, certification schemes, etc. UNEP to advise ASHRAE about publications that need assistance in review;

2. ASHRAE and UNEP will consider developing joint documents/publications about sound management of refrigerants;
 3. ASHRAE to advise UNEP about the ASHRAE Refrigeration Committee activities and explore possibility of UNEP involvement in some of the committee's activities;
 4. UNEP to technically contribute in the development of ASHRAE Guide on "Sustainable Refrigerated Facilities and Systems". UNEP and ASHRAE will further explore, upon completion of the guide, how to make it beneficial for developing countries and make it available in different languages; and
 5. ASHRAE and UNEP will consider developing special training module for the promotion of the safe use of low-GWP refrigerants with possibility to be a special course that is delivered by ASHRAE chapters to its members and clients and/or online tool for wider public benefit and use. ASHARE and UNEP will consider establishing special taskforce to examine the feasibility of this proposal taking into account the role and mandate of each organization in particular issues related to UNEP free distribution of materials and ASHARE business-model of materials offering.
- **Timeframe:** Continuing across the period of the work-plan i.e. 2015-2016
 - **Fiscal Impact:** Possible fiscal impact if joint publications/documents are considered, impact to be further examined accordingly based on a case-by-case.

Goal 1/Action 4

ASHRAE and UNEP to cooperate and coordinate efforts related to energy efficiency in the buildings sector

- **Suggested activities under this action item include:**
 1. ASHRAE and UNEP to explore opportunities to cooperate and coordinate efforts related to energy efficiency in the buildings sector including, but not limited to, measurement of energy performance in buildings, greenhouse gas emissions, green buildings and implementing relevant activities as agreed. Both organizations will further discuss and agree on detailed proposals and work-plan for this subject; and

2. UNEP to consider promote the ASHRAE Advanced Energy Guides which are downloadable, for free, from the ASHRAE website at: www.ashrae.org/aedg.

- **Timeframe:** Continuing across the period of the work-plan i.e. 2015-2016
- **Fiscal Impact:** Possible fiscal impact if joint events/activities are considered, impact to be further examined accordingly based on a case-by-case.

Goal 2: Expertise and Technological Information Exchange

Goal 2/Action 1

ASHRAE through its Distinguished Lecturer (DL) program will work with UNEP to provide speakers to collaborative activities between UNEP and ASHRAE chapters/sections.

- **Suggested activities under this action item include:**
 1. ASHRAE to share with UNEP the list of ASHRAE Distinguished Lecturers by **15th February 2015;**
 2. UNEP to study the list through its regional teams and highlight opportunities for joint sessions at different chapters in developing countries and UNEP regional team to consult with ASHRAE chapters about such opportunities. To be completed by **30th June 2015 of each year;**
 3. ASHRAE chapters and UNEP regional teams to organize jointly relevant sessions/workshops benefiting of the ASHRAE DL Program.
- **Timeframe:** Activity 3 continuing across the period of the work-plan i.e. 2015-2016
- **Fiscal Impact:** Possible fiscal impact if joint events/activities are considered, impact to be further examined accordingly based on a case-by-case.

Goal 2/Action 2

ASHRAE & UNEP will explore the possibility of building list of experts categorized according to their specialties in the refrigeration and HVAC sectors, to assist developing countries in updating and/or developing relevant standards and codes related to refrigerants' emission reduction and energy conservation within the scope of cooperation between ASHRAE and UNEP.

- **Suggested activities under this action item include:**
 1. The Liaison Committee to review the guidelines (Annex-A to this work-plan) for ASHRAE-UNEP Experts Nomination process and finalize it by **1st March 2015**;
 2. The Liaison Committee to call for nominators amongst ASHRAE Chapters and UNEP Regional Teams; a starting period of 3 months should be allowed to compile nominators. ASHRAE and UNEP to ensure updating the list regularly each year; and
 3. The Liaison Committee will further examine how the list will be posted and circulated to different interested countries/stakeholders in developing countries. The mean of dissemination of the list to be concluded by the Liaison Committee by **1st April 2015**.
- **Timeframe:** Continuing across the period of the work-plan i.e. 2015-2016
- **Fiscal Impact:** None.

Goal 2/ Action 3

ASHRAE and UNEP to consider launching special Initiative to support the establishment and/or strengthening of local refrigeration and/or HVAC societies in developing countries

- **Suggested activities under this action item include:**
 1. ASHRAE and UNEP establish special taskforce to examine the feasibility of the initiative in line with the suggested proposal (Annex-B to this work-plan) and to report back to the Liaison Committee by **1st April 2015**; and

2. ASHRAE and UNEP to start implementing the action-plan of the joint initiative based on outcomes of the special taskforce and final updated proposal.

- **Timeframe:** Continuing across the period of the work-plan i.e. 2015-2016
- **Fiscal Impact:** Need to be further examined base on the final recommendation, expected to be minimal cost.

Goal 2/ Action 4

ASHRAE and UNEP will consider building an online tool/page to ensure outreaching the outcomes of the cooperation between ASHRAE and UNEP and facilitate communication with different stakeholders in relation to the cooperation

- **Suggested activities under this action item include:**
 1. ASHRAE and UNEP will further discuss the feasibility of this action item particularly in relation to content, copy-rights, inclusion of online forum and regular update responsibilities; and
 2. The Liaison committee to conclude by **30 Sept 2015** the final recommendation for building the online tool including the technical and financial proposal resources required for it.
- **Timeframe:** Continuing across the period of the work-plan i.e. 2015-2016
- **Fiscal Impact:** Need to be further examined base on the final recommendation.

Annex-A

GUIDELINES FOR UNEP-ASHRAE EXPERT NOMINATORS

As per the work plan of UNEP-ASHRAE cooperation agreement, goal 2/action 2 calls ASHRAE & UNEP will explore the possibility of building list of experts categorized according to different specialties of the refrigeration and air-conditioning sectors, to assist developing countries in updating and/or developing relevant standards and codes related to refrigerants' emission reduction and energy conservation within the scope of cooperation between ASHRAE and UNEP. Below is a draft guideline for this joint exercise.

EXPERT QUALIFICATIONS:

Attained distinction and made substantial contribution in different areas of HVAC&R (10 years minimum) such as:

- Education and/or research
- Engineering practice /design/consulting/forensics
- Invention/original work
- Engineering executive on projects of unusual or important scope
- Sharing knowledge and contribution through outreach activities such as mentoring,
- publications, oral presentations and involvement in industry activities
- Other activities leading to advancement

Proposals for nomination will be reviewed by a committee formed by both UNEP and ASHRAE to evaluate the candidate background and accomplishment.

NOMINATION REQUIREMENTS

A nomination for expert must be initiated by the candidate and supported by at least one nominator who has knowledge of the nominee's background. The nomination must also be accompanied by at least one professional reference (not more than two). The nominator and professional references must be capable of evaluating the nominee's distinction and contributions with a substantial impact on the refrigeration technologies or on the Energy Standards in Buildings.

The requirements will include:

1. Letter from the nominee expressing interest for his name to be included in the roster of UNEP-ASHRAE experts.
2. Letter from the nominator supporting the nominee request.
3. Description of the nominee accomplishments to be submitted by the nominee himself/herself.
4. One (maximum two) professional reference letter highlighting the strength of the nominee
5. Detailed CV of the nominee.
6. Any other documentation that the nominee may see appropriate to include in order supporting his request.

Annex-B

Strengthening Refrigeration and/or HVAC Societies in Developing Countries Joint Proposed Initiative by ASHRAE and UNEP

BACKGROUND

Over the last couple of decades, the Multilateral Fund of the Montreal Protocol supported the phase-out of ODS¹ in the refrigeration and air-conditioning sectors in developing countries with the aim to reduce unnecessary emissions and move towards long-term alternative refrigerants. The support is usually in the form of specialized projects to build the capacity of the local servicing sectors on good practices, refrigerant management and certification of servicing operators i.e. individuals, end-users or service providers. One of the challenging components in such programs, supported by the Montreal Protocol, is the establishment of local societies for promoting the good practices, profession codes/standards and build capacities of the specialized individuals.

UNEP provided technical and financial support to many countries for building its national refrigeration/HVAC societies or associations where in some cases notable success achieved. However, the key obstacle is always the lack of local technical and institutional capacity to build and operate professionally such bodies in an independent and sustainable way.

ASHRAE holds the technical and institutional experience in supporting such models where ASHRAE chapters/sections are usually established away from the Society, physically, but within standard successful operational model that works properly in developed and developing countries. However, the distribution of ASHRAE members around the globe makes the presence of ASHRAE chapters limited to only 27 countries (out of which 7 are non-developing countries) out of around 139² developing countries. The presence of other specialized refrigeration and air-conditioning societies is also limited to few developing countries mainly the large fast growing developing economies.

The majority of developing countries don't have a dedicated specialized society or association for the refrigeration and HVAC individuals or sectors. Attempts, in these countries, to establish dedicated bodies usually face a lot of technical and operation difficulties due to lack of experience in establishing and sustainably running such bodies.

THE INITIATIVE

This initiative intends to provide support to developing countries in establishing their local dedicated societies/associations through a standard model to be developed jointly by ASHRAE (including AASA, ASHRAE Associate Society Alliance) and UNEP and group of start-up technical

¹ ODS: Ozone Depleting Substances

² According to the World Bank listing

support/services that help in initial years of operation. While ASHRAE holds the experience in setting bylaws and the in the operation of such societies including the type of services and activities that can be offered, UNEP is leading in providing support for the operation in developing countries and in communicating with governments in addition to the technical environmental portfolio that UNEP addresses which overlap with the refrigeration and air-conditioning sectors in many areas.

The proposed initiative will not entail substantial cost to both ASHRAE and UNEP as it should be designed to use the existing wealth of resources and knowledge at the end of both organizations. The very basic components that can be considered within the initiative include, tentatively, the following ideas:

1. Establish joint team to develop a **Model for New Refrigeration and/or HVAC Societies** including:
 - a. Guidelines for starting up and registration;
 - b. Sample Bylaws for operation and administration; and
 - c. Guidelines for technical activities and programs
2. Involve AASA³ in the initiative for the following role:
 - a. Provide input to the Sample model particularly from associate societies that operate in the developing countries;
 - b. Networking and joint activities between existing societies and new ones specially for geographically close societies;
3. Provide technical support to the newly established societies through:
 - a. Sample publications, handbooks and relevant materials (electronically and in accordance to the intellectual property arrangements of both ASHRAE and UNEP;
 - b. Support in organizing relevant technical events and functions; and
 - c. Link them with existing ongoing governmental activities particularly related to UNEP projects/programs being implemented in their countries

The participation of AASA members in this initiative, but at later stage, is also of high value where existing societies in developing countries can be a nearby support to the recently established ones. AASA involvement will also ease the global acknowledgment and increase the visibility of the initiative. ASHRAE and UNEP, through the 2015-2016 Joint Work-Plan and the ASHRAE-UNEP Liaison Committee, may wish to further examine this initial proposal and discuss its feasibility and applicability to the framework of their global cooperation.

³ AASA: ASHRAE Associate Society Alliance



ASHRAE ASSOCIATE SOCIETY ALLIANCE APPLICATION REQUEST FORM

GENERAL INFORMATION

Society Name Georgian Association of Refrigerating, Cryogenic and Air-conditioning Engineers NGO
Address Line 1 25 Moscow avenue, Tbilisi
Address Line 2 _____
Address Line 3 _____
Country Georgia
Telephone +995322714317
Facsimile _____
Email gra@post.ge
Web Address www.garcae.org.ge

SOCIETY OFFICIALS (Please list elected officials on a separate page)

CHIEF STAFF OFFICER (Please list person responsible for correspondence with ASHRAE – include formal title)

Name Tamar Khaburzanian Title Assistant president

Email ms.xaburzanian@mail.ru

ASHRAE Member Yes _____ Membership Number _____
No X

SOCIETY PRESIDENT

Name Nino Maglakelidze

Term of Office: From 02.2011 To 02.2015

ASHRAE Member Yes _____ Membership Number _____
No X

ASSOCIATE SOCIETY ALLIANCE REPRESENTATIVE

Name Sulkhan Suladze

Address Line 1 30apt., 17bldg., Phonichala-3,
Tbilisi

Address Line 2 _____

Address Line 3 _____

Country Georgia

Telephone +995599231832

Facsimile _____

Email sulkhansuladze@gmail.com

ASHRAE Member Yes _____ Membership Number _____
No X

PUBLICATIONS

<u>Publication Name</u>	<u>Publication Frequency</u>
Magazine "Artificial Cold and Environment"	Annually
GARCAE's Newsletter	Quarterly
_____	_____
_____	_____
_____	_____

MEMBERSHIP

Total Membership 186

<u>Membership Grades</u>	<u>Approximate Number of Members</u>
Founder	5
Collective member	12
Privat member	169
_____	_____
_____	_____

SOCIETY MEETINGS (include 5 year listing)

<u>Dates</u>	<u>Location</u>
21.03.2014	Tbilisi
15.02.2013	Tbilisi
17.05.2012	Batumi, Georgia
25.02.2011	Tbilisi
28.05.2010	Telavi, Georgia

OTHER SOCIETY INFORMATION

Native Language: Georgian

Objectives:
GARCAE activities are aimed at promoting new clean technologies taking into account reduction of emissions and environmental impacts in accordance with the Montreal Protocol targets as well as climate change benefits, introducing good practices, establishing international collaborations with world similar organizations, supporting educational activities and carry-out scientific research activities. Furthermore, it helps setting up links among public and private sectors in order to promote new internationally accepted standards, practices and guidelines in RAC sector

Submitted by:
Name Tamar Khabuzania
Title Asistant president
Email
Date: 02.10.2014

Return Completed Application form and a copy of your Society Bylaws to:

**Vickie Grant
ASHRAE
1791 Tullie Circle NE
Atlanta, GA 30329
Fax: 678-539-2156
Email: vgrant@ashrae.org**

Annex 1

List of selected officials of Georgian Association of Refrigerating, Cryogenic and
Air-conditioning Engineers NGO

1. Nino Maglakelidze – President, from 2011 to 2015
2. Temur Gordeladze – Board member, from 2011 to 2015
3. Anzor Maisuradze - Board member, from 2011 to 2015
4. Teimuraz Khutsishvili - Board member, from 2011 to 2015
5. Shalva Modebadze - Board member, from 2013 to 2015

GEORGIA

“GEORGIAN ASSOCIATION OF REFRIGERATING, CRYOGENICS AND AIR-CONDITIONING ENGINEERS” NGO

BYLAWS

(NEW WORDING)

15 December 1999, Registration #5\9-246

TBILISI

CHAPTER 1

Status and Purposes of the Organization

Paragraph 1. Organizational–legal form of the organization. Title.

