



MINUTES

EXECUTIVE COMMITTEE MEETING

Marriott St. Louis Grand Hotel
St. Louis, Missouri
Saturday, June 25 and Wednesday, June 29, 2016

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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 June 25 & June 29, 2016

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PRINCIPAL MOTIONS
Executive Committee Meeting
June 25 & June 29, 2016

- | <u>Number</u> | <u>Motion</u> |
|---------------|---|
| 1 – 5 | that ExCom recommends that the Lawrence Berkeley National Laboratory (LBNL)/ASHRAE Memorandum of Understanding be approved by the Board of Directors. |
| 2 – 6 | that the Public Policy Issue Briefs 2016-2017 be approved: <ul style="list-style-type: none"> • Building Energy Data: A Critical Response • Climate Change and Building Energy Efficiency • Commercial Building Energy Use Disclosure • Consensus Standards: Expert Solutions to Meet Global Needs • Energy Efficiency for Buildings and HVAC&R Equipment • Energy Use Metrics and Targets for Commercial Buildings • Research and Development Needs to Meet National Goals • Science, Technology, Engineering and Mathematics Education |
| 3 – 7 | that ExCom recommends the AASA membership application of Cámara Chilena de Refrigeración y Climatización A.G be approved by the Board of Directors. |
| 4 – 9 | that ExCom recommends that the ASHRAE Science and Technology for the Built Environment (STBE) Best Journal Paper of the Year be formally recognized the recipient at the Plenary Awards session of the ASHRAE Annual Meeting with approval from the Board of Directors. |
| 5 – 8 | that the following motions from the Scholarship Trustees be presented as a consent motion: <ol style="list-style-type: none"> 1. that ExCom recommends to the Board of Directors approval of the following revision to the Rule of the Board by Scholarship Trustees changing the name of the ASHRAE Region I Boggam & Barthy Setty Scholarship to the ASHRAE Region I <u>Setty Family Foundation</u> Scholarship. 2. that ExCom recommends to the Board of Directors approval of the following revision to the Rule of the Board by Scholarship Trustees changing the name of the ASHRAE Region III Boggam & Barthy Setty Scholarship to the ASHRAE Region III <u>Setty Family Foundation</u> Scholarship. |
| 6 – 9 | that Excom recommends that the following revision to the Rule of the Board by Scholarship Trustees requiring the following criteria for all post-High School scholarship applicants effective January 1, 2017 be approved by the Board of Directors. <ul style="list-style-type: none"> • <u>Must be a student member of ASHRAE</u> |
| 7 – 10 | that ExCom recommends the following revision to the Rule of the Board by the Life Member's Club changing 2.105 and 2.105.010 be approved by the Board of Directors. |

2.105 ORGANIZATIONAL / STAFF

2.105.001 Standing Bodies (10-01-27-01/11-06-26-21C/12-10-26-13)
The standing bodies of the Society are the Board of Directors and those listed in the table below:

<u>Standing Body</u>	<u>Authorized Number of Meetings per Year</u>	<u>Reporting To</u>
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Joint Exposition Policy	2	Members Council
Membership Promotion	3	Board of Directors
<u>Life Members Club (LMC)**</u>	<u>2</u>	<u>Executive Committee</u>
Nominating*	2	Board of Directors

**COF and LMC positions are not eligible for travel or transportation reimbursement from ASHRAE for attendance at meetings.

2.105.010 Life Members Club (xx-xx-xx-xx)

ASHRAE shall establish a Life Members Club (LMC) to improve the status of Life Members and their activity in the Society. The Life Members Club shall report directly to the ASHRAE Executive Committee (Ex-Com).

2.105.010.1 Scope and Purpose

The LMC shall perform services to enhance the continued relationship with Society of long-time members, to recognize the contributions of outstanding HVAC&R educators, to encourage the academic and professional growth of HVAC&R graduate students and to support younger members. To these ends, the Club shall solicit funds to award the E.K. Campbell Award of Merit, fund Grants-in-Aid to worthy graduate students and support selective YEA activities.

2.105010.2 Membership

There shall be two grades of membership in the Club.

Member -- Any member of ASHRAE who has attained Life Membership status in the Society shall be a Member.

Honorary Member -- Any Presidential Member of the Society who has not attained Life Membership in the Society shall be an Honorary Member and shall become a Member when achieving Life Member status in the Society.

2.105.010.3 Executive Committee

The affairs of the Club shall be administered by an Executive Committee (LMC - ExCom) consisting of the LMC Chair, LMC Vice Chair, LMC Secretary/Treasurer and not less than four additional LMC members.

ACTION ITEMS
Executive Committee Meeting
June 25 and June 29, 2016

Item	Responsible	Summary of Action	Status
1 – 2	Olesen	(Carryover) Share information from the DKV Conference with the Refrigeration Committee (5/2016: Ongoing; 6/2016: Ongoing.)	_____
2 – 2	Littleton	(Carryover) Notify the Student Activities RVCs and provide a list of scholarships to Student Activities Chairs to distribute. (5/2016: Ongoing; 6/2016: Ongoing.)	_____
3 – 2	Littleton	(Carryover) Contact the International District Energy Association regarding the approval of the ASHRAE/IDEA Memorandum of Understanding. (5/2016: Ongoing ; coming to closure, some additional input is being finalized. 6/2016: Still waiting for final input which should be forthcoming.)	_____
4 – 2	Littleton	(Carryover) Work with CAMEE to renew CAMEE/ASHRAE MOU which is expiring in the coming month and add item to Spring ExCom agenda. (5/2016: Ongoing; contacting CAMEE; 6/2016 – Still working with CAMEE.)	_____
5 – 2	Wentz/Littleton	(Carryover) Organize an ASHRAE/MCAA meeting after the June Annual Conference. Discuss the possibility of a joint publication on change orders and claims. (6/2016: Ongoing.)	_____
6 – 2	Chakroun	(Carryover) Look for a path forward for ASHRAE Standard 90.2 in Lebanon, Qatar, UAE and potential members of the current 90.2 committee willing to work on the standard for these countries. (6/2016: Ongoing.)	_____
7 – 5	Littleton	Contact Presidential Members to inquire if they are interested in receiving ASHRAE business cards.	_____
8 – 5	Olesen	Work with Members Council on future participation in Solar Decathlons and for ways ASHRAE might increase participation. Report due by the Bangkok meeting.	_____
9 – 6	Graef	Work with Technology Council to strategize recommendations and mechanisms to achieve Net Zero. Report due by the Bangkok meeting.	_____
10 – 6	Olesen/Littleton	Investigate the cost for membership in INIVE which would include participation by all ASHRAE members.	_____
11 – 6	Littleton	Distribute the approved Public Policy Issue Briefs to the Board of Directors and Technology Council.	_____
12 – 7	Chakroun/Olesen	Work with PubEd and GGAC for the appropriate location to place the Guidelines for Professional Practice in the ASHRAE structure.	_____
13 – 7	ExCom	Review the information from ASE (Alliance to Save Energy) and defer to future ExCom meeting.	_____

Item	Responsible	Summary of Action	Status
14 – 8	Littleton	Work with the Marketing Department to increase membership awareness and benefits to ASHRAE of the Board meeting in Bangkok.	_____



EXECUTIVE COMMITTEE MEETING

Marriott St. Louis Grand Hotel
St. Louis, Missouri
Saturday, June 25 & Wednesday, June 29, 2016

MEMBERS PRESENT: T. David Underwood, President
Timothy G. Wentz, President-Elect
Bjarne W. Olesen, Treasurer
Walid Chakroun, Vice President
Patricia T. Graef, Vice President
Charles E. Gullede III, Vice President
James K. Vallort, Vice President

MEMBER NOMINEES PRESENT: Sheila J. Hayter, Treasurer-Elect
M. Ginger Scoggins, Vice President Nominee
Edward K.C. Tsui, Vice President Nominee

GUESTS PRESENT: Pam Duffy, Leadership U
June 25, 2016 Susan Nagel, Leadership U
Anoop Peediyakkan, Leadership U
Madison Schultz, Leadership U
Dick Hayter, Presidential member
Thomas Phoenix, Presidential member
Michael Brandemuehl, bEQ member
Ron Jarnagin, Presidential member

STAFF PRESENT: Jeff H. Littleton, Executive Vice President
June 25, 2016 Mary D. Townsend, Executive Assistant
Joyce Abrams, Director of Member Services
Vanita Gupta, Director of Marketing
Claire Ramspeck, Director of Technology
Kim Mitchell, Chief Development Officer
Craig Wright, Director of Administrative Services
Mark Ames – Manager, Federal Government Affairs
Lilas Pratt, Manager – Special Projects

GUESTS PRESENT: Pam Duffy, Leadership U
June 30, 2016 Susan Nagel, Leadership U
Anoop Peediyakkan, Leadership U
Madison Schultz, Leadership U
Bill Murphy, Life Member's Club
Don Colliver, Presidential Member

STAFF PRESENT: Jeff H. Littleton, Executive Vice President
June 30, 2016 Mary D. Townsend, Executive Assistant

Lilas Pratt, Manager – Special Projects
Mark Ames – Manager, Federal Government Affairs
Jim Scarborough – Manager, Grassroots Government Affairs
Vanita Gupta, Director of Marketing
Kim Mitchell, Chief Development Officer

Call to Order/Introductions

President Underwood called the Executive Committee meeting to order on Saturday, June 25, 2016 at 8:30 a.m. ExCom members, nominees, guests and staff attended as listed above.

Review of Agenda

The following items were added to the agenda:

Unfinished Business –

- Solar Decathlon
- 90.2 Status
- Net Zero Energy Standard

New Business –

- 90.4 Status Update
- Alliance to Save Energy
- STBE Best Paper of the Year Award
- Membership Concerns Regarding Board Meeting in Bangkok

Approval of Minutes

Mr. Chakroun moved

that the minutes of the May 2, 3 & 4, 2016 ExCom meeting be approved.