1. Foregoing Act represents the Bylaws of the non-commercial (non-profit) Private legal entity (later - “Association”).
2. The name of organization is **“Georgian Association of Refrigerating, Cryogenics and Air–conditioning Engineers”**.
3. The organization with initial name **“Georgian Refrigeration Association”** was registered in 15.12.1999 by Vake District Court of Tbilisi city. Registration N 00527\12\0284, Identification N 204935918.

Paragraph 2. Legal Address of the organization, Duration of the Functioning.

1. The Legal Address of the organization: 25 Moscow ave., 0120Tbilisi, Georgia;
2. The Organization has been established for an indefinite period.

Paragraph 3. Seal.

1. The organization may have a seal.
2. An issue relating to the seal of the organization is a responsibility of the Board, which sets size of the seal and other elements.
3. Sealing or not the documents issued by the organization, or the documents just being signed by organization do not raise any legal consequences and it has just the additional protective function. Documents being signed by the authorities of the organization are admitted being legal.

Paragraph 4. Document details.

1. Every document (letter) issued by the organization must have :
 - a) Full name of the Organization;
 - b) Legal Address of the Organization ;
 - c) Job position, name and surname of the Authorities of the organization.
2. In case being through the liquidation process the company must additionally indicate on the document the fact that the company is having a liquidation process and also the name of the liquidator.

Paragraph 5. Purposes and Activity of the organization.

1. The main purpose of the organization is participation in the formation of the international and national resolutions, recommendations and normative acts concerning the protection of the Ozone layer, the Global warming and other ecological problems and their realization in the refrigerating, cryogenic, heat pumps and air-conditioning and other relating sphere throughout Republic of Georgia.
2. The major tasks of the organization activity:
 - Carrying out practical, scientific–research and educational-pedagogic works.

- Providing advisory assistance to legal and physical entities interested in mastering and development of ecologically clean technologies in field of refrigerating, cryogenics, heat pumps and air-conditioning systems.
3. The organization performs following activities for solution of these tasks:
- Choosing, working out and implementing of ecological, power–save, low-waste technologies and techniques.
 - Participation in the drafting of new curriculum, methods and instructions in field of low-power technique and technology.
 - Training of engineers and technicians for mounting, settings up, operating and fixing of refrigerating and cryogenic techniques.
 - Carrying out works concerning scientific–research and design.
 - Adoption of new ozone-friendly refrigerants.
 - Adoption of refrigerant recovery and recycling systems and support their distribution.
 - Drafting national standards and normative-technical documents.
 - Certification of products and services.
 - Providing advisory assistance to entrepreneurs and customers.
 - Collaboration with international companies.
 - Periodically issuing scientific and technical works.
 - Holding conferences, seminars and coordinating meetings about the above mentioned problems.
 - Processing specific individual orders inside the country and abroad.
 - Participation in the testing of a new kind of refrigerating technique.
 - Protecting interests of member organization and partner companies in state and ruling bodies as well as in foreign economical and humanitarian organizations.
 - Performing required advertising and other functions related to the purposes and tasks of the organization which are not against law.
4. The organization can implement any kind of activity that does not serve against Georgian Legislation and which directly and\or indirectly serves purposes of the organization.
5. Entrepreneurial activity can have just a subsidiary nature and all income received through this activity must be used just to reach statutory goals.

CHAPTER II

CO-Founders; Membership of the organization

Paragraph 6. Co-founders of the organization

1. Founders of the organization are:

- a) **TEMUR GORDZELADZE** (born 16.06.1951 in Ozurgeti, address: 23 Asatiani str., Kutaisi. He is an Engineer);
- b) **TAMAZ BUDAGASHVILI** (born 20.07.1951 in Kaspi, address: Flat #64, 23 Khvichia str., Tbilisi. He is an Engineer);
- c) **SULKHAN SULADZE** (born 06.08.1958 in Lagodekhi, address: Flat #30, building # 17, Ponichala -3, Tbilisi. He is an Engineer);
- d) **LIA TODUA** (born 29.11.1961 in Tbilisi, address: #23, 35 Paliashvili str., Tbilisi. She is a biologist);
- e) **IRINE SAMADASHVILI** (born 01.10.1964 in Tbilisi, address: 5 Gali str., Tbilisi. She is a chemist).

Paragraph 7. Membership of the organization

1. A member of the organization can be:
 - a) Resident of Georgia or any other foreign country, or physical entity without a citizenship;
 - b) Legal entity being resident or non- resident of Georgia. Legal entity is represented in the organization by the authorized representative of the association member –legal entity; Herewith, founders of the organization member-legal entity are not considered as members of the organization.
2. Become a member or leave a membership must be performed through written statement. No less than two member’s recommendations in written form are necessary to become a member of the organization. Board makes the decision concerning the membership (become a member or not) within one month period after showing the statement but the general meeting makes decision about excluding a member from the organization. The reason of the exclusion is violation of the statute or\and presence of other important reason.
3. Excluded member of the organization has right to appeal the decision at court.
4. A member of the organization has a right:
 - a) To take part in discussion of the issues connected with the organization activity, in the drafting and fulfilling plans , projects , programs and other events of the organization .
 - b) To choose and be chosen in the ruling and controlling bodies of the organization;
 - c) To nominate candidates for election.
 - d) In order to reach goals of the organization may benefit with material-technical recourses.
5. A member of the organization is responsible for:
 - a) Abidance of the organization bylaws;
 - b) Fulfillment of decisions made by ruling bodies;
 - c) Promotion of the aims of the organization;
 - d) Keeping in secret confidential information connected with the organization activities.
 - e) Payment membership fee, if it is established be the general meeting of the organization.
6. In case leaving the organization or being excluded a member of the organization does not have a right to ask for the membership fees he has already paid (compensation) or to have pretension on the organization property.

7. Membership of the organization may not be inherited.
8. The organization may have honorary members. Any physical entity who has made special contribution in the fulfillment of the major organization goals, or is an active member of the organization, or takes part in a different activity for fulfillment of the organization goals may become an honorary member.

Honorary members of the organization do not have rights and responsibilities established by the charter of the organization.
9. The act of excluding (or leaving the organization) a member from the organization does not cause the abolition of the organization except the case when no member is left in the organization. When there are no members left in the organization the board must start in the reasonable period the process of liquidation of the organization.

Paragraph 8. Registry of the organization membership.

1. Members of the organization must be registered in the organization membership registry (in the registration book).
2. The rule of the management of the organization membership registry is established by the board.
3. The organization membership registry is managed by the chairman of the board.

CHAPTER III

The Ruling Bodies of the Organization

Paragraph 9. General meeting of the organization members.

1. The supreme ruling body of the organization is the general meeting of the organization members (later – “Meeting”).
2. Meeting may decide every issue, which are not included in the competence of the Board.
3. Decision made by the Meeting is real just in case if that issue was included in an agenda of the Meeting.
4. The Meeting competence is:
 - a) Approval of the organization bylaws and making changes to it;
 - b) Adoption of the main activities, plans and targeted programs of the organization;
 - c) Approval of the annual results of the organization activity;
 - d) To elect and to dismiss organization board members, among those a chairman of the board and his/her deputy;
 - e) To create and to liquidate the affiliate and\or commission (among those are check-up/revisory), approval of the statute of the affiliate and commission;
 - f) Deciding issue connected with the Board members fees;
 - g) Dismissing the member of the organization;
 - h) Establishing and\or abolishing membership fees; settings the amount of membership fees and payment periods;

- i) Forming and liquidating special advisory councils of the organization;
- j) Solving other issues prescribed by this Bylaws and the Georgian legislation.

Paragraph 10. The procedure of calling of the Meeting.

1. The Meeting is called by the Board at least once a year or if it is required by the organization interest.
2. A special meeting is called by the tenth of the organization members through written request, or with the Board decision and indicating meeting agenda.
3. Members must be informed about the meeting in written form by e-mail or press (in case it exists) of the organization at least two weeks before.
4. Those members who cannot attend the meeting have right to participate in the polling in writing. They are equal to the members at the meeting.

Paragraph 11. Power of the Meeting. Making decisions.

1. The Meeting has power if more than half of members take part in it.
2. At the meeting a decision is made by the majority of the votes but a decision concerning the changing of organization bylaws – by two-third majority, herewith a decision about the changing of organization goal requires no less than four-fifth of all the members.
3. If the votes are divided equally a new polling will be held. In case after the second polling the votes again will be equal than the issue will be discarded.

The process of voting is open if any member does not require hidden voting.

4. Meeting is held according to the time –limit. The time-limit is established by the Meeting.
5. Meeting protocol is signed by the Meeting Chairman. He/She is responsible for the preciseness and truthfulness of the protocol.
6. There is a presumption of authenticity and legality of the Meeting protocol for the honest third parties.
7. General Meetings are registered in a registration book of the General Meetings of the organization. In the registration book must be indicated:
 - a) Sequence number of the Meeting;
 - b) Date and place of holding the Meeting;
 - c) Short summery of the decisions made by the Meeting;
 - d) Identity and signature of the recorder;
8. Maintenance of the registration book of the General Meetings is provided by the chairman of the Board.

Paragraph 12. Abolition of the Meeting decisions.

1. A decision of the Meeting that is against the legislation, organization goals and this bylaw may be abolished by the court or by the Meeting itself under request of the organization ruling bodies or any Member of the organization.

2. The abolition of a decision of the Meeting does not cause the revocation of those rights which have been acquired by the honest third parties under the anti-bylaws transactions and the illegal decision of the Meeting.

Paragraph 13. The Board of the organization.

1. The Board of the organization (later – “Board”) is a permanent ruling body of the organization.
2. The Board consists of 5 members.
3. The Meeting elects Board members for 2 year period. The Authority of the Board continues even after expiring this period up to the election of new Board.
4. Because of the resignation of the Board member or abolition of the authority in any other way (dismissal, illness, that makes it impossible to continue functions of the members) before the established period the Board immediately calls a special meeting which elects a new member under the empowered term.
5. Just the Board may dismiss the Board member because of the abusing of power, not fulfilling his/her responsibilities or behaving against the bylaws.

Paragraph 14. Competence of the Board.

1. Competence of the Board:
 - a) Drafting the main directions of the organization activity, plans, budgets and development of projects of the targeted programs and submitting them to the Meeting;
 - b) Formation of sectoral committees of the organization, approval of committee regulations, appointment and dismissal of the committee managers;
 - c) Formation of working groups if it is necessary and choosing their coordinators, also their dismissal;
 - d) Hearing reports of persons appointed by the Board;
 - e) Affiliation of members and honorary members of the organization.
 - f) Making decisions about acquiring and alienating real estate by the organization;
 - g) Encumbering with mortgages immovable and movable property of the organization , taking credit (loan), vouching for the third parties and get guarantees from the third parties;
 - h) Appointing and dismissing the affiliate managers (representative).
2. The board provides the fulfillment of the decisions made by the Meeting.
3. The board also fulfills other functions established by these regulations.

Paragraph 15. Organization of the Board activity.

1. The Chairman of the Board, who is also the President of the Association, leads the Board activity. He/She is chosen by the Meeting for the term of authority of the Board.
2. Board meetings are carried out at least once in three months period and it is called by the chairman on his/her own initiative or by the demand of at least one third of Board members.
3. The Chairman of the Board leads the Board meetings.
4. The Board has power if participants are more than half Board members.

5. The Board makes decisions by the majority of the participants. In case the votes are divided equally during the polling another voting takes place but if votes are again divided equally then the issue is discarded.
6. The Board carries out the meetings according to schedule that is approved by the Board.

Paragraph 16. Registration of the Board meetings.

1. The chairman of the Board meeting provides the meeting protocol. The protocol is signed by the chairman of the meeting. Members attending the meeting may also sign the protocol.
2. The chairman of the meeting is responsible for the accuracy of the meeting protocol. There is a presumption of authenticity and legality of the Board meeting protocol for the honest third parties.
3. The Board meetings are registered in the Board meeting registration book of the organization. In the registration book must be indicated:
 - a) The sequence number of the meeting;
 - b) The date and place of the meeting;
 - c) A short summary of the decisions made by the meeting;
 - d) The identity of the recorder (person) and signature.
4. The chairman of the Board manages the registration book of the Board meetings.

Paragraph 17. Organization representative authority

1. Sole representative authority of the organization is independently granted to the Chairman of the Board and Deputy Chairman of the board. They are elected by General Meeting of the organization members.
2. The Chairman (the President) leads organization daily activity.
3. The Chairman (the President):
 - a) Acts on behalf of the organization, represents it both inside and outside the country; He/She makes agreements on behalf of the organization. The Board should agree upon purchasing real estate, alienate and encumbering it with mortgages.
 - b) Leads development of programs and projects and provides their realization.
 - c) Submits the main directions of the organization activities, plans and targeted programs, reports on annual activity to the Meeting for approval;
 - d) Calls and leads Board meetings and guides its activity;
 - e) Provides the fulfillment of the Board and Meeting decisions, divides functions among the Board members;
 - f) Provides the legality of the financial activity of the organization.
 - g) Demands reports from accountable persons concerning their activities.
 - h) Provides business proceedings under the law of Georgian legislation.
 - i) Makes Labor contracts on behalf of the organization.
 - j) Fulfills other functions under this Bylaws.