MOTION PASSED (Unanimous voice vote, CNV)

Review of Action Items – May 2, 3 & 4, 2016

Action items 1 – 6 are ongoing from previous ExCom meetings or new to the list and added during the review. The action item list is located at the beginning of the minutes; updates are included where possible.

AI 1-6

Report of the President Attachment A

President Underwood reported a few highlights from his report. He attended CLIMA 2016, visited with the Hellenic Chapter and the Greek Navy and visited his own ASHRAE chapter in Toronto.

Reports of Officers' Inter-society Visits

Mr. Olesen reported:

- Attended the CIBSE meetings with Mr. Wentz.
- Visited Iran, but this visit was not part of ASHRAE business. The group is very qualified and has interest in forming an ASHRAE chapter or section but they are prevented from

doing so. They have a desire to translate some of the handbook and Mr. Comstock will research to determine what they will be allowed to do.

- Traveled to chapters in Michigan and Ohio and gave presentations at 6 of the chapters. Each meeting was well attended and organized. Cleveland celebrated its 100th-year anniversary with a black tie event.

Mrs. Graef attended the Region VIII CRC.

Mr. Chakroun is working with UNEP to focus on the main direction of ASHRAE and UNEP working together. UNEP values its relationship with ASHRAE.

Mr. Wentz attended the Region XI CRC. He also visited chapters in San Joaquin, Birmingham and Northeast Wisconsin.

Mr. Gulledge attended the Region XI CRC. Mr. Wentz gave a preview of his presidential address to the group. The American/Canadian collaboration was very impressive.

Ms. Hayter attended the EE Global meeting in Washington and was able to give a press briefing with EE Global because ASHRAE is a sponsor. ExCom will continue to sponsor the EE Global Meeting in Washington D.C. with a contribution of \$10,000. Ms. Hayter participated as a panelist on the discussion of the resiliency of buildings during the White House conference on Resiliency and Building Codes event. She also attended the Women in Engineering ProActive Network (WEPAN) conference held in Denver. Eighty percent of participants are from academia. She hopes to attend the event in Denver next year.

Report of the Treasurer Attachment B

Mr. Olesen reviewed the motions that will be presented to the Board of Directors that require a change to the Rule of the Board. The 2015-2016 fiscal year forecast, as of May 31, 2016, calls for a budget surplus of \$501,000 versus the budgeted deficit of \$449,000. Major variations include:

- Handbook reprints to maintain inventory and other sales-related costs increased expenses by \$307,000.
- IAQA salaries and benefits for staff time allocated for IAQA were not accounted for in the budget with revenues of \$540,000.
- Strategic Plan Initiatives 1 and 2 (\$120,000) were not utilized and funds were not spent.

Mr. Olesen reported that the 2016-2017 draft budget reflects a deficit of \$273,000. Even though the 2016-2017 draft budget reflects a deficit, the three-year budgeting cycle reflects a positive result. Major variations include:

- AHR Expo in Las Vegas has the potential to be one of the largest shows outside of Chicago.
- Annual dues increase for Full, Associate and Fellow members-1% (2014 CPI)
- Education registrations show a strong demand for training courses and eLearning.
- Chapter Opportunity Fund of \$140,000 in 2016-2017.
- Internship Program with expenses of \$75,000.
- Chapter Leadership Program with expenses of \$100,000.
- Technology Portal and Smartphone Apps with \$55,000 impact in 2016-2017.
- Increase to Distinguished Lecturer Budget for more DL visits by \$22,400.

- Overseas BOD Meeting/Region XIII and RAL Joint CRC in Thailand -\$60,000.

Mr. Olesen also reported that he will be presenting a few slides highlighting potential 2017-2018 Society initiatives for his presidential year and an overview of the Capital Campaign budget and next steps.

Mr. Olesen reported that there are five motions that will come before the Board of Directors for approval:

- 2016-2017 draft budget reflecting a deficit of \$273,000.
- Research budget for 2016-2017 showing total revenues and expenses of \$5,863,000.
- Discretionary capital expenditure budget of \$200,000 for the coming fiscal year, an additional \$200,000 for a bEQ Web Portal Development and \$200,000 for a rebuild of the Online Comment Database (both software assets with 3-year amortization).
- Revisions to the Rule of the Board 2.102.027.3 and revisions to 2.102.002.3 and 2.102.002.4 are included in Attachment B.

Executive Session

Executive sessions were held on Saturday, June 25th and on Wednesday, June 29th and actions are recorded in the executive session minutes.

Committee Reports

bEQ Attachment C

Mr. Brandemuehl presented an updated status of the bEQ program starting with a review of the programs refocused direction as detailed in Orlando. The committee is currently focused on several areas:

- Marketing efforts including a request for a proposal for the first item in the plan, the branding toolkit.
- Online web portal including development of a functional specification for a web portal
- Collaborations including EPA and USGBC for LEED EBOM credits
- Outreach including applications for the university course and interest in the international market.

Mr. Brandemuehl reported to the committee that the goal is to implement these efforts over the next 12 months.

CLIMA 2016 Attachment D

NIBS/NCEES

Mr. Hayter reported that his report would be on the National Council of Examiners for Engineering and Surveying (NCEES).

- NCEES' main objective is to provide advance licensure standards for all professional engineers. The update this year is that there has been little movement on licensure and no one has adopted a change this year. The state of New Hampshire agree with the concept of a master's degree versus a bachelor's degree of licensing.

Unfinished BusinessPostponed Motion – LBNL/ASHRAE MOU Attachment E

Mr. Underwood reported that the postponed motion from Spring ExCom regarding the approval of the LBNL/ASHRAE MOU be reconsidered.

Mr. Olesen moved

- (1) that Excom recommends that the Lawrence Berkeley National Laboratory (LBNL)/ASHRAE Memorandum of Understanding be approved by the Board of Directors.

MOTION 1 PASSED (Unanimous, CNV)

Business Cards for Presidential Members

Mr. Vallort reported that there has been interest expressed by Presidential Members to have an ASHRAE business card. The discussion included the need to include with the title, the year of the presidential term so that it is clear they are not serving as the current president.

Mr. Littleton will contact Presidential Members to inquire if they are interested in receiving ASHRAE business cards.

AI-7

Solar Decathlon

Mr. Olesen reported that this discussion is about support of international solar decathlons and ASHRAE's participation in 2017-2018. He suggested that we attempt the same involvement worldwide that we currently do at the U.S. solar decathlon, where \$20,000 is donated for some specific activities for the event. Mr. Olesen pointed out that part of his presidential theme is a student competition with a proposed \$75,000 in the 2017-2018 budget.

The discussion included the potential for more ASHRAE exposure at the U.S. event, as well as other worldwide event participation.

Mr. Olesen will work with Members Council on future participation in Solar Decathlons and in ways ASHRAE might increase participation. Report is due by the Bangkok meeting.

AI-8

90.2 Status

Mrs. Graef reported that Standard 90.2 now has a timeline for completion of December 31, 2016. Public review of the standard should be in September and they are expecting comments, which will need to be addressed. In addition, some of the non participating members have resigned so it is not so hard to get a quorum at the meetings. They are looking for additional committee members to help respond to the public review comments.

Net Zero Energy Standard

Mrs. Graef reported that since the next AEDG is "Approaching Zero Energy", what are the next steps for ASHRAE? The discussion included referring to Technology Council the issue of Net Zero for their recommended strategies and some mechanisms to put in place that will reflect the vision of the Society.

Mrs. Graef will work with Technology Council to strategize recommendations and mechanisms to achieve Net Zero. Report will be due report by the Bangkok meeting.

AI-9

New Business

Nominating Feedback on Members Council Motion Regarding Term of Service Attachment F

Mr. Underwood reported that attached to the agenda is the requested Nominating Committee feedback to a Members Council motion regarding term of service on the Nominating Committee. This motion may come before the Board of Directors on Wednesday in the Members Council report.

ASHRAE and INIVE Attachment G

Mr. Olesen reported that ASHRAE should become member of the INIVE. This is a network on Ventilation and Energy performance. INIVE collects information and is running several projects like Build UP and AIVC. This will give ASHRAE members access to valuable information.

Mr. Olesen and Mr. Littleton will investigate the cost for membership in INIVE which would include participation by all ASHRAE members

AI-10

Review of Public Policy Issue Briefs Attachment H

Mr. Gullledge moved:

- (2) that the 2016-2017 Public Policy Issue Briefs be approved.
- Building Energy Data: A Critical Response
 - Climate Change and Building Energy Efficiency
 - Commercial Building Energy Use Disclosure
 - Consensus Standards: Expert Solutions to Meet Global Needs
 - Energy Efficiency for Buildings and HVAC&R Equipment
 - Energy Use Metrics and Targets for Commercial Buildings
 - Research and Development Needs to Meet National Goals
 - Science, Technology, Engineering and Mathematics Education

MOTION 2 PASSED (Unanimous, CNV)

Mr. Littleton will distribute the approved Public Policy Issue Briefs to the Board of Directors and Technology Council.

AI-11

AASA Application from Cámara Chilena de Refrigeración y Climatización A.G Attachment I

Mr. Wentz moved:

- (3) that ExCom recommends the approval of the AASA membership application of Cámara Chilena de Refrigeración y Climatización A.G by the Board of Directors.

MOTION 3 PASSED (Unanimous, CNV)

Guidelines for Professional Practice Attachment J

Mr. Underwood reported that there is continuing discussion on who within ASHRAE decides our position on certification programs and licensing. The narrow issue here is about replacing a requirement for registration with a requirement for certification in order to do commissioning

Mr. Chakroun and Mr. Olesen will work with PubEd and GGAC for the appropriate location to place the Guidelines for Professional Practice in the ASHRAE structure.

AI-12

Canadian Energy Efficiency Alliance (CEEA) Membership Attachment K

Mr. Underwood reported that CEEA's Chairman, Martin Luymes has sent a request to ASHRAE to become members of the alliance. Mr. Underwood recommended that ASHRAE not become a member this year.

90.4 TPS Status Update

Mr. Jarnagin reported that SPC 90.4 has been approved for publication. This has been a coordinated effort with 90.1. There is some overlap with 90.1 and is more strict on data centers than 90.4. SPC 90.4 will not be exclusive to data centers but its primary focus is on servers that only require 80 degrees, no lighting and no ventilation. There is some temporary duplication but there may be greater issues to deal with if we don't finalize the approval process.

Alliance to Save Energy

Ms. Hayter reported that the Alliance to Save Energy is encouraging ASHRAE to endorse the energy productivity request, which would double energy productivity by 2025.

ExCom will review the information from ASE (Alliance to Save Energy) and defer to future ExCom meeting.

AI-13

Science and Technology for the Built Environment (STBE) Best Paper of the Year Award

Mr. Gullede moved:

- (4) that ExCom recommends that the ASHRAE Science and Technology for the Built Environment (STBE) Best Journal Paper of the Year be formally recognized and the recipient honored at the Plenary Awards session of the ASHRAE Annual Meeting with approval from the Board of Directors.

MOTION 4 PASSED (Unanimous, CNV)

Membership Concerns Regarding Board Meeting in Bangkok

Mr. Underwood reported that there have been questions about the Board meeting in Bangkok and it appears that there is a lack of appropriate information.

Mr. Littleton will work with the Marketing Department to increase membership awareness and benefits to ASHRAE of the Board meeting in Bangkok.

AI-14

Reports From Other Reporting Bodies

Foundation Trustees Attachment L

Scholarship Trustees Attachment M

Mr. Wentz moved:

- (5) that the following motions from the Scholarship Trustees be presented as a consent motion:
 1. that ExCom recommends to the Board of Directors approval of the following revision to the Rule of the Board by Scholarship Trustees changing the name of the ASHRAE Region I ~~Boggam & Barth~~ Setty Scholarship to the ASHRAE Region I Setty Family Foundation Scholarship.
 2. that ExCom recommends to the Board of Directors approval of the following revision to the Rule of the Board by Scholarship Trustees changing the name of the ASHRAE Region III ~~Boggam & Barth~~ Setty Scholarship to the ASHRAE Region III Setty Family Foundation Scholarship.

MOTION 5 PASSED (Unanimous, CNV)

Mr. Wentz moved:

- (6) that Excom recommends that the following revision to the Rule of the Board by Scholarship Trustees requiring the following criteria for all post High School scholarship applicants effective January 1, 2017 be approved by the Board of Directors.
 - Must be a student member of ASHRAE

MOTION 6 PASSED (5-1-0, CNV)

Life Member’s Club Attachment N

Mr. Vallort moved:

- (7) that ExCom recommends the following revision to the Rule of the Board by the Life Member’s Club changing 2.105 and 2.105.010 be approved by the Board of Directors.

2.105 ORGANIZATIONAL / STAFF

2.105.001 Standing Bodies (10-01-27-01/11-06-26-21C/12-10-26-13)
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<u>Life Members Club (LMC)**</u>	<u>2</u>	<u>Executive Committee</u>
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2.105.010.3 Executive Committee

The affairs of the Club shall be administered by an Executive Committee (LMC - ExCom) consisting of the LMC Chair, LMC Vice Chair, LMC Secretary/Treasurer and not less than four additional LMC members.

MOTION 7 PASSED (Unanimous, CNV)

Information Items

DiscoverE Meeting Report Attachment O

Adjournment

Mr. Underwood thanked everyone for attending. The meeting was adjourned at 9:35 a.m. on Wednesday, June 30, 2016.



Jeff H. Littleton, Secretary

Mdt/2016/07/13

Distribution: Board of Directors
Staff Directors

Attachments:

- A. Report of the President
- B. Report of the Treasurer
- C. bEQ Committee Report
- D. CLIMA 2016 Report
- E. Lawrence Berkeley National Laboratory/ASHRAE MOU
- F. Nominating Feedback on Members Council Motion Regarding Term of Service
- G. International Network for Information on Ventilation and Energy (INIVE)
- H. Public Policy Issue Briefs 2016-2017
- I. AASA Application – Cámara Chilena de Refrigeración y Climatización A.G
- J. Guidelines for Professional Practice
- K. Canadian Energy Efficiency Alliance (CEEA) Membership
- L. Foundation Trustees
- M. Scholarship Trustees
- N. Life Member's Club
- O. DiscoverE Report

**Report of President David Underwood
ASHRAE Travel for July 1, 2015
Through June 30, 2016**

Date	Meeting	Location	Comments
July 9-11	Senior Leaders	Niagara-on-the-Lake ON	
July 22-26	Region IX CRC	Rapid City, SD	
August 5-9	Region IV CRC	Raleigh, NC	
August 12-16	Region X CRC	Los Gatos, CA	
August 25-30	Region XIII	Manila, Philippines	148 students participated
August 25-30	XIV EXPOACAIRE, Colombia Chapter	Medellin, Colombia	
September 18-23	CONBRAVA, Brasil Chapter	Sao Paulo, Brasil	Negotiated with Brasil code body regarding translation of our standards
September 24-26	Chile Chapter	Santiago, Chile	Inaugural meeting with more than 100 participants including architects, contractors and government officials
September 29 - October 5	RAL CRC	Istanbul, Turkey	MOU signed between ISHRAE and Pakistan HVAC&R association
October 6-13	CIBSE/BSRIA/IMechE	London, England	
October 13-16	Washington Leadership Meeting	Washington, DC	
October 19-21	AHR Mexico	Guadalajara, Mexico	
October 22-25	AABC Conference	Los Cabos, Mexico	
November 5-8	ASHRAE Board Meeting	Atlanta, GA	
November 9-13	Space Coast Chapter, Central Florida Chapter, Southwest Florida Chapter, Florida West Coast Chapter	Various Florida locations	
November 17-20	13 th Asia Pacific Conference on the Built Environment	Hong Kong	
November 30 – December 5	46 th International Congress & Exhibition on HVAC&R and Danube Chapter	Belgrade, Serbia	
December 6-9	2 nd Energy Management & Exhibition and Bahrain Chapter	Manama, Bahrain	
December 15-17	SoCal Chapter, Orange Empire Chapter, Tri County Chapter, San Joaquin Chapter	Los Angeles, CA and Sacramento, CA	
January 5-7	Arkansas Chapter, NW Arkansas Section	Little Rock, AR and Fayetteville, AR	
January 12-15	NIBS Conference	Washington, DC	Meetings with DOE, White House staff and the Canadian staff

January 20-28	ASHRAE Winter Conference & AHR Exhibition	Orlando, FL	
February 1-3	Kansas City Chapter, Ozarks Chapter, Wichita Chapter	Kansas City, MO, Springfield, MO, Wichita, KS	
February 8	Manitoba Chapter	Winnepeg, MB	
February 9	Regina Chapter		
February 10	British Columbia Chapter	Vancouver, BC	
February 11	Northern Alberta Chapter	Edmonton, AB	
February 21	India Chapter	Delhi, India	
February 22	Deccan Chapter	Hyderabad, India	
February 23	Bangalore Chapter	Bangalore, India	
February 24	Mumbai Chapter	Mumbai, India	
February 24-26	ACREX	Mumbai, India	
February 26	ISHRAE BoD	Mumbai, India	
February 29-March 2	Bangladesh Chapter	Dhaka, Bangladesh	
March 3-5	Pakistan Chapter	Karachi, Pakistan	
March 12-18	Mostra Covegno & AICARR	Milan, Italy	
March 26	Japan Chapter	Tokyo, Japan	
April 3-5	South Korea Chapter	Seoul, S. Korea	
April 6-9	CR Expo	Beijing, China	
April 11	Toronto Chapter	Toronto, ON	
April 12-17	UNEP	Paris, France	
April 18-21	Alamo, Houston, Austin Chapter	San Antonio, TX Austin, TX Houston, TX	
April 24-27	ASHRAE Leadership Meetings	Washington, DC	
April 28-29	Rocky Mountain Chapter	Denver, CO	
April 30-May 4	ASHRAE Spring ExCom Meeting	Banff, AB CANADA	
May 9	Toronto/Hamilton chapter meeting		
May 10-13	Central NY Chapter, Connecticut Chapter	Syracuse, NY and Hartford CT	CNY 75 th anniversary
May 20-22	REHVA Board meetings	Aalborg, Denmark	
May 23-25	CLIMA 2016	Aalborg Denmark	
May 29-June 6	Hellenic Chapter, Hellenic Navy and Green Transportation seminar	Athens, Greece	
June 13	Toronto chapter annual golf tournament & cycling event		
June 22-29	ASHAE Annual Meeting	St Louis MO	