4. The Unit of Chairman may be created at the Chairman of the Board and the Board approves its regulations, staff scheduling and structures.

5. The Deputy Chairman of the Board performs functions of the Chairman of the board in case his/her absence. Herewith, he/she has the same representative authority with the third parties as the Chairman of the Board.

CHAPTER IV. Changes in the regulation

Reorganization and Liquidation of the organization

Conclusive Regulations

Paragraph 18. Changes in the Bylaws. Registration facts.

1. Changes in the organization Bylaws may be made according to rule approved by this Bylaws.
2. Any kind of changes that represents registration fact must be shown to the registration body of the organization. Documents must be certified under Notary Law.
3. The board of the organization is obliged for submitting the registration facts to the registration body.
4. Any kind of registration fact concerning the honest third parties is in power just after the moment of registration.

Paragraph 19. Reorganization of the organization; liquidation.

1. The reorganization and liquidation of the organization may be done by the Board's decision or other reason specified by the legislation.
2. The information about the liquidation must be published. Liquidation is performed under the legislation law. During the process of the liquidation current activities must be finished, demands must be established, the rest of the property must be presented in monetary units, creditors must be satisfied.
3. In consequence of the liquidation the rest of the property would be given to one or several noncommercial legal entities who have goals similar to the organization. Authorized concrete person on receiving the property after the liquidation is chosen by the body which makes decisions concerning liquidation. If such authorized concrete person would not be chosen then property will be divided according to the Georgian Legislation Law.

Paragraph 20. Resolution of disputes.

1. Disputes among organization members, also between organization and its members would be solved on the basis of the agreement. In case of disagreement a dispute would be solved at the Court.
2. A dispute between the organization and the third party would be solved under the current legislation.

Paragraph 21. Conclusive Regulations.

1. In any case if one or more regulations of this Bylaws would be abolished it would not cause invalidation of the whole Bylaws. In this case the rest regulations would be in power without abolished regulations.

To: ExCom Members
Re: Teamup Calendar

Below is a link to the Team UP calendar option. Also, there is a link to a trial calendar that I created. I believe participants can create and modify their individual schedules based on what sharing rights are given. No google account is required; however, you can only go back one year from the current month. If ExCom want the ability to view past months in the calendar more than 2 months, there is a monthly subscription fee. I did not research how much the fee is.

Link to Website:

<http://www.teamup.com/>

Link to a free sample calendar that I created for the month of October 2014. The type of calendar chosen is called the Team Calendar. It is a "Who Centered Calendar" focused where people are.

<http://teamup.com/ks81862796e4317e51/>

Lois Benedict | Executive Assistant / Scholarship Administrator

Understanding Teamup Calendar

Teamup is a shared online calendar application for groups and projects. It is different from other personal calendars where each user is required to have an account and that person is the "owner" of that calendar. On such a calendar the most common events are meeting appointments, holidays, and personal plans or to-dos.

Teamup Calendar is designed to focus on the needs of organizing people and things in a group context, for example: A team of people needs an easy overview of each team member's whereabouts; the use of a conference room or tennis court needs to be coordinated among the users; a small business needs to share workflow schedules with multiple people whose work is interdependent. Since any real-world group has a manager or coordinator, a group calendar created from Teamup has one master user, the calendar administrator, who manages how the calendar is structured and with whom the calendar is shared at which permission levels. Read more about [how people are using Teamup Calendar](#) and see why we say a million thanks!

Teamup Calendar offers unique features that address the needs of groups and make sharing easy:

- No user accounts. Share with anyone without requiring anyone to signup or login
- Share via secret links with highly flexible multi-level access permissions
- A calendar administrator manages how the calendar is structured and who can access which part of the calendar

- Customizable branding with your organization's logo and color
- Allowing add-only but not modifying existing events for direct contribution from the community members
- Share events as Web pages without sharing calendars for hassle-free and event-specific sharing without privacy concerns
- Display details & images of multiple events on one List view
- Multiple options for time zone conversion



Shaping Tomorrow's
Built Environment Today

1791 Tullie Circle NE ▪ Atlanta, Georgia 30329-2305 ▪ Tel 678.539.1104 ▪ <http://www.ashrae.org>

Joyce Abrams
Director
Member Services

jabrams@ashrae.org

TO: Tom Phoenix, Executive Committee Chair
Mary Townsend, Executive Committee Staff Liaison

FROM: Joyce Abrams

DATE: November 26, 2014

SUBJECT: Members Council Referrals to Executive Committee

During the Members Council meeting in Atlanta, the motions below on CRC Training were referred to the Executive Committee for consideration. Let me know if you have any questions. Thank you.

Region VII (Memphis Chapter) – Motion 6.f (10/02/2014):

That the Society President is requested to appoint an ad hoc committee to study moving training back to the CRC level and eliminate centralized training.

Background: The centralized training for Membership and Research Promotion is currently taking future leaders away from the CRC indirectly by promoting these two committees by providing financial support for centralized training, but only a small stipend for the CRC and only if both events are attended. It would be cheaper to bring in speakers for each CRC than to hold centralized training.

Fiscal Impact: TBD, based on possible appropriate Presidential ad hoc already in existence.

Region IV (Triangle Chapter) – Motion 8 (10/02/2014):

That chapter committee chairs for Research Promotion, Membership Promotion, Refrigeration Chair, and YEA Chair (those not currently allowed reimbursement) be allowed as current chairs the same transportation reimbursement for CRC Regional meeting effective July 1, 2015.

Background: To entice new member interested in becoming a part of chapter operations, this reimbursement will take some of the burden off to attend meaningful training and help strengthen chapter operations.

Fiscal Impact: Approximately \$350 per person. (Members Council estimates fiscal impact would be closer to \$200,000.)

(Please note: the refrigeration chair listed in the motion is an optional position for chapters and regions.)

cc: Jeff Littleton, Society Executive Vice President



Action Plan for discussion

December 18, 2014

Kari M. Arfstrom

Executive Director

HVACR Workforce Development Foundation

Expectations for today's call

Review the draft action plan and initiatives (Kari –Est time 30 min)

Feedback with your questions, comments. (Board–Est time 30 min)

Set direction for next steps (All–Est time 20 min)

- Determine immediate , short & longer term tasks
- Discuss budget needs (immediate, short & long term)

Next meeting (Est time 5 min)

- At the Expo or a conf call

March Board meeting (Est time 5 min)

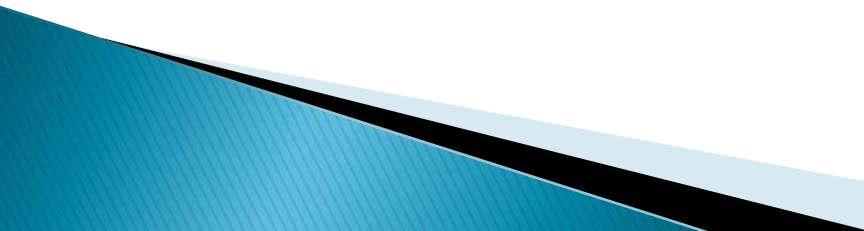
- March 9–11, 2015 Linthicum Heights, MD
Dinner Mon eve, Board meeting Tues morning, Lunch and Federal legis update , con't with board meeting in afternoon with Dr. Kitty Manley
Alliance meeting on Wed morning?

Recap of the HVACR–WDF

Mission

The HVACR Workforce Development Foundation is dedicated to leading an industry effort to develop and promote educational projects, programs, and partnerships to attract committed and skilled employees to a career in HVACR.

Foundation Objectives

- ▶ To raise the awareness of the HVACR industry and the importance it plays in daily lives.
 - ▶ Create interest in the HVACR industry as an attractive and profitable career choice.
 - ▶ To enhance the quality and quantity of available workforce for the HVACR industry.
- 

Update on HVACR&M Conf

March 9–11, 2015
Maritime Institute, Maryland

- ▶ Merged and updated websites for registration and WDF – one URL www.careersinHVACR.org
- ▶ Opened registration in mid–November
- ▶ Marketing to date – press release, tweets, website links, newsletters, etc
- ▶ Speakers, agenda online
- ▶ Incentive to win hotel room by Jan 30
- ▶ 45 registrations thus far, down from last year
- ▶ Sponsorships, Supporter invoices

CTE is trending: Headlines (from just one day)

New York City gets state funding to open a construction-focused P-TECH

[Tweet](#) [Like](#) [Share](#) [Share](#) [Pin it](#)

Submitted by Ariana Fine on Tue, 11/18/2014 - 11:14am

Wednesday, November 19, 2014

Chalkbeat New York

New York City will receive a slice of \$28 million in state aid over the next seven years to open a seventh P-TECH, or Pathways in Technology Early College High School, Gov. Andrew Cuomo's office announced Wednesday.

Report praises Mass. technical schools for industry collaboration

[Tweet](#) [Like](#) [Share](#) [Share](#) [Pin it](#)

Submitted by Ariana Fine on Tue, 11/18/2014 - 9:54am

Wednesday, November 19, 2014

The Republican

Westfield Vocational Technical School's plan to create a hands-on aviation technology program and Franklin County Technical School's revamped machine program could serve as a model for similar co-operative programs around the state.

Gov. Christie signs bills to expand N.J. vocational education

[Tweet](#) [Like](#) [Share](#) [Share](#) [Pin it](#)

Submitted by Ariana Fine on Thu, 12/04/2014 - 12:17am

Thursday, December 4, 2014

NJ Advance Media

Gov. Chris Christie today signed five bills that are intended to expand vocational education in New Jersey.

CEOs Say Employees Need STEM Training

By [Liana Heitin](#) on December 3, 2014 4:20 PM

About 60 percent of job openings require basic science, technology, engineering, and math literacy, and 42 percent require advanced STEM skills, according to a [new survey of 126 chief executive officers](#).

Released today by the Washington-based groups, Change the Equation and the Business Roundtable, the survey looks at CEOs' perceptions of workers' skills. It indicates that 46 percent of respondents said "skills shortages" are "somewhat problematic," and 52 percent said they are "problematic" or "very problematic." The "skills gap" cited in the survey referred to a gap between the skills that employers are looking for and those that job seekers possess (and was not STEM).

67

[Tweet](#)

Articles we won't want...

- ▶ From a high school counselor in Tennessee:

"We have increased our college-going attendance from single digits to something like 25 percent who will at least attempt it now," Ms. Orr said, but it can still be tough for families with few resources or postsecondary experience to help their students plan for and succeed after high school. "The careers are changing rapidly, the set of skills needed for that job are changing. Do you have to have a bachelor's degree to be a plumber? How do you know, how do you research that?"

- ▶ Education Week, Nov. 4, 2014

What went into this plan?

Conversations


- ▶ HVACR WDF Board members, staff, board chairs & Past ED
- ▶ ACTE, AACCC, AERA, NASDCTE, Gateway
- ▶ Similarly situated trade associations
- ▶ Close It Summit, CED, AHRI, IdeaGen,
- ▶ Researchers, educators, media specialists

Research

- ▶ USED, DOL, Census
- ▶ Harvard B & Ed Schools
- ▶ Deloitte
- ▶ Accenture
- ▶ Achieve
- ▶ Burning Glass
- ▶ Manpower Group
- ▶ NAM, CofC, CED, CPE
- ▶ BRT & CTEq
- ▶ LOTS of websites
- ▶ Competitor collateral

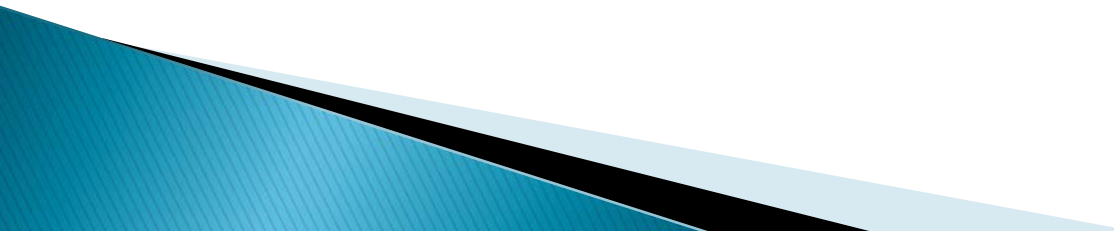
GOALS to Accomplish with the Plan

Overall objectives

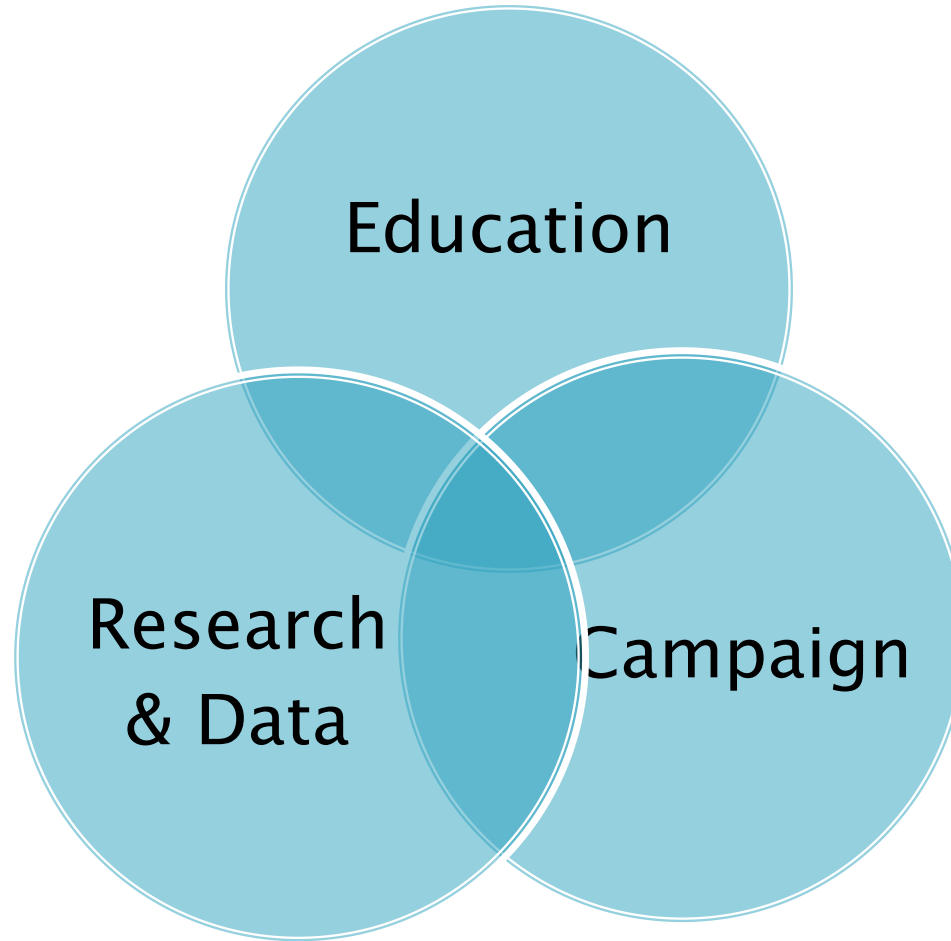
- ▶ Redirect national dialogue about “college & career readiness” and workforce shortages in the US and Canada
 - ▶ Influence the current culture of programs of study and career paths to overcome the skills gap
 - ▶ Affect change in student’ opinions of careers in HVACR
- 