ASHRAE CONSOLIDATED (excl Foundation)
STATEMENT OF REVENUES & EXPENSES
For the Eleven Months Ending May 31, 2016

in thousands US dollars

MONTH OF MAY			Fiscal YTD Through Month of MAY				TWELVE MONTHS ENDING JUNE 30						DRAFT	DRAFT	DRAFT	
Actual	Actual	Budget	Actual	Budget	Actual	Budget	Actual	Actual	Budget	Actual	Forecast	Budget	Budget	Budget	Budget	
FY 14-15	FY 15-16	FY 15-16	FY 14-15	FY 14-15	FY 15-16	FY 15-16	FY 12-13	FY 13-14	FY 14-15	FY 14-15	FY 15-16	FY 15-16	FY 16-17	FY 17-18	FY 18-19	
							roll up									
							acct / Description									
							REVENUES									
\$626.8	\$643.2	\$652.9	\$6,794.2	\$6,862.6	\$6,989.9	\$7,086.9	31 Membership Dues Earned Income	\$7,221.9	\$7,325.3	\$7,544.6	\$7,430.5	\$7,750.2	\$7,750.2	\$7,985.4	\$8,189.0	\$8,352.8
278.3	285.8	301.5	3,150.6	3,571.8	3,324.9	3,489.9	32 Publication Sales Income	3,323.4	3,803.6	3,896.5	3,483.9	3,773.2	3,585.5	3,924.8	4,201.5	4,278.3
270.9	239.2	239.0	3,446.4	3,593.9	3,555.3	3,475.1	34 Advertising Income - Display	3,856.1	3,773.1	3,897.0	3,710.8	3,785.3	3,761.0	3,846.0	3,918.8	4,017.1
4.8	1.4	3.8	30.6	15.5	17.6	24.0	34 Advertising Income - Classified	19.3	26.5	16.9	32.0	25.0	25.0	25.0	25.0	25.5
61.9	56.4	67.5	534.9	568.3	638.6	576.2	34 Advertising Income - On-line	525.4	470.4	620.0	595.6	695.0	640.0	720.0	768.4	790.2
0.4		20.6	1,095.7	1,118.2	1,020.0	1,100.7	35.1 Meeting & Seminar Income	1,535.2	1,965.7	1,666.3	1,578.5	1,737.5	1,737.5	1,968.5	1,646.5	1,679.4
11.5	12.2	13.7	171.3	146.7	163.9	205.6	35.2 Certification Registration	138.7	148.5	160.0	183.3	180.0	220.0	250.0	300.0	350.0
123.2	252.1	140.5	1,327.6	1,329.5	1,659.2	1,392.6	35.3 Education Registration	1,011.3	1,301.6	1,450.4	1,504.5	1,843.2	1,585.0	2,060.0	2,193.0	2,437.1
			86.6	230.0	3.2		37 Special Project Income	519.3	105.0	240.0	316.6					
279.8	231.5	311.2	1,231.2	1,177.7	1,426.8	1,300.5	38 Contribution Income	1,845.8	1,945.6	2,160.9	2,116.6	2,259.4	2,249.4	2,335.8	2,440.8	2,972.4
			5,146.6	4,857.9	5,168.0	4,757.6	41.1 AHR Exposition Income	3,949.9	3,973.0	4,857.9	5,146.6	5,168.0	4,757.6	5,168.0	5,702.5	4,700.0
10.0	105.0	5.2	115.0	115.0	57.0	64.2	41.2 Contributions and Matching Gifts	70.0	130.0	115.0	115.0	57.0	59.4	140.9	65.2	66.3
			145.9	60.0	34.0	60.0	41.3 Exposition Income - Other Countries	116.3		60.0	145.9	34.0	60.0	84.0		
73.8	54.6	58.3	811.9	813.5	600.7	641.4	44 Reserve Transfers	701.3	1,025.5	887.5	885.7	641.4	641.4	2,269.4	1,539.0	948.4
53.7	2.9	7.9	513.0	379.8	305.0	285.6	46 Miscellaneous Income	286.4	340.7	414.0	534.4	329.9	299.1	352.9	334.5	340.1
1,795.1	1,884.3	1,822.1	24,601.5	24,840.4	24,964.1	24,460.3	TOTAL REVENUES	25,120.3	26,334.5	27,987.0	27,779.9	28,279.1	27,371.1	31,130.7	31,324.2	30,957.6
							EXPENSES:									
993.5	666.9	1,158.2	7,219.2	7,292.0	7,980.0	8,387.1	51 Salary Expense	7,328.8	7,523.6	7,899.7	7,910.9	8,377.9	8,403.1	8,820.1	9,233.5	9,406.5
273.4	199.8	282.4	2,310.4	2,098.7	2,345.3	2,370.0	52 Payroll Taxes, Benefits, Personnel Exp	2,212.2	2,257.7	2,289.5	2,505.0	2,525.1	2,392.2	2,636.0	2,736.4	2,795.4
386.7	319.0	1,101.1	3,052.9	3,470.0	3,235.6	3,591.8	61 Publishing and Promotion Expense	3,641.9	3,569.1	3,785.4	3,776.9	4,009.6	3,777.2	3,935.8	4,070.3	4,080.1
54.5	155.2	126.0	1,653.8	1,602.0	1,710.8	2,124.9	64 Meetings & Conferences Expense	1,789.8	2,293.1	2,205.1	2,199.2	2,392.6	2,279.1	2,736.2	2,398.5	2,376.9
97.3	124.0	133.2	1,660.2	2,201.2	1,544.6	2,201.9	66 Travel Expense	1,743.5	2,265.6	2,398.9	2,076.6	2,138.5	2,321.5	2,515.0	2,629.6	2,563.3
17.5	42.0	20.6	120.8	131.5	160.2	134.9	68 Awards, Certif, Logo Cost of Goods Sold	132.4	119.7	143.4	164.6	149.0	149.2	153.7	159.8	163.0
13.1	(5.1)	114.6	1,967.8	2,576.2	1,841.6	2,545.7	71 Research Projects & Grants Expense	2,462.4	2,649.6	2,898.9	2,469.6	2,621.7	2,678.0	3,921.7	2,905.2	2,639.9
31.7		9.2	72.5	160.0	81.3	100.8	73 Special Projects Expense	466.2	50.0	160.0	72.5	110.0	110.0	162.0	70.0	
	1.5	0.6	46.5	54.9	72.6	60.3	76 Public Relations Expense	70.3	129.1	59.9	51.0	62.3	62.3	64.1	66.7	68.0
49.3	57.6	54.7	506.6	503.9	540.7	567.7	78 Occupancy & Insurance	501.5	563.4	549.8	559.2	580.0	575.9	595.7	619.5	631.9
172.0	160.6	188.5	1,579.5	1,768.2	1,621.5	1,673.0	82 Office Expense and Organizational Dues	1,709.6	1,746.9	1,929.0	1,840.2	1,973.2	1,892.7	2,002.1	2,168.0	2,140.1
137.9	63.7	252.8	1,369.3	1,663.2	1,313.0	1,876.7	84 Outside Services Expense	1,430.1	1,528.0	1,814.3	1,659.7	1,955.4	1,980.0	2,792.0	2,683.4	2,200.8
172.4	124.0	144.5	542.8	462.2	657.0	541.0	88 Other Expense	529.8	542.9	530.2	530.8	675.8	555.6	685.5	699.9	715.5
(8.3)	(106.2)		(78.5)	(59.5)	(636.0)		88.1 Prepaid Expense (contra acct)		(18.3)	(64.9)	33.8	(540.0)		(475.0)	(475.0)	(475.0)
		8.3	35.5	100.0		91.7	89 Opportunity Fund		35.0	100.0	35.5		100.0	240.0	240.0	100.0
47.6	44.8	51.1	556.5	563.0	527.6	543.5	90 Depreciation Expense	695.6	660.9	614.2	631.9	543.5	543.5	618.9	720.7	821.6
		8.8					91 Allocation of Overhead & BOD								(0.1)	(0.1)
2,438.6	1,847.8	3,654.6	22,615.8	24,587.5	22,995.8	26,811.0	TOTAL EXPENSES	24,714.1	25,916.3	27,313.4	26,517.4	27,574.6	27,820.3	31,403.8	30,926.4	30,227.9
(643.5)	36.5	(1,832.5)	1,985.7	252.9	1,968.3	(2,350.7)	SURPLUS (DEFICIT) before reserve income	406.2	418.2	673.6	1,262.5	704.5	(449.2)	(273.1)	397.8	729.7
							91.5 Headquarters Building Renewal Contributions		0.3							
(7.8)	1.8		153.9	275.0	509.2	483.6	91.7 Gain on Merger			153.9						
			466.5				92 Non-recurring Expenses	1,244.8	488.9	300.0	670.7	590.0	590.0	350.0		
							Reserve Investment Income:									
84.9	91.0	67.5	468.2	980.6	(187.3)	871.7	95 Investmt Income - Reserves (net of exp)	1,977.1	2,721.8	1,069.7	222.5	(59.9)	923.0	798.3	847.8	869.5
(73.8)	(54.6)	(58.3)	(811.9)	(676.0)	(600.7)	(641.4)	96 Transfer Reserves Portion Used Currently	(701.3)	(1,025.5)	(737.5)	(885.7)	(641.4)	(641.4)	(2,269.4)	(1,539.0)	(948.4)
11.1	36.4	9.2	(343.7)	304.6	(788.0)	230.3	Remaining Reserve Investment Income	1,275.8	1,696.3	332.2	(663.2)	(701.3)	281.6	(1,471.1)	(691.2)	(78.9)
(624.6)	71.1	(1,823.3)	1,329.4	282.5	671.1	(2,604.0)	OVERALL SURPLUS (DEFICIT) after reserve income	437.2	1,625.9	705.8	82.5	(586.8)	(757.6)	(2,094.2)	(293.4)	650.8