Audiences to Accomplish Goals

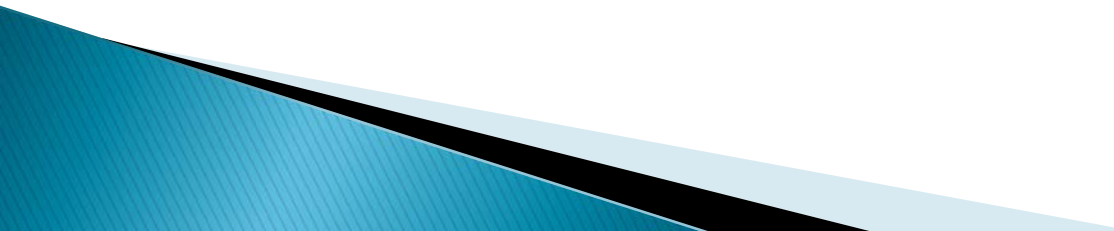
- ▶ Redirect national dialogue about college & career readiness
 - National, state, local policy makers & Administration; industry/business and community leaders; chief state school officers/boards, local and regional superintendents; Media/press
- ▶ Influence the current culture of programs of study and career paths to overcome the skills gap
 - Parents/care givers/mentors; K-12 and IHE educators, counselors and administrators
- ▶ Affect change in student' opinions of careers in HVACR
 - Traditional & disenfranchised youth; Veterans (returning or retiring); Second career adults (un- or underemployed)

- ▶ How do we address the HVACR workforce shortages and the skills gap?
 - First, by proving there are shortages and gaps, then doing something about it!
 - ▶ To accomplish the goals, I propose the HVACR WDF embark on very deliberate plan of action.
- 

Three Initiatives in the Action Plan



Initiative One: Research and Data

- ▶ We need to know what we know, what we think we know, what we don't know, and what we don't know that we don't know.....
 - ▶ To Paraphrase Donald Rumsfeld
- 

We know what we think we know....

- ▶ In a casual scan of the current “facts” here is what I found:
 - Number of HVACR jobs (engineers, technicians, etc) currently available (unfilled): 30,000–150,000
 - Number of retirements per year from the entire field: 20,000–45,000
 - Number of students taking HVAC courses: 2,300– 5,500
 - Industry Growth in next 5 years: 5%–30%
 - Average annual salary, age, etc: ???

Research and Data Collection

▶ Tasks

- Update the current literature, body of knowledge
- Update the demographic and labor data
- Ascertain the number of program in sec and post sec schools, colleges/universities
- To find best and promising practices, stories
- Compare national findings with the local field
- In general, to establish a current baseline for future measurement – Did we move the needle?

Research and Data Collection

Task 1 – The Demand Side

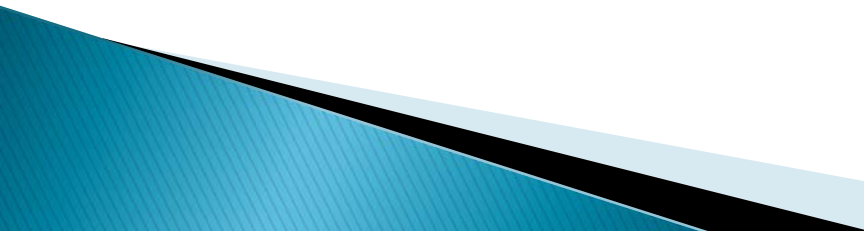
Update Workforce and Demographic stats; conduct Labor Market analysis

- ▶ Use the same reliable statistics
- ▶ Data exists in publicly available federal data sets
 - Use d/b such as DOL, BLS, Census, ACS, trusted previous studies
- ▶ Data exists in propriety d/b such as Burning Glass
- ▶ Needs to be defensible

Research and Data Collection

Task 2 – The Supply Side

Establish the scope of sec and post sec HVACR programs (See map on website)

- ▶ Need to know the nature of curriculum, locations of programs
 - ▶ Understand programs of study, internships, apprenticeships
 - ▶ Credentials of programs, instructors, students; graduation and placement rates, debt, etc
 - ▶ Find student and instructor success stories
- 

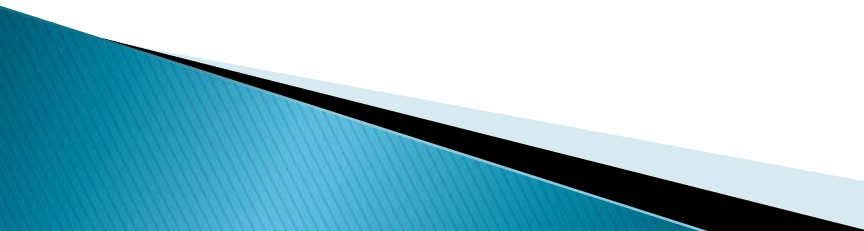
Research and data collection

Part 3 – How the Demand and Supply sides are being coordinated at local level

Field surveys of Current and Projected Labor Force

- Cross walk the Supply and Demand in a visual graphic
- Survey engineers, manufactures, contractors, wholesalers to hear from members on the “real story”
- What are their local needs for workforce, are recent hires coming with right training, credentials, wages, retirements, etc
- Conduct this on an annual basis to see if we are affecting change

Timeline

- ▶ Need Research and data collection tasks 1 & 2
 - Propose to start in January, 2015 with RFPs, contracts
 - Establish Research committee (Interested board and board's staff)
 - Outlines, drafts by March, completed by summer
 - Ensure user friendly formats
 - ▶ Annual survey would start after the baseline has been established.
 - ▶ Update reports over time.
- 

Initiative Two: Education--Pathways /Standards

- ▶ Words and terms I heard used frequently:
 - Standardize, consistent, replicate, scale
 - Align with CCSS, STEM and between sec and post sec, colleges
 - C & I must end with a “recognized end of program” certification
 - Market driven, alignment with local and regional needs
 - Assessments for end of course, program
 - Benchmark programs at national level


Education–Pathways / Standards

Tasks:

Prepare common pathways, standards for instructors with guidance from industry and practitioners


Create curriculum (modules/courses) to align with standards

Ensure that all assessments (modules, courses, end of program) are aligned to courses and standards; certifications and accreditations



Turbo DACUM

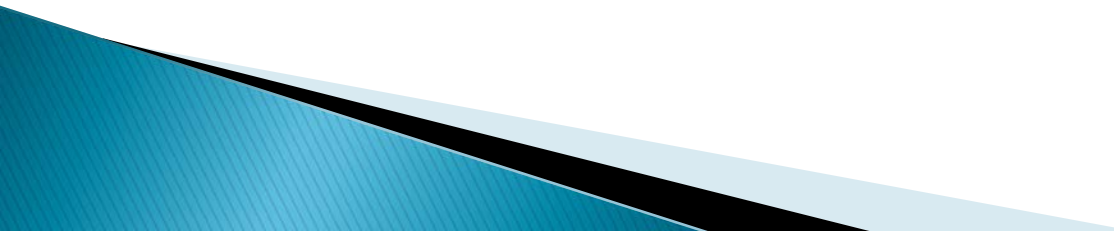
See Dr Kitty Manley's proposal for further details.

- ▶ Example of auto mechanics process
 - ▶ Create Duties and Tasks with industry and practitioners
 - ▶ Cross check using Delphi survey method
 - ▶ Create student learning outcomes with lecture/lab hours, rubrics on Tools & Equipment, Math, Communication, Safety
 - ▶ Residential and Light Commercial, Commercial, Refrigeration, Building performance, others?
- 

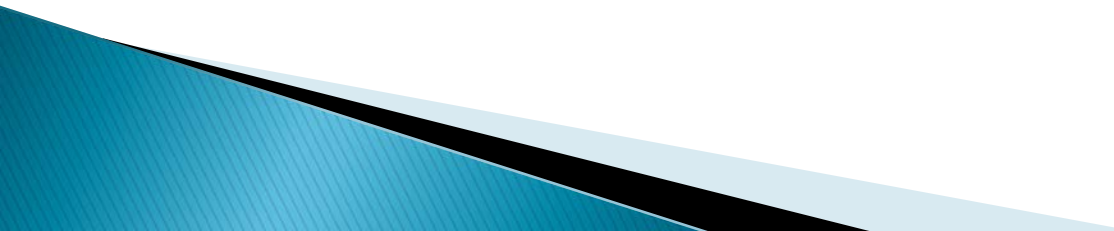
Then....

- ▶ Develop, modify curriculum and instruction to align with new standards
 - Dissemination, adoption, awareness
- ▶ Align assessments, certifications, accreditations at national level

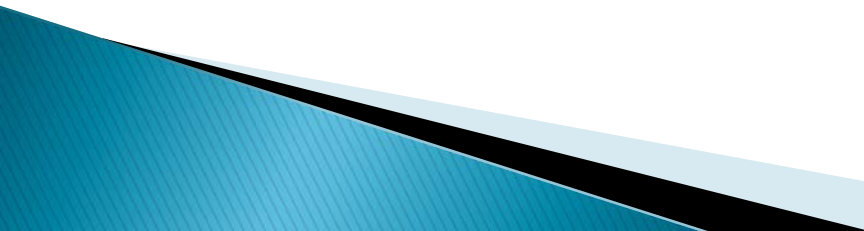
Timeline

- ▶ Contact with Kitty Manley to start process Jan 2015.
 - ▶ Collect the various pathways, standards already completed in the HVACR area; review and plan for full project
 - ▶ Present initial findings at March Board meeting (Dr Manley)
 - ▶ Proceed with pathways as needed
- 

Timeline

- ▶ Concurrently start to gather secondary and post sec curriculums and assessments
 - ▶ Need to be sensitive to the “boundaries” between standards, curriculum and assessments/tests; need to be aligned, inclusive, yet reliable and reputable
 - ▶ Ensure courses are stackable and transferable
- 

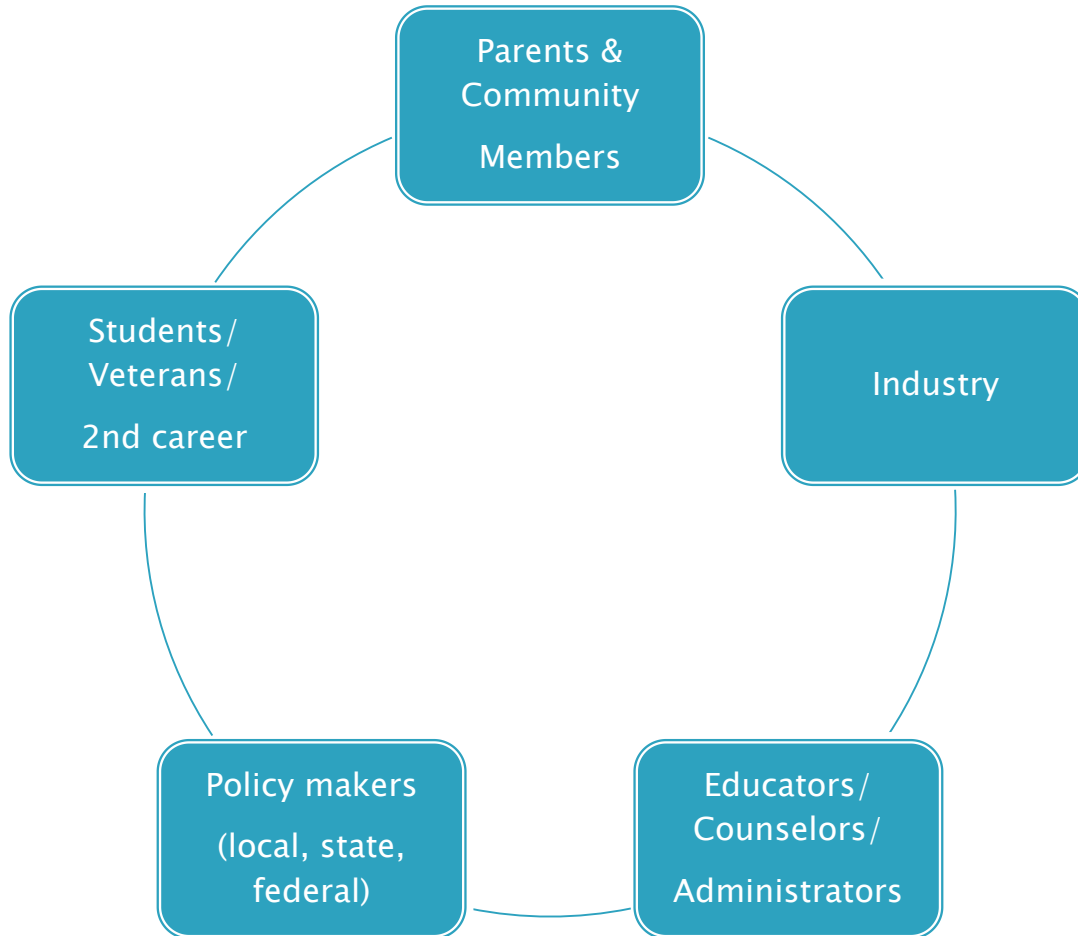
Future education projects

- Review and expand/revise the HVACR&M Conf
 - Offer training on new standards/curriculum (online and F2F; free and fee)
 - Design and disseminate elem and sec modules with a focus on HVAC issues
 - Offer benchmarking for schools offering HVACR courses/programs
 - Update pathways/standards, curriculum, assessments as warranted by industry, and by federal and state laws/regs
- 

Initiative Three: “The Campaign”

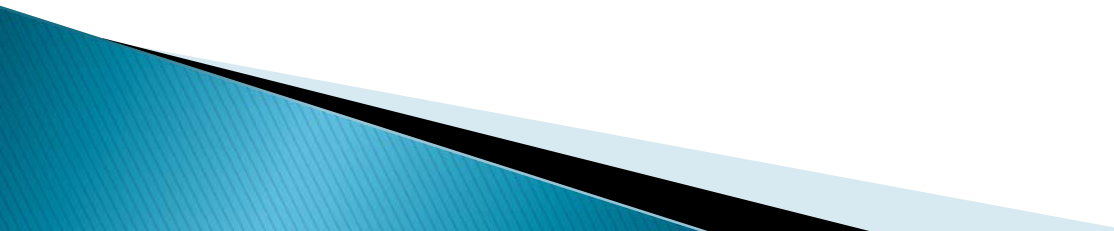
- ▶ Once the Research and data collection projects are near completion and Pathways/ standards project is underway, then we need to decide how big of an outreach/media/PR campaign to conduct.
- ▶ Not a scattered “Got Milk” national campaign, but a very targeted outreach effort to key audiences with direct messages using our data to drive communication efforts.
- ▶ Specifically for awareness, recruitment and promotion of HVACR jobs (engineers, technicians)

Strategic Audiences with Specific Messages



Messages, slogans, graphics

- ▶ Jobs in America (URL available)
- ▶ Cool Careers, Hot Cash
- ▶ What is the pathway to your destination?
- ▶ Blue collar → green collar → white collar
- ▶ Without heat/AC/hot water/refrigeration, this is you (ice cube/sweltering/dirty/eating out of a can.....)
- ▶ Sending a man to the moon, it takes everyone.
- ▶ STEM = CTE = HVACR
- ▶ Images briefcase, toolbox, etc
- ▶ Step ladder
- ▶ No “butt cracks” or dirty hands


- ▶ Indoor Environment and Energy Efficiency
 - ▶ Comfort, safety
 - ▶ Reduce energy/ water
 - ▶ Cannot be outsourced
 - ▶ Highly skilled
 - ▶ Middle class
 - ▶ Small business owner, entrepreneur
 - ▶ Meaningful work
 - ▶ Add value to economy
 - ▶ Professional/dignity
- 

Create strategic media campaigns to targeted audiences

- ▶ What is action desired, what are we asking various audiences to do
- ▶ Decide on geographic regions, outlets receptive to topic
- ▶ Develop message – brand, slogans, the look of the campaign
- ▶ Campaign website, reports, short papers, infographics, articles, blogs, bullet points
- ▶ Easy to understand facts, data, FAQs
- ▶ Case studies – paper, video (students, instructors, parents)
- ▶ Speaking engagements, PPT, presi
- ▶ Targeted talk shows (local TV, Radio)
- ▶ TV, radio, newspapers, mags – advertorials, paid, free or earned, op eds, etc
- ▶ Social media blitz, twitter
- ▶ Submit questions for candidates
- ▶ ETC ETC

Examples of what to develop....

▶ “Toolkits”

- For Educators, Counselors (need to answer the question from the Tennessee counselor)
 - For industry personnel for career nights, ride alongs, Ask me how to become... , op ed, presentations, as members of local community
 - For Parents to encourage their children to explore this career with high skills, no or little debt, guaranteed employment
 - For students with apps, game based sites for youth and young adults
 - For Veterans
 - For Policymakers
- 

Timeline

- ▶ Start to plan now, field test messages, brand
- ▶ Role out over next 6–24 months
- ▶ Several launch dates to consider through out the year with key audiences
 - October is National Manufacturing month (industry)
 - February is CTE month (students, instructors)
 - Back to school (students, educators, parents)
 - New year's resolutions (industry, community)
 - New Congress, Administration, Perkins/WIA reauthorizations (policy makers)
 - Veteran's, Memorial Days (Veterans)

May issue of *District Administration*

- ▶ Working with AC manufactures for a multiple page advertorial (content and advertising)
- ▶ Deadline approaching

AS OF 9/25/14; SUB	
MAY 2015	
AD MATERIALS DUE: 3/30/15	
Curriculum Roundup: Programming	C
Video and online teacher evaluations	C
Magnet schools	C
Business of: Air conditioning schools	E
Product Focus: Library technology	P
District CIO: Social media monitoring	D
BUYERS GUIDE: GUIDE TO AUDIO/VISUAL SOLUTIONS	E I

Collaborative partners

- ▶ Influence Reauthorization of the Perkins Act & assist with outreach and dissemination
 - ACTE
 - AACCC
 - CCSSO (new president)
 - AASA, NSBA, NASSP, Middle Schools
 - School/Guidance/Career Counselors
 - Members of the Foundation
 - Other trade groups
 - Geographic locations, targeted demographics

Recommended Actions

- ▶ **Upon agreement of Initiatives, start to solicit contributions and fundraising (D & O in addition)**

- ▶ **Start Initiative one (parts 1 & 2) in Jan 2015**
 - Subcommittee to be formed ASAP to assist
 - Budget range: \$75,000–\$125,000 depending on number of project contractors (for US and Canada)
 - DA May issue

- ▶ **Start Initiative two in Jan 2015**
 - Initial presentation at March meeting
Budget range: \$50,000 for initial planning, curriculum review, additional funds for each pathway

- ▶ **Begin to work with a PR/Communications company in Q2, 2015**

Budget range: Depending on scope and duration, \$250,000/Q

Discussion

- ▶ Questions
- ▶ Clarifications
- ▶ Actions

Systems Efficiency Initiative: A New Approach to Energy Efficiency in Buildings

The Alliance to Save Energy (the Alliance) is organizing a multiyear initiative to advance building systems energy efficiency, in collaboration with private sector partners, utilities, government, and nonprofit organizations. The Systems Efficiency Initiative (SEI) includes technical assessments, policy analysis, and action steps to build on and complement current efforts to improve single-device and whole-building efficiency.

SEI will engage all interested stakeholders – manufacturers, designers and builders, utilities, consumers or building owners, and efficiency advocates – to: 1) better understand the opportunities for systems-level energy efficiency in buildings; and 2) develop and put in place effective policy instruments to accelerate systems efficiency that build on the market transformation successes and the lessons learned from more than three decades of traditional focus on the product and whole-building levels.

The collaborative effort will produce:

- A well-documented assessment of energy saving potential for building systems;
- A roadmap of specific opportunities, priorities, and near-term actions to achieve them;
- An inventory of policy and program strategies to support systems energy efficiency; and
- A proposed plan of action to better incorporate systems-level efficiency in current government and utility programs, and in federal or state legislation.

We expect this initiative to raise awareness within the efficiency community of the importance of adding systems efficiency to the available toolkit for energy efficient market transformation.

The Opportunity

Across the spectrum of building energy uses – from home appliances to lighting, commercial and residential HVAC, and data/telecomm centers – industry experts and efficiency advocates alike are looking beyond familiar energy-saving measures to consider opportunities not easily captured by either efficient individual devices or whole-building performance. By comparison, for industrial processes and wastewater treatment, it has become commonplace to emphasize systems-level efficiency as opposed to focusing singularly on high-efficiency pumps, motors, fans, or air compressors. However, in the buildings sector, efficiency measures and programs have mostly focused on individual devices or on whole-building performance.

Several studies recently have introduced the idea that, even as device-level savings are becoming harder to identify or more costly per kWh or therm saved, opportunities for systems-level efficiency in buildings remain largely unexplored and untapped and there have been few attempts to systematically quantify energy savings potential for building systems. Estimates at a recent European workshop show that the savings of both HVAC and lighting could be roughly doubled by moving beyond single devices to systems-level efficiency (ECEEE 2014). A far more aggressive estimate by ACEEE is that: “System efficiency opportunities produce energy savings that dwarf component-based efficiency improvements by an *order of magnitude*” (Elliott et al. 2012). Under the concept of “Intelligent Efficiency,” ACEEE attributes these savings mainly to enhanced performance data and control capabilities to improve the long-term operation of systems.

There are some individual efforts to address specific building systems but there remains a need for a more systematic analysis of systems-level savings potential, tied to the development of strategies to achieve these savings. Outlined on the next page are a few examples of potential gains; others are likely to emerge through literature review and consultation with experts in each subsystem.

Proposed Tasks and Deliverables

The Alliance proposes a two-year collaborative effort organized under five main tasks, all of which will involve close consultation with and contributions from project partners:

- *Task 1: Inventory and Initial Scoping* - Compile information on ongoing work to characterize building systems efficiency, drawing on published sources as well as interviews.
- *Task 2: Analysis of Potential Savings* - Estimate the potential and achievable energy, cost, and peak demand savings from systems-level efficiency, beyond what can be achieved through efficient equipment alone, as well as non-energy benefits of the systems approach.
- *Task 3: Technology RD&D Roadmap* - Characterize the main technology developments needed for systems efficiency improvements, drawing on existing technology roadmaps by DOE and industry.

- *Task 4: Policy and Program Options* - Identify the key program and policy measures to improve building systems efficiency. Examples include:
 - New, industry-accepted methods for measuring and testing system energy performance – including “performance maps” to characterize performance under a range of operating conditions, and metrics to address the *quality* as well as quantity of delivered energy services;
 - Creation of a third-party services infrastructure for energy systems testing and assessment;
 - Tools, training, and professional certification to support better systems-level design, installation, commissioning, assessment, and operations;
 - Market drivers such as system efficiency labeling, competitive awards and other recognition, and utility incentives or tax benefits;
 - Needed modifications or reformulations of minimum energy standards for equipment and for building energy codes, to accommodate systems efficiency considerations; and
 - Recommended means of tracking progress and results.
- *Task 5: Action Plan* - Prioritize the policy and program options and outline a sequence of concrete actions to move both the market actors and the policy community toward a commitment to incorporate systems thinking as broadly as possible across all their activities.

Sample Opportunity Areas for Efficiency Gains in Building Energy Systems

- Rapid performance advances in functionality, miniaturization, and cost reductions of **information and communications technologies (ICT)** present new opportunities. The increase in real-time data availability, computing power, communications and control applies not only within but across building systems (e.g., windows with controllable daylight and solar gains linked to lighting and HVAC controls). Beyond the building shell, demand-response signals can modulate operation of solid-state lighting, HVAC, water heating, and even home appliances in ways that have little or no impact on building occupants.
- As space conditioning and water heating equipment have become more efficient, there is increased attention to reducing **thermal losses** in distribution systems, equipment sizing, part-load efficiencies, and thermal energy storage. Technologies long available at the industrial scale (waste heat recovery, combined heat and power) are migrating to small scale commercial and even residential applications.
- A systems approach may lead us to reexamine current thinking on centralized vs. decentralized building “**infrastructure services**,” such as refrigerant compressors, AC-to-DC power conversion, local on-demand hot water, and task-based delivery of lighting and conditioned air.
- **Specialized applications** such as commercial food preparation, data centers, and vertical transport (elevators and escalators) offer unique opportunities for better systems design, control, and integration with other building systems.
- An added benefit is the ability to provide new dimensions of **service quality** – or avoid unintentionally degrading quality in the name of saving energy. Building indoor air quality, thermal and acoustic comfort, and safety and security can only be effectively addressed at a systems level. Lighting quality (glare, visual comfort, visual task performance, color rendition) is best tackled via broader systems – including daylighting, controls, room layout, and furnishings – rather than choice of light source or luminaire alone.

Organization and Effort

The Alliance will organize and lead a collaborative effort, involving key stakeholders across the spectrum of interested industries, utilities, buildings technology and policy experts, and other nongovernmental organizations active in buildings energy efficiency.

Federal and state agencies will be invited to participate in the SEI ex officio. A Steering Committee for the project, led by two industry co-chairs, will consist of approximately 20 senior representatives of partner organizations and funders. The Alliance will form technical working groups for each selected building system, and will leverage the expertise of the broader Steering Committee to develop the action plan.

To execute this activity the Alliance seeks \$500,000 in funding over a two-year period; we anticipate reaching this funding goal with contributions from multiple sources. The main output of this initiative – namely the action plan – will be used to guide future Alliance policy work, which leverages funding by Alliance Associates and foundations to carry out policy education and advocacy.

January, 2015

Systems Efficiency Initiative Membership, Governance and Roles

The Alliance to Save Energy (the Alliance) is organizing a two-year initiative to advance building systems energy efficiency, in collaboration with private sector partners, utilities, government and nonprofit organizations.