GENERAL (Fund 2)
STATEMENT OF REVENUES & EXPENSES
For the Eleven Months Ending May 31, 2016

in thousands US dollars

MONTH OF MAY			Fiscal YTD Through Month of MAY				TWELVE MONTHS ENDING JUNE 30						DRAFT	DRAFT	DRAFT	
Actual	Actual	Budget	Actual	Budget	Actual	Budget	Actual	Actual	Budget	Actual	Forecast	Budget	Budget	Budget	Budget	
FY 14-15	FY 15-16	FY 15-16	FY 14-15	FY 14-15	FY 15-16	FY 15-16	roll up	FY 12-13	FY 13-14	FY 14-15	FY 15-16	FY 15-16	FY 16-17	FY 17-18	FY 18-19	
							acct / Description									
REVENUES																
\$614.2	\$630.4	\$638.6	\$6,658.2	\$6,719.1	\$6,850.1	\$6,932.4	31	\$7,077.4	\$7,178.7	\$7,388.0	\$7,281.8	\$7,595.7	\$7,595.7	\$7,828.6	\$8,026.3	\$8,186.8
278.3	285.8	301.5	3,150.6	3,571.8	3,324.9	3,489.9	32	3,323.4	3,803.6	3,896.5	3,483.9	3,773.2	3,585.5	3,924.8	4,201.5	4,278.3
270.9	239.2	239.0	3,446.4	3,593.9	3,555.3	3,475.1	34	3,856.1	3,773.1	3,897.0	3,710.8	3,785.3	3,761.0	3,846.0	3,918.8	4,017.1
4.8	1.4	3.8	30.6	15.5	17.6	24.0	34	19.3	26.5	16.9	32.0	25.0	25.0	25.0	25.0	25.5
61.9	56.4	67.5	534.9	568.3	638.6	576.2	34	525.4	470.4	620.0	595.6	695.0	640.0	720.0	768.4	790.2
0.4		20.6	1,095.7	1,118.2	1,020.0	1,100.7	35.1	1,535.2	1,965.7	1,666.3	1,578.5	1,737.5	1,737.5	1,968.5	1,646.5	1,679.4
11.5	12.2	13.7	171.3	146.7	163.9	205.6	35.2	138.7	148.5	160.0	183.3	180.0	220.0	250.0	300.0	350.0
123.2	252.1	140.5	1,327.6	1,329.5	1,659.2	1,392.6	35.3	1,011.3	1,301.6	1,450.4	1,504.5	1,843.2	1,585.0	2,060.0	2,193.0	2,437.1
			86.6	230.0	3.2		37	60.9	50.0	240.0	316.6					
5.4	4.9	7.5	37.0	36.2	90.6	24.6	38	31.3	47.2	39.5	72.7	30.4	41.0	42.3	525.9	
			5,146.6	4,857.9	5,168.0	4,757.6	41.1	3,949.9	3,973.0	4,857.9	5,146.6	5,168.0	4,757.6	5,168.0	5,702.5	4,700.0
10.0	105.0	5.2	(1,699.5)	(1,699.5)	(1,841.4)	(1,834.2)	41.2	(1,940.9)	(1,859.2)	(1,699.5)	(1,699.5)	(1,841.4)	(1,839.0)	(1,859.3)	(2,153.8)	(1,762.6)
			145.9	60.0	34.0	60.0	41.3	116.3		60.0	145.9	34.0	60.0	84.0		
26.2	33.2	36.2	288.3	288.3	365.2	398.4	44	510.9	489.2	314.5	314.5	398.4	398.4	861.4	1,329.0	733.4
53.7	2.9	7.6	513.0	376.9	304.9	282.6	46	286.4	341.9	410.9	534.4	326.6	295.9	349.5	331.0	336.5
1,460.5	1,623.5	1,481.7	20,933.2	21,212.8	21,354.1	20,885.5	TOTAL REVENUES	20,501.6	21,710.2	23,318.4	23,201.6	23,760.9	22,853.0	25,267.5	26,330.5	26,297.6
EXPENSES:																
929.9	624.1	1,086.5	6,712.0	6,788.0	7,456.8	7,816.3	51	6,814.3	6,988.0	7,353.7	7,357.2	7,807.1	7,832.3	8,232.2	8,622.0	8,782.8
257.4	187.0	265.7	2,164.9	1,957.6	2,194.8	2,219.3	52	2,070.3	2,105.2	2,136.6	2,344.1	2,365.4	2,241.5	2,467.2	2,565.2	2,620.8
385.0	315.2	1,092.4	3,036.7	3,376.2	3,194.4	3,498.0	61	3,596.3	3,524.7	3,683.1	3,757.5	3,981.3	3,673.9	3,831.6	3,965.0	4,049.2
54.5	155.2	125.5	1,635.1	1,589.2	1,684.9	2,108.4	64	1,778.3	2,286.6	2,189.6	2,178.5	2,375.7	2,262.2	2,718.8	2,380.4	2,358.5
96.8	120.2	132.3	1,564.6	2,077.3	1,474.1	2,079.7	66	1,634.3	2,138.0	2,263.8	1,954.6	2,008.4	2,190.1	2,382.7	2,492.4	2,423.3
17.5	22.0	20.6	75.5	102.7	93.1	102.5	68	99.4	86.9	112.0	98.9	116.4	116.5	120.0	124.8	127.3
	7.3		102.4	122.6	121.7	129.4	71	106.3	106.5	122.6	100.9	127.5	127.5	131.3	136.6	139.3
31.7		9.2	72.5	160.0	81.3	100.8	73	7.8	50.0	160.0	72.5	110.0	110.0	162.0	70.0	
	1.5	0.6	46.5	54.7	72.6	60.0	76	70.3	129.1	59.7	51.0	62.0	62.0	63.9	66.5	67.8
49.3	57.6	54.7	506.6	503.9	540.7	567.7	78	501.5	563.4	549.8	559.2	580.0	575.9	595.7	619.5	631.9
169.1	155.4	185.5	1,533.1	1,717.8	1,579.0	1,620.1	82	1,668.6	1,704.0	1,873.9	1,788.1	1,917.7	1,835.4	1,943.1	2,106.6	2,077.6
133.1	63.7	252.8	1,364.1	1,663.2	1,312.8	1,876.7	84	1,430.1	1,528.0	1,814.3	1,654.6	1,955.4	1,980.0	2,792.0	2,683.4	2,200.8
163.5	116.4	126.0	512.9	405.5	620.1	476.9	88	493.0	496.8	468.4	487.8	613.5	491.4	619.3	631.0	645.3
(8.3)	(106.2)		(78.5)	(59.5)	(636.0)		88.1		(18.3)	(64.9)	33.8	(540.0)		(475.0)	(475.0)	(475.0)
		8.3	35.5	100.0		91.7	89		35.0	100.0	35.5		100.0	240.0	240.0	100.0
47.6	44.8	51.1	556.5	563.0	527.6	543.5	90	695.6	660.9	614.2	631.9	543.5	543.5	618.9	720.7	821.6
(81.1)	(54.0)	(84.8)	(727.5)	(726.0)	(672.9)	(840.0)	91	(649.4)	(730.0)	(792.0)	(808.5)	(763.6)	(840.0)	(903.2)	(1,016.2)	(1,003.0)
2,246.0	1,710.2	3,326.4	19,112.9	20,396.2	19,645.0	22,451.0	TOTAL EXPENSES	20,316.7	21,654.8	22,644.8	22,297.6	23,260.3	23,302.2	25,540.5	25,932.9	25,568.2
(785.5)	(86.7)	(1,844.7)	1,820.3	816.6	1,709.1	(1,565.5)	SURPLUS (DEFICIT) before reserve income	184.9	55.4	673.6	904.0	500.6	(449.2)	(273.0)	397.6	729.4
(7.8)	1.8		466.5	275.0	509.2	483.6	91.5		0.3							
							92	1,244.8	488.9	300.0	670.7	590.0	590.0	350.0		
							Reserve Investment Income:									
55.4	65.2	42.9	308.5	659.1	(117.4)	572.9	95	1,277.1	1,778.1	719.0	146.5	(32.9)	603.0	566.1	614.7	634.0
(26.2)	(33.2)	(36.2)	(288.3)	(474.9)	(365.2)	(398.4)	96	(510.9)	(489.2)	(518.1)	(314.5)	(398.4)	(398.4)	(861.4)	(1,329.0)	(733.4)
29.2	32.0	6.7	20.2	184.2	(482.6)	174.5	Remaining Reserve Investment Income	766.2	1,288.9	200.9	(168.0)	(431.3)	204.6	(295.3)	(714.3)	(99.4)
(748.5)	(56.5)	(1,838.0)	1,374.0	725.8	717.3	(1,874.6)	OVERALL SURPLUS (DEFICIT) after reserve income	(293.7)	855.7	574.5	65.3	(520.7)	(834.6)	(918.3)	(316.7)	630.0