The collaborative effort will produce:

- A well-documented assessment of energy saving potential for building systems;
- A roadmap of specific opportunities, priorities, and near-term actions to achieve them;
- An inventory of policy and program strategies to support systems energy efficiency; and,
- A proposed plan of action to better incorporate systems-level efficiency in current government and utility programs, and in federal or state legislation.

A diversity of organizations and companies will be invited to serve on the Systems Efficiency Initiative (SEI) in order to ensure that the work products developed from this initiative are vetted and unbiased and that they have the greatest credibility possible among the key audiences of interest – policy and decision makers.

Systems Efficiency Initiative Structure

Lead

Manufacturers, designers and builders, utilities, consumers and/or building owners, and efficiency advocates all will be invited to participate in the SEI. The Alliance will serve as the organizer of the SEI. In this capacity, the Alliance will invite entities to participate in the Initiative, will oversee any/all fundraising for the Initiative, will convene regular meetings of the participants, will develop meeting minutes, and will develop draft documents for review by the key stakeholders and will issue the final documents outlined above.

SEI Steering Committee

The SEI Steering Committee will consist of manufacturers, designers and builders, utilities, and building owners that make a financial contribution to the Initiative, along with key nonprofit and research organizations with relevant expertise. Steering Committee members will be asked to meet periodically (approximately four times between the commencement and publication of work products) to establish the agenda for the Initiative, direct and oversee the technical work required for the end product, and vet and develop a set of consensus recommendations that, taken together, could result in a proposed plan of action to better incorporate systems-level efficiency in current government and utility programs, and in federal or state legislation. Members of the SEI Steering Committee will be invited to appoint one or more individuals to participate in any/all technical advisory committees that are created as part of this work (see section below on the role of the technical advisory committees). Entities who are involved in the SEI Steering Committee should expect their participation to be noted in formal documents published as part of this initiative.

The Alliance will invite two company representatives to serve as co-chairs of the Steering Committee. These individuals will be responsible for chairing meetings of the Executive Committee, serving as spokespersons for the initiative in the media and at forums and conferences, and approving the initial agendas and final recommendations of the Steering and Technical Committees before they are released to the public.

Ex Officio SEI Members

Federal and state agencies will be invited to participate in the SEI as ex officio members. While they may be asked to contribute funding toward the SEI, their participation is not contingent upon funding. Ex Officio SEI members may serve as technical advisors to the project. Their participation in the SEI will be noted in formal documents only at the approval of the individual federal and/or state agency.

Technical Advisory Committees

Technical Advisory Committees will be organized as needed and as authorized by the Steering Committee to address particular technical and policy issues that arise. These could focus on particular building systems, on a particular cross-cutting issue (e.g., performance metrics), on policy approaches (e.g., training incentives) or some combination. Steering committee member organizations and other outside stakeholders and experts, as warranted, will be invited to participate. The frequency of meetings by phone or in person will be determined by the advisory committee.

Funders of the Systems Efficiency Initiative (as of 1/13/2015)

American Gas Association
Copper Development Association
CREE Inc.
Ingersoll Rand
Johnson Controls
Legrand NA
National Electrical Manufacturers Association
Phillips
United Technologies Corporation

January 17th, 2015

BOMA 360 Report

I as well as David Underwood attended the BOMA 360 Council meeting on Saturday January 17th 2015 in Scottsdale AZ. The meeting was attended by approximately 30 individuals. BOMA 360 staff presented current statistics of the 360 program which indicated for the year 2014 there were 169 new applicants and 74 renewals making a total of 243 applications processed in 2014 which was a 23% increase over 2013. Total properties in the program was listed at 660. The program presently has representation in 63 building markets. It was also reported that BOMA 360 is making headway with continued development of international member applicants especially with their partnership with BOMA Canada.

Open discussion proceeded where the staff asked the BOMA members in attendance what was their experience in using the 360 program. Their statements were:

1. Market recognition of a higher level of property management allowing for higher market rent values
2. Industry recognition of management excellence
3. Improved management process mandated by the 360 renewal process
4. Improved property management value as seen by the building owners
5. Education and training tools for new management staff

If you are not familiar with the BOMA 360 program I have attached a presentation explaining the program. On page 6, Section 4 slide which shows what the program covers for energy:

Section 4: Energy

- ENERGY STAR® score
- ENERGY STAR® products
- Building energy management plan
- Energy audit and system commissioning or re-commissioning
- Energy awareness

It is apparent that building energy efficiency is important to the program but is not highly developed. In reviewing this year's applications I discovered that 15% of the applicant buildings did not achieve an Energy Star Level of 50%. Those applicants that could not achieve an Energy Star rating of 50% all reported that they had an Energy Management plan, had high energy awareness and were utilizing energy audits and commissioning. Many of the applicants that achieved higher than 75% Energy Star rating did not report they were using an energy management plan or using Energy Audits or Commissioning? I am not sure what those statistics mean but I think this is an opportunity for ASHRAE to help BOMA achieve a higher level of energy effectiveness for their members. BOMA would profit from further developing their tool kit for building managers to use to improve their energy efficiency. ASHRAE has two products that could benefit the BOMA 360 program, BEQ and the PMP Best Practice process could both be utilized to assist BOMA in their efforts and at the same time help promote ASHRAE at the same time.

David Underwood said he had talked to them previously about using BEQ but said they would not be interested until BEQ had traction in the industry. To take advantage of this opportunity ASHRAE should revamp the BEQ program not as a building labeling program but as an Energy Management tool to be used in continuing to improve building efficiency. A statement was made at the meeting that the BOMA 360 building label is competing with USGBC and Energy Star for building label space, it is my opinion that ASHRAE should promote BEQ as a tool used to improve building performance but could be used as a performance label if desired. I would recommend ASHRAE move away from the concept of a physical building label.

Respectfully submitted

A handwritten signature in blue ink, appearing to read "James Bochat", enclosed in a thin black rectangular border.

James Bochat
ASHRAE Member

How to Put BOMA 360 to Work for Your Building

Tuesday, March 13, 2012

2pm ET/1pm CT/12pm MT/11am PT

Speaker Profiles

Dan Chancey, Vice President, Senior Asset Manager, Commercial Advisors

Dan Chancey serves as Vice President, Senior Asset Manager, for Commercial Advisors in Memphis, TN. A veteran of the commercial real estate industry, Dan exemplifies ambitious leadership, working his way up from Maintenance Manager to General Manager.

Dan is currently the chair of the BOMA 360 Performance Program Council. He is a former member of the BOMA International Executive Committee and has been extremely active on the local and regional levels, serving as President of BOMA/Memphis in 2004 and 2005.

Dan Cote, West Coast Regional Manager, Piedmont Office Realty Trust

Dan Cote has over 25 years of commercial real estate experience with the majority of it spent in the Los Angeles area. He is currently the West Coast Regional Manager for Piedmont Office Realty Trust where he oversees the management of 18 office buildings totaling approximately 2.7 Million square feet. One of his responsibilities at Piedmont is to lead the BOMA 360 initiative for the company where 20 buildings have already achieved the BOMA 360 designation.

Dan's broad range of experience covers the areas of property management, asset management and leasing. He is a BOMA regional committee member and also holds an MBA from the Anderson School of Business at UCLA.

George Denise, CFM, FMA, RPA, LEED AP, Global Account Manager & Wakefield

George Denise is Global Account Manager for Cushman & Wakefield, providing facility management services for Adobe Systems Incorporated, overseeing a global portfolio of 59 properties totaling 3.2 million square feet.

He is past-president of BOMA Silicon Valley, and a member of Cushman & Wakefield's National Energy & Sustainability Committee. He was also a member of BOMA's Energy Efficiency Program (BEEP) Task Force and a member of the BOMA International Task Force that created the recently published *BOMA Green Lease Guide*.

Mr. Denise is a LEED Accredited Professional and has been instrumental in the certification of nine Adobe buildings through the U.S. Green Building Council's LEED program.

Moderator: Brian Green, CFO/Vice President – Finance, Administration & Information Technology (FAIT), BOMA International

Mr. Green joined the BOMA staff in 2004 and leads a team of staff professionals responsible for BOMA's finance, administration and information technology. The FAIT Group is responsible for supporting all departments and programs of BOMA.

Prior to joining the BOMA staff, Green served as Chief Financial Officer for a regional social service agency as well as eight years public accounting. He has extensive experience in not-for-profit with an emphasis in finance and operations management and management of information systems.



How to Put BOMA 360 to Work For Your Building

Tuesday, March 13, 2012

Dan Chancey, RPA, VP Senior Asset Manager
Commercial Advisors, Memphis, TN
Chair, BOMA 360 Performance Program Council

George Denise, CFM, FMA, RPA, LEED Accredited Professional
Global Account Manager
Cushman & Wakefield @ Adobe, San Jose, CA
Member, BOMA 360 Performance Program Council

Dan Cote, Regional Manager
Piedmont Office Realty Trust, Inc., Irvine, CA





What we will cover

- What is the 360 Performance Program?
- How is the program administered?
- What is the application process?
- Why participate?
- Market acceptance
- Questions and answers





What is the BOMA 360 Performance Program?

Validation and Industry Recognition of Buildings that demonstrate Best Practices encompassing all major aspects of Building Management and Operations





What is the BOMA 360 Performance Program?

- Online application with independent review and evaluation of 6 major components
 - Building Operations & Management
 - Life Safety/Security/Risk Management
 - Training & Education
 - Energy
 - Environmental/Sustainability
 - Tenant Relations/Community Involvement





What is the BOMA 360 Performance Program?

- 4 Prerequisites
 - SOP Manual
 - Preventive Maintenance Program
 - Participation in most recent EER®
 - Participation in ENERGY STAR® Portfolio Manager





What is the BOMA 360 Performance Program?

- Program Administration
 - 9 Member Council Oversight
 - Independent Credentialing Procedures
 - Continuous Review and Program Update
 - Audit of Applications





What is the BOMA 360 Performance Program?

- Program Administration
 - Fee based on SF (\$750-\$1,500)
 - Portfolio discounts (10-plus buildings)
 - Higher fees for non-members
 - Submit at any time throughout the year
 - Recognition conferred quarterly
 - Renewal every 3 years
 - Annual Statement of Verification

BOMA



Online Application

Section 1: Building Operations & Management

- BOMA Floor Measurement Standard
- Financial Management
- Insurance
- Green Lease
- Green Purchasing

BOMA



Online Application

Section 2: Life Safety/Security/Risk Management

- Emergency preparedness and recovery
- AEDs in building
- Emergency communications network
- Code compliance
- Fire and life safety systems
- Evacuation drills
- Written security procedures
- Access control and surveillance
- Americans with Disabilities Act

BOMA



Online Application

Section 3: Training and Education

- Professional designations
- Licensing
- Continuing education
- Professional development plan
- Professional memberships
- BOMA education and events
- TOBY® participation



Online Application

Section 4: Energy

- ENERGY STAR® score
- ENERGY STAR® products
- Building energy management plan
- Energy audit and system commissioning or re-commissioning
- Energy awareness



Online Application

Section 5: Environmental/Sustainability

- Waste management/recycling
- Indoor air quality
- Green cleaning
- Exterior maintenance management
- Water management
- Traffic reduction



Online Application

Section 6: Tenant Relations/Community Involvement

- Community impact
- Tenant relations/tenant communications
- Advocacy on industry related issues





Online Application

Waiver for Toby Regional Winners

- Portfolio Winners
 - Sections 3, 4, 5, 6, waived
- Earth Winners
 - Sections 3, 4, 5 waived
- \$300 fee discount
- Award must be within one year prior to application





Why participate?

- Third-party verification
- Developed by industry professionals
- Vetted, tested throughout industry
- Benchmark against industry best practices
- Marketing advantage
- Marketing tool for brokers
- Building “check-up”
- Building evaluation tool
- Holistic approach – not just “green”





Why participate?

- Value to owner, manager, tenant
 - Recognition for best practices
 - Fine tune procedures, processes
 - Savings in operations, efficiencies
 - Positive for leasing, asset value
 - Positive for tenant satisfaction, retention, acquisition
- Kingsley Study
 - BOMA 360 buildings have higher score in 47 out of 50 tenant satisfaction categories
- Survey of BOMA 360 Designees
 - 38% report designation was major factor in attracting, competing for new tenants





Market Acceptance

- **Over 400** buildings since June 2009
- Designees in 50 markets
- Over 70 real estate companies
- Top 12 companies

CBRE	Cushman& Wakefield
Brookfield	Granite Properties
Parmenter	Hines
Piedmont	Crescent RE
LBA Realty	GSA
Transwestern	Cousins





For more information:

www.boma.org/getinvolved/boma360
or e-mail boma360@boma.org

Next application deadline is June 1





Questions and Answers

Global Refrigerant Management Initiative (GRMI)

8:30 a.m. -- 9:45 a.m.

January 25, 2015

Sinclair Ballroom

Waldorf Astoria Hotel

11 E. Walton, Chicago, IL 60611, USA

Purpose:

- 1. Opening**
- 2. Participant Self Introductions**
- 3. Comments by GRMI Sponsors**
 - a. **ABRAVA** – Samoel Viera de Souza
 - b. **AHRI** – Steve Yurek
 - c. **The Alliance for Responsible Atmospheric Policy** – Kevin Fay
- 4. Report on Current List of Participants** – Jim Walters
- 5. Review of and Comment on Proposed GRMI Charter (Attached)** – All
- 6. Next Steps**
- 7. Adjournment**

Global Refrigerant Management Initiative (GRMI)

8:30 a.m. -- 9:45 a.m.