**RESEARCH (funds 3 & 4)
STATEMENT OF REVENUES & EXPENSES
For the Eleven Months Ending May 31, 2016**

in thousands US dollars

MONTH OF MAY			Fiscal YTD Through Month of MAY				TWELVE MONTHS ENDING JUNE 30						DRAFT	DRAFT	DRAFT	
Actual FY 14-15	Actual FY 15-16	Budget FY 15-16	Actual FY 14-15	Budget FY 14-15	Actual FY 15-16	Budget FY 15-16	roll up acct / Description	Actual FY 12-13	Actual FY 13-14	Budget FY 14-15	Actual FY 14-15	Forecast FY 15-16	Budget FY 15-16	Budget FY 16-17	Budget FY 17-18	Budget FY 18-19
\$12.6	\$12.9	\$14.3	\$136.0	\$143.5	\$139.8	\$154.5	REVENUES									
							31 Membership Dues Earned Income	\$144.4	\$146.6	\$156.6	\$148.7	\$154.5	\$154.5	\$156.8	\$162.7	\$166.0
271.6	225.0	303.7	1,152.3	1,141.5	1,272.6	1,276.0	37 Special Project Income	458.4	55.0							
			1,814.5	1,814.5	1,898.4	1,898.4	38 Contribution Income	1,814.5	1,898.4	2,121.4	2,000.2	2,219.0	2,219.0	2,294.8	2,398.5	2,446.4
47.6	21.4	22.1	523.6	525.3	235.5	243.0	41.2 Contributions and Matching Gifts	2,010.9	1,989.2	1,814.5	1,814.5	1,898.4	1,898.4	2,000.2	2,219.0	1,828.9
		0.3		2.9		3.0	44 Reserve Transfers	190.4	536.3	573.0	571.2	243.0	243.0	1,408.0	210.0	215.0
							46 Miscellaneous Income		(1.1)	3.2		3.3	3.3	3.4	3.5	3.6
331.8	259.3	340.4	3,626.4	3,627.7	3,546.3	3,574.9	TOTAL REVENUES	4,618.6	4,624.4	4,668.7	4,534.6	4,518.2	4,518.2	5,863.2	4,993.7	4,659.9
							EXPENSES:									
63.6	42.7	71.7	506.2	504.0	523.2	570.8	51 Salary Expense	514.5	535.7	546.0	553.8	570.8	570.8	587.9	611.5	623.7
16.0	12.8	16.6	145.2	141.1	150.4	150.7	52 Payroll Taxes, Benefits, Personnel Exp	142.0	152.4	152.9	160.9	159.7	150.7	168.8	171.2	174.6
1.6	3.9	8.7	16.1	93.8	41.1	93.8	61 Publishing and Promotion Expense	45.6	44.4	102.3	19.4	28.3	103.4	104.2	105.4	31.0
		0.5	18.7	12.8	26.0	16.4	64 Meetings & Conferences Expense	11.5	6.5	15.5	20.7	16.9	16.9	17.4	18.1	18.4
0.4	3.8	0.9	94.6	123.9	68.6	122.2	66 Travel Expense	109.2	127.6	135.2	119.1	130.2	131.4	132.3	137.2	139.9
			35.3	28.8	37.1	32.4	68 Awards, Certif, Logo Cost of Goods Sold	33.0	32.7	31.4	35.6	32.7	32.7	33.6	35.0	35.7
13.1	(12.4)	114.6	1,865.4	2,453.6	1,719.9	2,416.3	71 Research Projects & Grants Expense	2,356.1	2,543.0	2,776.3	2,368.7	2,494.2	2,550.5	3,790.4	2,768.7	2,500.6
				0.2		0.2	73 Special Projects Expense	458.4								
2.9	5.2	3.0	46.4	50.5	40.5	52.9	76 Public Relations Expense			0.2		0.2	0.2	0.2	0.3	0.3
4.8			4.8				82 Office Expense and Organizational Dues	41.0	42.9	55.1	52.1	55.6	57.3	59.0	61.3	62.6
8.8	7.5	18.5	29.8	56.7	36.9	64.1	84 Outside Services Expense				4.8					
81.1	54.0	93.6	727.5	726.0	672.9	840.0	88 Other Expense	36.8	46.1	61.8	43.0	62.3	64.3	66.2	68.9	70.2
							91 Allocation of Overhead & BOD	649.4	730.0	792.0	808.5	763.6	840.0	903.2	1,016.1	1,002.9
192.3	117.5	328.1	3,490.0	4,191.4	3,316.6	4,359.8	TOTAL EXPENSES	4,397.5	4,261.3	4,668.7	4,186.6	4,314.5	4,518.2	5,863.2	4,993.7	4,659.9
139.5	141.8	12.3	136.4	(563.7)	229.7	(784.9)	SURPLUS (DEFICIT) before reserve income	221.1	363.1	348.0	203.7					
							Reserve Investment Income:									
29.6	25.5	24.6	160.6	321.5	(69.4)	298.9	95 Investmt Income - Reserves (net of exp)	700.0	943.7	350.8	75.2	(27.0)	320.0	232.2	233.1	235.5
(47.6)	(21.4)	(22.1)	(523.6)	(201.1)	(235.5)	(243.0)	96 Transfer Reserves Portion Used Currently	(190.4)	(536.3)	(219.4)	(571.2)	(243.0)	(243.0)	(1,408.0)	(210.0)	(215.0)
(18.0)	4.1	2.5	(363.0)	120.4	(304.9)	55.9	Remaining Reserve Investment Income	509.6	407.4	131.4	(496.0)	(270.0)	77.0	(1,175.8)	23.1	20.5
121.5	145.9	14.8	(226.6)	(443.3)	(75.2)	(729.0)	OVERALL SURPLUS (DEFICIT) after reserve income	730.7	770.5	131.4	(148.0)	(66.3)	77.0	(1,175.8)	23.1	20.5

**BOARD OF DIRECTORS 2-5nn
STATEMENT OF REVENUES & EXPENSES
For the Eleven Months Ending May 31, 2016**

in thousands US dollars

MONTH OF MAY			Fiscal YTD Through Month of MAY				TWELVE MONTHS ENDING JUNE 30						DRAFT	DRAFT	DRAFT	
Actual FY 14-15	Actual FY 15-16	Budget FY 15-16	Actual FY 14-15	Budget FY 14-15	Actual FY 15-16	Budget FY 15-16	roll up acct / Description	Actual FY 12-13	Actual FY 13-14	Budget FY 14-15	Actual FY 14-15	Forecast FY 15-16	Budget FY 15-16	Budget FY 16-17	Budget FY 17-18	Budget FY 18-19
\$1.2		\$0.4 (4.8)	\$12.4	\$7.3		\$4.2 (53.2)	REVENUES									
					(58.0)		38 Contribution Income	\$14.9	\$4.5	\$8.0	\$23.5	\$8.0	\$8.0	\$8.0	\$8.3	\$491.5
							41.2 Contributions and Matching Gifts					(58.0)	(58.0)	22.0	(58.0)	(59.2)
26.0			247.0	36.7	0.3		44 Reserve Transfers							240.0	610.0	
							46 Miscellaneous Income	3.0	2.5	40.0	273.0			5.0	5.2	5.3
27.2		(4.4)	259.4	44.0	(57.7)	(49.0)	TOTAL REVENUES	17.9	7.0	48.0	296.5	(50.0)	(50.0)	275.0	565.5	437.6
							EXPENSES:									
113.5	86.2	114.9	941.4	801.8	1,076.2	1,023.7	51 Salary Expense	771.5	735.7	868.6	1,032.7	1,039.3	1,039.3	1,173.0	1,297.3	1,311.5
28.6	25.8	27.1	269.1	224.5	307.7	270.3	52 Payroll Taxes, Benefits, Personnel Exp	224.1	214.4	243.2	287.0	286.7	274.4	324.4	350.9	360.2
3.7	1.4	28.7	9.0	89.4	31.4	101.7	61 Publishing and Promotion Expense	32.8	69.4	97.5	10.0	66.8	107.3	141.7	222.2	217.4
1.3	8.6	3.6	53.3	35.4	73.7	61.2	64 Meetings & Conferences Expense	39.0	71.0	58.8	64.0	61.6	61.6	70.7	109.6	86.0
52.7	54.4	83.1	723.0	897.0	707.4	1,000.3	66 Travel Expense	650.8	1,017.9	978.6	887.9	893.5	1,036.8	1,067.6	1,136.6	1,090.4
3.4	2.9	1.5	11.1	3.2	9.8	3.2	68 Awards, Certif, Logo Cost of Goods Sold	9.2	9.1	3.5	14.9	3.7	3.7	3.8	3.9	4.0
	7.3		7.2	7.5	7.3	7.8	71 Research Projects & Grants Expense	7.0	7.1	7.5	7.2	7.8	7.8	8.1	8.4	8.6
							76 Public Relations Expense									
1.1	1.9	1.2	55.3	32.2	26.4	44.1	82 Office Expense and Organizational Dues	42.2	42.6	35.1	60.5	44.8	44.8	57.4	64.9	65.8
10.9	2.1	20.2	161.2	125.5	52.1	184.9	84 Outside Services Expense	92.4	69.2	136.9	204.6	117.0	191.6	578.7	458.3	193.8
	0.4	0.9	1.2	2.4	7.0	9.7	88 Other Expense	5.3	0.5	2.5	1.9	10.6	10.6	22.6	31.6	25.6
	(42.5)				(498.7)		88.1 Prepaid Expense (contra acct)					(540.0)		(475.0)	(475.0)	(475.0)
		8.3	35.5	100.0		91.7	89 Opportunity Fund		35.0	100.0	35.5		100.0	100.0	100.0	100.0
			3.2	2.8	0.2		90 Depreciation Expense	4.1	4.1	3.1	3.2					
(217.6)	(148.4)	(275.8)	(2,270.3)	(2,324.0)	(1,800.3)	(2,877.9)	91 Allocation of Overhead & BOD	(1,878.5)	(2,277.4)	(2,535.3)	(2,584.6)	(1,991.8)	(2,877.9)	(3,073.0)	(3,308.7)	(2,988.3)
(2.4)	0.1	13.7	0.2	(2.3)	0.2	(79.3)	TOTAL EXPENSES	(0.1)	(0.2)	24.9						
29.6	(0.1)	(18.1)	259.2	46.3	(57.9)	30.3	SURPLUS (DEFICIT) before reserve income	18.0	7.2	48.0	271.6	(50.0)	(50.0)	275.0	565.5	437.6
							Reserve Investment Income:									
							96 Transfer Reserves Portion Used Currently							(240.0)	(610.0)	
							Remaining Reserve Investment Income							(240.0)	(610.0)	
29.6	(0.1)	(18.1)	259.2	46.3	(57.9)	30.3	OVERALL SURPLUS (DEFICIT) after reserve income	18.0	7.2	48.0	271.6	(50.0)	(50.0)	35.0	(44.5)	437.6