Attachment

Scope and Mission (Draft 1 15)

Global Refrigerant Management Initiative

GENERAL DESCRIPTION AND INITIAL AREAS OF CONCENTRATION

The Global Refrigerant Management Initiative (GRMI) is an industry-led¹ global refrigerant management Initiative. This initiative seeks to identify and explore opportunities to educate the HVACR industry's global supply chain on ways to improve the management of refrigerants to reduce leak and service emissions, and to promote the re-cycling, recovery, reclaiming, and end of life destruction of refrigerants and foam blowing agents.

The impetus behind the formation of the GRMI is the potential growth of HFCs use and emissions. Although comprising only about one (1) percent of global greenhouse emissions, HFCs are expected to increase to greater than 10 percent of greenhouse gas emissions by 2015. The current bank of fluorocarbons in the installed base of air-conditioning/heating equipment is approximately 20 GtCO₂eq (CFCs, HCFCs, HFCs). It has been estimated that more than 85 percent of emissions occur from equipment leaks or during servicing, repair, or disposal of equipment.

Reducing CO₂ equivalent emissions from our industry's equipment is a significant opportunity. Regulation and legislation that address improvements in energy efficiency and promote low-GWP refrigerant technology only address new equipment entering the market place. A much larger opportunity exists to make significant reductions in the equivalent emissions from the existing installed base through effective refrigerant management practices.

Areas initially identified for the Initiative's focus, but subject to amendment of the GRMI Steering Committee when formed, are the following:

1. Industry supply chain practices/guidelines that reduce/eliminate refrigerant emissions;
2. 2n industry developed certification of training, relying on the global code of good refrigerant management practices;
3. Potential research on cost-effective end-of-life programs for refrigerants and foam blowing gases.;
4. Opportunities for capacity-building assistance for the development of an effective reclamation industry.

The Initiative may wish to consider other tasks, such as developing potential policy initiatives to be considered by national governments that will facilitate effective service practices, and/or the

¹ Original Proposal Supporters: The Brazilian Association of Refrigeration, Air-conditioning, Ventilation and Heating (ABRAVA), the Air-conditioning, Heating, and Refrigeration Institute (AHRI), and the Alliance for Responsible Atmospheric Policy (The Alliance)

Global Refrigerant Management Initiative (GRMI)

8:30 a.m. -- 9:45 a.m.

development of a voluntary reporting regime in order to provide ongoing information on the success of the initiative.

GRMI will also identify technology and/or equipment, as well as other issues, including the modifications of building codes and standards, that would facilitate more effective refrigerant manage.

GRMI PURPOSE AND AFFILIATION

The initial, primary purpose of the GRMI is to improve global education, training and certification (ETC) of the service industry associated with air conditioning and refrigeration industries.

The GRMI is Intended to be a focal point to develop common approaches among national, regional actors to achieve global success.

GRMI will be housed under the umbrella of the International Climate Change Partnership/Business Institute for Sustainability Solutions, a non-profit, UN recognized business NGO. ICCP is an observer in the Climate and Clean Air Coalition (CCAC).

MEMBERSHIP

Members of the GRMI are key industry associations and other private interests (to be defined by the GRMI Steering Committee) from around the world representing the industry's manufacturers, wholesalers, retailers and contractors. Membership is approved by the Steering Committee. Membership is voluntary.

A list of those organizations who have expressed a strong interest in being a member are found in the Attachment.

ORGANIZATION

The Steering Committee

GRMI programs will be managed by a Steering Committee composed of 20 members. The committee will be composed of the key supporting industry organizations, and associate memberships of individual member companies, as approved. Steering Committee members will be asked to contribute financial or in-kind support for the GRMI operation.

Steering Committee Chair

The Steering Committee will be Chaired by a member of the Steering Committee on a rotating two year basis.

GRMI Secretariat

Global Refrigerant Management Initiative (GRMI)

8:30 a.m. -- 9:45 a.m.

GRMI's Secretariat will be located in the ICCP office, located in Arlington, Virginia, a suburb of Washington, DC.

Steering Committee Tasks

The Steering Committee will develop a budget for program initiation, as well as a dues budget for these organizations and private sector interests according to the capability of such entities to participate.

The Steering Committee will:

- be responsible for identifying existing ETC programs around the globe and establishment of a work team to consider and develop a uniform ETC program and modules;
- develop and disseminate a uniform ETC program that will be made available to regional and national industry programs; and
- be responsible for identifying potential modifications of the ETC initiatives that may be necessary to adapt the program to unique local services;
- assemble a coalition of allied industry and NGO organizations;
- develop online education and certification programs;
- develop model policy that could be considered and adopted at the local, state, and national levels;
- coordinate with implementing agencies (IBRD, UNEP) to encourage use of ETC products;
- pursue a communications program, including speaking engagements, written materials, and other internet based products;
- participate in/or develop regional training programs, including those sponsored by UNEP OzoneAction.

Budget and Finance

GRMI will operate on an annual budget. The budget year is January 1 to December 31 the following year. An annual budget will be developed by a Budget Subcommittee of the Steering Committee and assisted by Secretariat staff.

A proposed annual budget will be presented to the Steering Committee for approval no later than October 15 of each year.

Funding for the annual budget will come from all GRMI members. In-kind contributions are acceptable but the annual budget must have on hand funds necessary to meet projected expenditures and a reserve fund equaling six (6) months expenditures at a minimum and 12 months expenditures at a maximum.

The secretariat will draft rules and procedures for the expenditure of funds for approval by the Steering Committee.

Global Refrigerant Management Initiative (GRMI)

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ATTACHMENT

Interested Organizations

ABRAVA

ACAIRE (Colombia)

AHRI

The Alliance

ANFIR (Mexico)

AREMA (Australia)

CRAA (PRC)

EPEE

HRAI (Canada)

JRAIA (Japan)

KRAIA (Korea)

Refrigerants Australia

Global Refrigerant Management Initiative (GRMI)

8:30 a.m. -- 9:45 a.m.

Report to ASHRAE Board of Directors

October 2014

North American Technician Excellence (NATE)

I attended the fall 2014 NATE Board of Trustees meeting at the NATE headquarters on October 14-15.

John Lanier as NATE COO, and Wade Mayfield as NATE board chairman have made several personnel and operational changes.

The most significant change was from VGI (Video General Incorporated) to Castle Worldwide for test administration services, which has caused considerable disruption but should provide long term benefits.

NATE is below budgeted revenue YTD for 2014, with exams down 3,000 YTD vs budget. Part of the exam issue is attributed to the change from VGI to Castle.

Overall, NATE continues to be stuck at about 13% of available technicians being certified, and exam volume continues to show a slow steady decrease, from 20k per year in 2004 to 18k per year in 2013. On the positive side, the recertification rate appears to have grown to over 35% for 2014 from under 25% in 2013.

NATE continues to undertake a number of initiatives to reach and retain technicians, including: 1) a more flexible and friendly recertification approach that includes a continuing education path in addition to retesting; 2) initiating programs with technical schools to interface with technicians at the beginning of their career; 3) reaching out to the HVAC distributor community to provide training and testing resources; 4) better accounting and more user friendly exam administration; 5) a more interactive and user friendly website (complete). In addition, and most importantly, Nate is planning to develop a tiered level of certifications.

The NATE website can be accessed at: <http://www.natex.org/>

Respectfully Submitted,
Wayne Reedy
Fellow, ASHRAE

To: President Thomas Phoenix
From: Ronald Vallort
Re: ASHRAE/GCCA Report

As the ASHRAE/GCCA Liaison, I recently attended the GCCA (IACSC) 2014 Annual Conference & Expo along with the GCCA Construction / Codes Committee Meeting from November 6, 2014 through November 8, 2014 in Boca Raton, FL.

GCCA Construction / Codes Committee Meeting and GCCA (IACSC) 2014 Conference

The Construction Codes Committee met at the IACSC Conference to further discuss topics from the GCCA 2014 Assembly of Committees Meeting.

IACSC has members all over the world and is a Core Partner of the Global Cold Chain Alliance. The International Association of Cold Storage Constructors (IACSC) represents building owners, engineers, contractors and suppliers in the cold storage construction industry. IACSC provides a forum for innovative ideas, promotes standards of practice, hosts professional education programs, and promotes the interests of the industry in political, legal and regulatory arenas.

Topics of interest to ASHRAE that were covered in the Construction / Codes Committee Meeting and the GCCA (IACSC) 2014 Conference were:

- Energy Guideline for Refrigerated Facilities (Baseline reference for USGBC)
- Using Oxygen Reduction technology as a proactive fire prevention system in the US
- Review the 2012 IARW Warehouse Design, Maintenance and Modernization Manual
- Low Charge Ammonia systems
- Safety of solar roof panels during a fire.

I continue to interact with GCCA Members and reinforce the relationships between CGGA members and ASHRAE.

The following information should be of interest to the ASHRAE Committees listed below:

- Refrigeration Committee
- TC 10.1
- TC 10.5

CONSTRUCTION / CODES COMMITTEE

The Construction/Codes Committee covers all aspects of warehouse construction, including design, cost, materials, and codes. Listed below are the items of mutual interest to ASHRAE and GCCA.

- **LEED Scorecard Project Update**

- A Baseline Energy Guideline for Refrigerated Facilities has been submitted to the USGBC for use in the Leadership in Energy & Environmental Design (LEED) rating system for the cold storage industry.
- The USGBC still has the Guideline under review, but has indicated that the Baseline Energy Guideline for Refrigerated Facilities can be used as a reference for projects. Projects using the guidelines could receive up to 19 points if they are at least 10% more efficient than the baseline established in the guide.
- The Guidelines will be available to all individuals through GCCA to facilitate widespread use of the Guidelines and their final approval from the USGBC.
- It is recommended that individuals notify the USGBC if they intend to use the Guidelines.

Cold storage and refrigerated buildings are extremely high users of energy and resources, and much opportunity exists for the improvement of their operations. These Guidelines will enable owners to seek recognition through the LEED program for their efforts to increase their energy efficiency and decrease their energy use.

- **Hypoxic Systems Subcommittee**

Using a Low Oxygen environment technology to prevent fires is being used successfully in Europe, but using it in the United States is problematic due to OSHA and NFPA guidelines.

- Natural atmosphere has approximately 21% of Oxygen (O₂) and 78% Nitrogen (N₂), with about 1% of other gases (Argon and CO₂). European standards state that as long as there is 17% O₂ there is no problem, while OSHA puts the level of O₂ that requires self-contained breathing apparatus (SCUBA) gear at 19.5%.
- German regulations differ greatly from those in the United States
 - Medical examination required for individuals working in a Low Oxygen facility
 - 13% to 15% O₂ – workers must take a 15 minute break per 2 hours
 - 15% to 17% O₂ – workers must take a 15 minute break per 4 hours
 - Greater than 17% O₂ - no restrictions
- Reduced Oxygen Atmosphere facility requirements:
 - Must be air-tight (blower test)
 - Air-lock to keep air and cold in the facility
 - N₂ generators and distribution piping
 - O₂ sensors with alarms
 - System controls and monitoring
 - Lab testing to determine the fire set point of the product stored
- Reduced Oxygen Atmosphere facilities do NOT need:
 - In-rack sprinklers (which are becoming less effective as buildings grow taller)
 - Expensive sprinkler systems throughout the facility

- A Low Oxygen facility is being constructed in Washington state
 - The facility will house potatoes
 - The set point of potatoes was established at a lab in Germany
 - Local government agencies used European standards and practices to allow the facility to be built.
 - The costs to operate and maintain the system components are not known at this time.

While a Low Oxygen fire prevention system is 99.9% effective, it seems improbable that the system will gain immediate acceptance in the United States. Regulations, codes, and insurance regulations would need to be modified. The Low Oxygen fire prevention system would be best suited to long term, one main product, and automated cold storage facilities. Data centers may be candidates for the system if the centers are sealed and unmanned.

3 Year Review of the 2012 IARW Warehouse Design, Maintenance and Modernization Manual

The Warehouse Design, Maintenance and Modernization Manual will be reviewed in 2015. The various chapters will undergo peer review and revision as necessary to reflect changing technology, codes, and practices. It is anticipated that the reviews should be completed by January 2016.

Ron Vallort will review the Refrigeration Chapter which he previously authored.

IACSCPRESNTATIONS

The presentations relevant to ASHRAE are listed below.

Low Charge Ammonia Systems - A white paper on "Low Ammonia Charge Refrigeration Systems for Cold Storage was presented" by Terry Chapp, PE, Danfoss.

The paper is available only to GCCA members, however the technology of low ammonia charge refrigeration systems is constantly evolving and information about it is readily available from other sources.

While ammonia has zero Global Warming Potential (GWP), zero Ozone Depletion Potential (ODP), and a high coefficient of performance (COP); large quantities of ammonia are considered hazardous with burdensome government regulations and disliked by the general public. Fluorocarbon refrigerants continue to be phased out worldwide, so utilizing ammonia, but in lesser quantities, is the movement driving new and revised refrigeration technologies.

Government agencies; international, federal, and state; continue to increase regulations regarding large ammonia charges, the push is on to reduce the ammonia charge in large refrigerated facilities and large HVAC systems. The number and size of refrigerated facilities continues to grow: in the United States and other countries especially developing countries.

Advances in refrigeration system design that have made the reduced ammonia charge possible:

- Advanced heat transfer technology
- Advanced controls
- Advanced manufacturing technology
- Advanced auxiliary components

Various approaches to reducing the ammonia charge fall into the following categories:

- Eliminate all but the most essential ammonia in a system
- Substitute other heat transfer fluids for ammonia whenever practical.
- Maximize the heat transfer from the ammonia in the system to the air or secondary fluid
- Discard the “more is better” approach to ammonia charge

The low charge systems fall into three general categories:

- Central systems – reduce or eliminate unused ammonia charge.
- The 3/1 recirculation rate is longer recommended.
- Recirculation rates as low as 1.25/1 have been successfully achieved.
- Hybrid systems – restrict ammonia charge to the machine room and use a second coolant in the cold rooms in the facility (central systems).
- Packaged systems – utilize numerous, smaller self-contained systems that will eliminate all the interconnecting piping and ammonia inventory.