OVERHEAD 2-9nn
STATEMENT OF REVENUES & EXPENSES
For the Eleven Months Ending May 31, 2016

in thousands US dollars

MONTH OF MAY			Fiscal YTD Through Month of MAY				TWELVE MONTHS ENDING JUNE 30						DRAFT	DRAFT	DRAFT	
Actual	Actual	Budget	Actual	Budget	Actual	Budget	Actual	Actual	Budget	Actual	Forecast	Budget	Budget	Budget	Budget	
FY 14-15	FY 15-16	FY 15-16	FY 14-15	FY 14-15	FY 15-16	FY 15-16	roll up	FY 12-13	FY 13-14	FY 14-15	FY 15-16	FY 15-16	FY 16-17	FY 17-18	FY 18-19	
							acct / Description									
							REVENUES									
			\$5,146.6	\$4,857.9	\$5,168.0	\$4,757.6	41.1 AHR Exposition Income	\$3,949.9	\$3,973.0	\$4,857.9	\$5,146.6	\$5,168.0	\$4,757.6	\$5,168.0	\$5,702.5	\$4,700.0
			(1,814.5)	(1,814.5)	(1,898.4)	(1,898.4)	41.2 Contributions and Matching Gifts	(2,010.9)	(1,989.2)	(1,814.5)	(1,814.5)	(1,898.4)	(1,898.4)	(2,000.2)	(2,219.0)	(1,828.9)
			145.9	60.0	34.0	60.0	41.3 Exposition Income - Other Countries	116.3		60.0	145.9	34.0	60.0	84.0		
26.2	33.2	36.2	288.3	288.3	365.2	398.4	44 Reserve Transfers	510.9	489.2	314.5	314.5	398.4	398.4	621.4	719.0	733.4
(7.2)	(9.8)	4.7	(32.7)	53.7	13.5	31.0	46 Miscellaneous Income	17.0	24.0	58.6	(47.2)	31.7	31.7	32.0	33.2	33.9
19.0	23.4	40.9	3,733.6	3,445.4	3,682.3	3,348.6	TOTAL REVENUES	2,583.2	2,497.0	3,476.5	3,745.3	3,733.7	3,349.3	3,905.2	4,235.7	3,638.4
							EXPENSES:									
294.1	167.8	361.8	1,700.4	1,835.7	1,952.8	2,062.2	51 Salary Expense	1,693.5	1,784.0	1,988.6	1,862.3	2,144.7	2,062.2	2,201.3	2,287.1	2,332.9
84.1	50.3	94.7	641.3	532.3	587.5	659.7	52 Payroll Taxes, Benefits, Personnel Exp	513.4	534.2	592.2	715.2	702.5	669.0	677.5	755.7	770.8
0.8	3.9	0.9	5.3	34.3	22.3	4.4	61 Publishing and Promotion Expense	8.2	5.1	37.5	21.8	41.8	26.8	64.6	64.8	64.9
0.4	0.2	0.8	7.4	11.8	13.2	14.7	64 Meetings & Conferences Expense	19.6	7.8	12.8	10.7	13.3	13.3	13.7	14.2	14.5
7.2	8.1	7.8	80.6	76.7	94.1	85.1	66 Travel Expense	95.1	92.4	83.6	87.0	87.0	87.0	89.6	93.2	95.0
	1.5	0.4	46.5	52.6	72.6	57.8	76 Public Relations Expense	61.8	127.9	57.3	50.9	59.6	59.6	61.4	63.9	65.2
46.7	50.4	51.5	473.0	468.6	502.6	524.5	78 Occupancy & Insurance	464.8	527.1	511.2	523.2	535.8	535.8	554.4	576.6	588.1
20.0	18.5	21.7	339.2	310.5	321.2	344.7	82 Office Expense and Organizational Dues	310.9	328.2	338.7	374.5	352.4	352.4	368.2	385.7	395.2
26.5	20.4	23.1	451.0	492.5	400.9	492.8	84 Outside Services Expense	429.4	478.7	537.3	454.8	511.0	502.0	548.3	571.1	583.3
4.7	7.7	4.8	76.3	63.5	95.4	67.5	88 Other Expense	60.7	93.5	69.3	83.7	108.6	72.1	109.7	116.3	122.1
45.4	44.8	51.1	482.9	504.6	508.2	543.5	90 Depreciation Expense	603.5	568.8	550.5	556.0	543.5	543.5	618.9	720.7	821.6
(529.3)	(373.6)	(605.6)	(4,303.9)	(4,380.8)	(4,570.7)	(4,923.7)	91 Allocation of Overhead & BOD	(4,261.0)	(4,547.6)	(4,779.0)	(4,740.0)	(5,100.2)	(4,923.7)	(5,307.6)	(5,649.3)	(5,853.6)
0.6		13.0		2.3	0.1	(66.8)	TOTAL EXPENSES	(0.1)	0.1	0.1						
18.4	23.4	27.9	3,733.6	3,443.1	3,682.2	3,415.4	SURPLUS (DEFICIT) before reserve income	2,583.3	2,496.9	3,476.5	3,745.2	3,733.7	3,349.3	3,905.2	4,235.7	3,638.4
(7.8)	1.4		24.9		189.7		91.5 Headquarters Building Renewal Contributions		0.3							
							92 Non-recurring Expenses	86.0	14.0	192.4	90.0	90.0				
							Reserve Investment Income:									
55.4	65.2	42.9	308.5	659.1	(117.4)	572.9	95 Investmt Income - Reserves (net of exp)	1,277.1	1,778.1	719.0	146.5	(32.9)	603.0	566.1	614.7	634.0
(26.2)	(33.2)	(36.2)	(288.3)	(474.9)	(365.2)	(398.4)	96 Transfer Reserves Portion Used Currently	(510.9)	(489.2)	(518.1)	(314.5)	(398.4)	(398.4)	(621.4)	(719.0)	(733.4)
29.2	32.0	6.7	20.2	184.2	(482.6)	174.5	Remaining Reserve Investment Income	766.2	1,288.9	200.9	(168.0)	(431.3)	204.6	(55.3)	(104.3)	(99.4)
55.4	54.0	34.6	3,728.9	3,627.3	3,009.9	3,589.9	OVERALL SURPLUS (DEFICIT) after reserve income	3,263.5	3,772.1	3,677.4	3,384.8	3,212.4	3,463.9	3,849.9	4,131.4	3,539.0

PUBLISHING & EDUCATION COUNCIL (2-4nn & 5-5nn)
STATEMENT OF REVENUES & EXPENSES
For the Eleven Months Ending May 31, 2016