Refrigeration research and development will concentrate on reducing the ammonia charge of new and existing ammonia refrigeration systems for the next few years. Packaged systems are already in production as evidenced by the Azane products produced in the United States by a subsidiary of Star Refrigeration from the UK, where these systems have been used for more than 20 years.

FSMA and Food Facility Design and Construction by Lowell Randel, VP of Government & Legal Affairs, GCCA.

The Food Safety Modernization Act (FSMA) was signed into law on January 4, 2011. This first major change in over 70 years requires over 50 new regulations so the implementation process will take several years. The prevention controls section of FSMA will impact facilities the most. Facilities that manufacture, process, pack or hold human food will need to be able to monitor and maintain temperature. Building design and construction will have to ensure and provide records to prove that safe, clean, and controlled conditions were maintained throughout construction.

Please take the above information to use as you see fit with the appropriate ASHRAE staff so we can continue to implement these ideas and foster cooperation and sharing between ASHRAE and GCCA.

I will continue to keep you aware of developments and activities that would be of interest to ASHRAE. I will be working on the revision of the Refrigeration Chapter in the IARW Warehouse Design, Maintenance and Modernization Manual. I will attend the GCCA Annual Meeting in April 2015 as the ASHRAE Liaison.

Respectfully,
Ron

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20141210 NIBS CWCC Board of Advisors Meeting Report

The primary purpose of this meeting was to update the board on the results of the completed Job Task Analyses and Certification Schemes for the four job tasks. To reiterate these are:

- Energy Auditor
- Building Commissioning Professional
- Building Operating Professional
- Energy Manager

Once these were reviewed and discussed, the intent then was to make a recommendation to the Board of Direction regarding approval. Lastly, we were to discuss the future of the project.

After introductions were made we were informed of two personnel changes that were taking place. On the NIBS side, it was announced that Deke Smith was leaving and his place at NIBS was to be taken over by Roger Grant. As for NREL/DOE, Benjamin Goldstein announced that he was also leaving his position which is to be filled by Monica Newcome. Both replacements were at the meeting. Although many in the meeting felt that the project lost the top two champions, we were assured that their replacements were extremely competent and would seem the project to completion.

Once that smoke cleared we were able to get down to business reviewing the results of the schemes. Two versions of these had been distributed to the board members, one being a snapshot of each job scheme and the other the near final version of the scheme as a whole. It was in the later that a lot of the details of how each scheme was developed and by whom, is found. This is also the document that will answer many questions that AMP (Dr. Rob Shaw) had about this process.

In discussing these schemes these were some of the sticking points:

Three (3) year renewal cycle: While other organizations had an issue with this, it was resolved that shorter renewal cycles would be acceptable, just not longer ones.

50 PDH's per renewal cycle: This was discussed at length but in the end remained unchanged.

Code of Ethics: At first this was an issue because of the apparent inflexibility of the scheme, but this was changed to allow for others to keep their single code of ethics as long as it appeared to cover what is in the scheme.

Grandfathering current certification holders: This could be ASHRAE's biggest hurdle. The two methods discussed were retesting or creating a new certification. I believe as long as we can justify compliance of our tests with the schemes we should be okay.

It was asked if these schemes were guidelines or standards that must be met. To which Benjamin stated that these should be considered more of benchmarks than anything else. It was clear from the discussion that these schemes were made for those starting from scratch with the intent of getting through ANSI approval and qualifying for the Better Buildings 'Seal of Approval', once they developed their test in a prescribed manner. ASHRAE will have to review the scheme and see if there are any changes to our nearly complete documents, however I don't anticipate many changes.

Much of the focus of the discussion centered around commissioning. Some of the insights from other organizations:

- NEBB: They are going to develop a new certification from scratch.
- BCA: Are torn because of the market and the limited funds, but this is their primary focus.
- ACG: Sees a lot of problems complying with schemes.

Future plans were discussed from the distribution of the FINAL schemes in late January to early February, to the implementation of the program in 2015. Further on down the road in 2018 having a discussion on whether or not to begin an update.

Lastly we discussed how to build the demand for the certifications. This was a discussion about how to grow the pie rather than splitting it up. Here are some of the points:

- Growing competition between cities and states to be the greenest in

the region. Involve the AIA.

- Get it legislated - help local and state leaders write in requirements.
- Get standard labor codes to clearly define these jobs to the government. These are in the works now and should be available within the next couple of months from the US Department of Labor.
- Work with APPA and COA to educate them how to hire CxA, EA, EM
- Utility Programs

Scheme Approval

Based on the discussions, edits were made to the Building Commissioning Professional, Energy Manager, Energy Auditor schemes and were sent to the Board of Direction for their approval pending the acceptance of the edits by each of the scheme committees. Not approved was the Building Operating Professional, as this job task was found to be too broad. It is uncertain as to its future.

Post Meeting Discussions

I talked with Benjamin and Dr. Christine Nero (Professional Testing) to discuss the compatibility issue between our test and the scheme. My concern was that the total number of questions was specified in schemes and that our test construction did not match up, even though I felt our content did. Although they did not have a direct answer it was implied that we might be able to justify that fact that we used less questions because we have built in varying levels of difficulty. I also believe that they want to get this program moving and having ASHRAE on board would give it more momentum.

ASHRAE Action Items:

1. Review the schemes and update our documents as needed.
2. Cross-walk the test with the scheme and get a preliminary approval from NIBS.

Key Performance Indicators Snapshot				December 2014			
		Compare to last year		FISCAL YEAR 2014-15			
Publications (All) Sold	2,104	↓	-34%	Non-Dues Revenue (in thousands)			
ASHRAE.org Visits	94,490	↓	-3%	Dec. actual	Dec. budget	% of budget	
Education Registration	86	↓	-20%	\$709	\$913	78%	
Certification Applications	34	↑	17%	YTD actual	YTD budget		
Media Placements	909	↑	84%	\$4,826	\$5,410	89%	
Ads Sold (All)	262	↑	65%				
Conference Attendance	818	↑	3%				
Publications							
Publication Type	Print			Electronic			
	Dec. 2014	YTD 2014-15	YTD 2013-14	Dec. 2014	YTD 2014-15	YTD 2013-14	
Books/papers/articles	1,039	7,431	10,316	383	2,264	2,060	
Standards	340	3,230	3,422	342	2,557	2,660	
AEDGs (life to date)		ASHRAE.org Visits					
Total Downloads	Print	Views				Visits	
525,896	26,055	Dec. 2014	Dec. 2013	YTD 2014-15	YTD 2013-14	Dec. 2014	Dec. 2013
		352,315	341,277	2,163,314	1,880,335	94,490	97,263
ASHRAE Learning Institute							
		Dec. 2014	Dec. 2013	YTD 2014-15	YTD 2013-14		
Attendees at instructor-led online seminars		0	0	257	369		
Attendees at instructor-led seminars at ASHRAE conferences		0	0	51	0		
Attendees at in-company, chapter, industry events seminars		0	0	1,095	865		
eLearning course purchases		86	107	536	570		
Totals		86	107	1,939	1,804		
Certification							
Applications Received	Dec. 2014	Dec. 2013	LTD % passage	Exams Taken YTD 14-15	Exams Taken YTD 13-14	Certs. Earned YTD 14-15	Certs. Earned YTD 13-14
Healthcare design (HFDP)	1	2	83	195	187	131	117
High performance building (HBDP)	5	5	65.2	Key Dates 2015 Winter Conference Jan. 24-28 Chicago ASHRAE Webcast April 23, 2015			
Operations/maintenance (OPMP)	0	3	56.9				
Commissioning (CPMP)	19	11	84.3				
Building energy modeling (BEMP)	4	1	68.4				
Building energy assesstmt. (BEAP)	5	7	79.3				
Totals	34	29					
PR Activity							
	Dec. 2014	Dec. 2013	YTD 2014-15	YTD 2013-14			
Releases	4	8	28	30			
Pitches	0	3	0	9			
Inquiries	8	13	46	68			
Placements	909	495	4,379	2,159			
Advertising Sold - Journal/HPB/ASHRAE.org							
	Dec. 2014	Dec. 2013	YTD 2014-15	YTD 2013-14			
Print ads	76	69	342	341			
Digital ads	186	90	1,610	756			
2015 Winter Conference							
	Member Paid	Non-Mem. Paid	Reduced fee	Comp	Total	Cumulative	
Dec. 2014	397	88	269	64	818	1,968	
Dec. 2013	377	73	307	40	797	1,860	

Marketing/PR Dashboard Legend

All activities reflect comparisons by month and year for current fiscal year vs. previous fiscal year

LTD: life-to-date

Non-dues revenue: comparison of non-dues revenue (in thousands) actual to budget.

Publications: comparison of sales (print and electronic download) of publications (books, papers and articles) and standards.

ASHRAE.org Site Traffic: Views represents the number of times pages on ASHRAE.org are viewed; visits represent the number of visits to ASHRAE.org.

ALI Student Count: The number of attendees at courses offered under ASHRAE Learning Institute; eLearning reflects the monthly number of courses purchased (which may include individuals who purchased more than one course)

PR Activity: A release is a news release issued by ASHRAE. A pitch is a contact by ASHRAE to a reporter regarding a possible story angle. An inquiry is a contact by a reporter to ASHRAE seeking information on an activity. Placements refer the number of times ASHRAE is mentioned in magazines and newspapers (both print and electronic).

Certification Applicants: Indicates number of applications received for specific certification programs. Does not include individuals who earned a certification by virtue of serving on an examination development subcommittee.

Healthcare Facility Design Professional (HFPD)- launched June 2007

High Performance Building Design Professional (HBDP) - launched June 2008

Operations and Performance Management Professional (OPMP)- launched Jan. 2009

Commissioning Process Management Professional (CPMP) - launched June 2009

Building Energy Modeling Professional (BEMP) - launched Jan. 2010

Building Energy Assessment Professional (BEAP) - launched Jan. 2011

Advertising: Reflects number of ads sold in ASHRAE Journal, HPB and ASHRAE.org, both print and digital formats.



CRC SCHEDULE 2015-2016

<u>FALL 2015</u>	HOST CHAPTER LOCATION	ALTERNATE CHAPTER LOCATION	TARGET MONTH/WEEK (1 st , 2 nd , 3 rd week, etc.)	ACTUAL CRC DATES	OFFICIAL VISITOR	STAFF	CRC CHAIR
REGION I	CENTRAL NEW YORK SYRACUSE, NY	ROCHESTER ROCHESTER, NY	AUGUST 3 RD WEEK AUGUST 9-15	AUGUST 20-22			STEVE SILL
REGION II	HAMILTON HAMILTON, ON	NB/PEI MONCTON, NB	AUGUST 4 TH WEEK AUGUST 16-22	AUGUST 21-23			DAVE RASMUSSEN
REGION III	JOHNSTOWN JOHNSTOWN, PA	PHILADELPHIA PHILADELPHIA, PA	AUGUST 3 RD WEEK AUGUST 9-15	AUGUST 13-15			CHRIS ALBRIGHT
REGION IV	TRIANGLE RALEIGH DURHAM, NC	ATLANTA ATLANTA, GA	AUGUST 2 ND WEEK AUGUST 2-8	AUGUST 6-8			JIMMY LEONIDA
REGION V	EVANSVILLE EVANSVILLE, IN	DAYTON DAYTON, OH	AUGUST 2 ND WEEK AUGUST 2-8				SHAWN MOWERY
REGION VII	MEMPHIS MEMPHIS, TN	BIRMINGHAM BIRMINGHAM, AL	AUGUST 1 ST WEEK JULY 26-AUGUST 1	JULY 23-25			MIKE BILDERBECK JIM MORGAN
REGION IX	BLACK HILLS AREA RAPID CITY, SD	NEBRASKA OMAHA, NE	AUGUST 1 ST WEEK JULY 26-AUGUST 1	JULY 23-25			ALLEN FREELAND MIKE MUELLER
REGION X	SAN JOSE SAN JOSE, CA	SOUTHERN CALIFORNIA LOS ANGELES, CA	AUGUST 2 ND WEEK AUGUST 2-8	AUGUST 13-15			JOSEPH CHIN
REGION XII	GOLD COAST FORT LAUDERDALE, FL	SOUTHWEST FLORIDA FORT MEYERS, FL	AUGUST 1 ST WEEK JULY 26-AUGUST 1	AUGUST 6-8			DANNY DENARO ROBIN BRYANT
REGION XIII	PHILIPPINES MAKATI CITY, PHILIPPINES	THAILAND BANKOK, THAILAND	AUGUST 4 TH WEEK AUGUST 16-22	AUGUST 21 – 22			EMMANUEL PUNSALAN
RAL			SEPTEMBER 3 RD WEEK SEPTEMBER 13-19				
<u>SPRING 2016</u>	HOST CHAPTER LOCATION	ALTERNATE CHAPTER LOCATION	TARGET MONTH/WEEK (1 st , 2 nd , 3 rd week, etc.)	ACTUAL CRC DATES	OFFICIAL VISITOR	STAFF	CRC CHAIR
REGION VI	MADISON MADISON, WI	ST LOUIS ST LOUIS, MO	MAY 1 ST WEEK				SHARON GOULD
REGION VIII	EAST TEXAS TYLER, TEXAS	CENTRAL OKLAHOMA OKLAHOMA CITY, OK	APRIL 4 TH WEEK	APRIL 28-30			RHAMY MORRISON
REGION XI	SASKATOON SASKATOON, SK	PUGET SOUND SEATTLE, WA	MAY 2 ND WEEK				BILL DEAN

NOTE: ALL TARGET WEEK/DATES ARE FINAL AND CANNOT BE CHANGED. IF THERE IS A CONFLICT IN THE SCHEDULE, THE REGION MUST RESOLVE.

Additions and/or revisions are shaded.

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