in thousands US dollars

MONTH OF MAY			Fiscal YTD Through Month of MAY				TWELVE MONTHS ENDING JUNE 30						DRAFT	DRAFT	DRAFT	
Actual	Actual	Budget	Actual	Budget	Actual	Budget	Actual	Actual	Budget	Actual	Forecast	Budget	Budget	Budget	Budget	
FY 14-15	FY 15-16	FY 15-16	FY 14-15	FY 14-15	FY 15-16	FY 15-16	FY 12-13	FY 13-14	FY 14-15	FY 14-15	FY 15-16	FY 15-16	FY 16-17	FY 17-18	FY 18-19	
							roll up									
							acct / Description									
							REVENUES									
\$278.3	\$285.8	\$301.5	\$3,150.6	\$3,571.8	\$3,324.9	\$3,489.9	32 Publication Sales Income	\$3,323.4	\$3,803.6	\$3,896.5	\$3,483.9	\$3,773.2	\$3,585.5	\$3,924.8	\$4,201.5	\$4,278.3
270.9	239.2	239.0	3,446.4	3,593.9	3,555.3	3,475.1	34 Advertising Income - Display	3,856.1	3,773.1	3,897.0	3,710.8	3,785.3	3,761.0	3,846.0	3,918.8	4,017.1
4.8	1.4	3.8	30.6	15.5	17.6	24.0	34 Advertising Income - Classified	19.3	26.5	16.9	32.0	25.0	25.0	25.0	25.0	25.5
61.9	56.4	67.5	534.9	568.3	638.6	576.2	34 Advertising Income - On-line	525.4	470.4	620.0	595.6	695.0	640.0	720.0	768.4	790.2
11.5	12.2	13.7	171.3	146.7	163.9	205.6	35.2 Certification Registration	138.7	148.5	160.0	183.3	180.0	220.0	250.0	300.0	350.0
123.2	252.1	140.5	1,327.6	1,329.5	1,659.2	1,392.6	35.3 Education Registration	1,011.3	1,301.6	1,450.4	1,504.5	1,843.2	1,585.0	2,060.0	2,193.0	2,437.1
				230.0			37 Special Project Income		45.0	230.0	230.0					
4.2	1.3	7.1	8.7	12.3	10.1	11.9	38 Contribution Income	15.8	17.0	13.4	10.8	13.9	13.9	14.3	14.9	15.2
	95.0		95.0	95.0	95.0	97.0	41.2 Contributions and Matching Gifts	50.0	110.0	95.0	95.0	95.0	97.0	98.6	102.5	104.6
31.7	8.4	(6.6)	138.7	199.9	163.9	148.1	46 Miscellaneous Income	185.9	195.3	218.1	143.1	186.0	155.2	186.8	192.9	195.6
786.5	951.8	766.5	8,903.8	9,762.9	9,628.5	9,420.4	TOTAL REVENUES	9,125.9	9,891.0	10,597.3	9,989.0	10,596.6	10,082.6	11,125.5	11,717.0	12,213.6
							EXPENSES:									
263.8	183.2	308.4	2,024.9	2,120.5	2,197.0	2,364.0	51 Salary Expense	2,157.9	2,232.8	2,297.2	2,218.4	2,348.7	2,364.0	2,434.9	2,532.3	2,583.0
79.5	54.9	74.1	664.0	632.3	666.5	664.6	52 Payroll Taxes, Benefits, Personnel Exp	673.8	717.3	685.3	706.0	713.9	673.2	756.0	765.0	782.3
283.5	276.6	948.0	2,656.6	2,857.9	2,778.6	3,016.9	61 Publishing and Promotion Expense	3,229.1	3,105.4	3,117.8	3,302.7	3,446.8	3,133.0	3,258.1	3,296.3	3,374.8
28.5	71.5	39.9	342.1	319.3	458.4	372.1	64 Meetings & Conferences Expense	320.1	354.7	349.3	451.6	551.7	426.8	560.0	565.2	594.5
5.0	7.3	4.1	115.5	196.7	89.2	165.8	66 Travel Expense	170.6	196.9	214.6	178.4	188.1	187.1	205.7	231.7	235.7
0.3		0.2	0.8	2.2	(0.3)	2.3	68 Awards, Certif, Logo Cost of Goods Sold	1.3	0.8	2.4	1.0	2.5	2.5	2.6	2.7	2.7
							76 Public Relations Expense		8.5							
2.7	7.2	3.2	33.6	35.3	38.1	43.2	78 Occupancy & Insurance	36.7	36.3	38.5	36.1	44.3	40.1	41.3	42.9	43.8
130.0	142.2	137.8	786.4	908.2	840.5	805.1	82 Office Expense and Organizational Dues	909.3	894.2	990.7	963.5	1,052.8	969.4	1,027.5	1,069.4	1,096.1
59.6	35.7	162.6	601.2	831.0	670.6	976.5	84 Outside Services Expense	718.0	744.5	906.6	817.2	1,094.5	1,054.3	1,281.3	1,251.4	1,171.2
139.7	86.9	98.9	173.4	126.6	275.6	156.2	88 Other Expense	122.6	143.7	138.1	108.1	228.1	162.5	163.6	165.3	173.2
			45.8	37.2			90 Depreciation Expense	61.0	61.0	40.6	45.8					
336.3	231.7	403.2	2,906.3	3,054.5	2,829.1	3,478.9	91 Allocation of Overhead & BOD	2,722.7	3,048.4	3,332.1	3,237.1	3,162.5	3,478.9	3,744.9	4,145.4	4,091.7
1,328.9	1,097.2	2,180.4	10,350.6	11,121.7	10,843.3	12,045.6	TOTAL EXPENSES	11,131.6	11,536.0	12,113.2	12,065.9	12,833.9	12,491.8	13,475.9	14,067.6	14,149.0
(542.4)	(145.4)	(1,413.9)	(1,446.8)	(1,358.8)	(1,214.8)	(2,625.2)	SURPLUS (DEFICIT) before reserve income	(2,005.7)	(1,645.0)	(1,515.9)	(2,076.9)	(2,237.3)	(2,409.2)	(2,350.4)	(2,350.6)	(1,935.4)
(542.4)	(145.4)	(1,413.9)	(1,446.8)	(1,358.8)	(1,214.8)	(2,625.2)	OVERALL SURPLUS (DEFICIT) after reserve income	(2,005.7)	(1,645.0)	(1,515.9)	(2,076.9)	(2,237.3)	(2,409.2)	(2,350.4)	(2,350.6)	(1,935.4)

GENERAL (Fund 2)
STATEMENT OF REVENUES & EXPENSES
MAJOR VARIATIONS
For the Eleven Months Ending May 31, 2016

in thousands US dollars

MONTH OF MAY		Fiscal YTD Through Month of MAY				TWELVE MONTHS ENDING JUNE 30						Variance	Comments							
Actual FY 14-15	Actual FY 15-16	Budget FY 15-16	Actual FY 14-15	Budget FY 14-15	Actual FY 15-16	Budget FY 15-16	Actual FY 12-13	Actual FY 13-14	Budget FY 14-15	Actual FY 14-15	Forecast FY 15-16	Budget FY 15-16		Budget vs. Forecast 15-16						
roll up																				
acct / Description																				
\$614.2	\$630.4	\$638.6	\$6,658.2	\$6,719.1	\$6,850.1	\$6,932.4														
REVENUES																				
278.3	285.8	301.5	3,150.6	3,571.8	3,324.9	3,489.9	31	Membership Dues Earned Income	\$7,077.4	\$7,178.7	\$7,388.0	\$7,281.8	\$7,595.7	\$7,595.7	\$ -					
270.9	239.2	239.0	3,446.4	3,593.9	3,555.3	3,475.1	32	Publication Sales Income	3,323.4	3,803.6	3,896.5	3,483.9	3,773.2	3,585.5	\$ 187.7	New Titles; Strong standards sales (188 in particular); Increased digital demand				
4.8	1.4	3.8	30.6	15.5	17.6	24.0	34	Advertising Income - Display	3,856.1	3,773.1	3,897.0	3,710.8	3,785.3	3,761.0	\$ 24.3	Strong market share position; print/digital packages				
61.9	56.4	67.5	534.9	568.3	638.6	576.2	34	Advertising Income - Classified	19.3	26.5	16.9	32.0	25.0	25.0	\$ -					
0.4	20.6	20.6	1,095.7	1,118.2	1,020.0	1,100.7	34	Advertising Income - On-line	525.4	470.4	620.0	595.6	695.0	640.0	\$ 55.0	Webinar advertising - strong demand				
11.5	12.2	13.7	171.3	146.7	163.9	205.6	35.1	Meeting & Seminar Income	1,535.2	1,965.7	1,666.3	1,578.5	1,737.5	1,737.5	\$ -					
							35.2	Certification Registration	138.7	148.5	160.0	183.3	180.0	220.0	\$ (40.0)	Demand for high level understanding not yet created				
123.2	252.1	140.5	1,327.6	1,329.5	1,659.2	1,392.6	35.3	Education Registration	1,011.3	1,301.6	1,450.4	1,504.5	1,843.2	1,585.0	\$ 258.2	Very strong growth and demand; primarily HVAC Design & eLearning				
			86.6	230.0	3.2		37	Special Project Income	60.9	50.0	240.0	316.6			\$ -					
5.4	4.9	7.5	37.0	36.2	90.6	24.6	38	Contribution Income	31.3	47.2	39.5	72.7	40.4	30.4	\$ 10.0					
			5,146.6	4,857.9	5,168.0	4,757.6	41.1	AHR Exposition Income	3,949.9	3,973.0	4,857.9	5,146.6	5,168.0	4,757.6	\$ 410.4	Stronger vendor demand than originally budgeted in Orlando				
10.0	105.0	5.2	(1,699.5)	(1,699.5)	(1,841.4)	(1,834.2)	41.2	Contributions and Matching Gifts	(1,940.9)	(1,859.2)	(1,699.5)	(1,699.5)	(1,841.4)	(1,839.0)	\$ (2.4)					
			145.9	60.0	34.0	60.0	41.3	Exposition Income - Other Countries	116.3		60.0	145.9	34.0	60.0	\$ (26.0)	AHR Mexico - less demand than anticipated				
26.2	33.2	36.2	288.3	288.3	365.2	398.4	44	Reserve Transfers	510.9	489.2	314.5	314.5	398.4	398.4	\$ -					
53.7	2.9	7.6	513.0	376.9	304.9	282.6	46	Miscellaneous Income	286.4	341.9	410.9	534.4	326.6	295.9	\$ 30.7					
1,460.5	1,623.5	1,481.7	20,933.2	21,212.8	21,354.1	20,885.5	TOTAL REVENUES						20,501.6	21,710.2	23,318.4	23,201.6	23,760.9	22,853.0		
EXPENSES:																				
929.9	624.1	1,086.5	6,712.0	6,788.0	7,456.8	7,816.3	51	Salary Expense	6,814.3	6,988.0	7,353.7	7,357.2	7,807.1	7,832.3	\$ (25.2)	Open positions; Hiring new staff took longer than anticipated				
257.4	187.0	265.7	2,164.9	1,957.6	2,194.8	2,219.3	52	Payroll Taxes, Benefits, Personnel Exp	2,070.3	2,105.2	2,136.6	2,344.1	2,365.4	2,241.5	\$ 123.9	Benefits costs higher than anticipated.				
385.0	315.2	1,092.4	3,036.7	3,376.2	3,194.4	3,498.0	61	Publishing and Promotion Expense	3,596.3	3,524.7	3,683.1	3,757.5	3,981.3	3,673.9	\$ 307.4	Unanticipated Handbook reprints needed to maintain inventory - higher COGS due to smaller runs; Higher Special Pubs revenue results in higher expense for digital delivery; Budget low as compared to '14-15; Higher Journal Advertising Revenue results in increased commissions				
54.5	155.2	125.5	1,635.1	1,589.2	1,684.9	2,108.4	64	Meetings & Conferences Expense	1,778.3	2,286.6	2,189.6	2,178.5	2,375.7	2,262.2	\$ 113.5	Increased Education Courses outside of HQ				
96.8	120.2	132.3	1,564.6	2,077.3	1,474.1	2,079.7	66	Travel Expense	1,634.3	2,138.0	2,263.8	1,954.6	2,008.4	2,190.1	\$ (181.7)	Travel Expenses tracking closer to '14-15 levels				
17.5	22.0	20.6	75.5	102.7	93.1	102.5	68	Awards, Certif, Logo Cost of Goods Sold	99.4	86.9	112.0	98.9	116.4	116.5	\$ (0.1)					
	7.3		102.4	122.6	121.7	129.4	71	Research Projects & Grants Expense	106.3	106.5	122.6	100.9	127.5	127.5	\$ -					
31.7		9.2	72.5	160.0	81.3	100.8	73	Special Projects Expense	7.8	50.0	160.0	72.5	110.0	110.0	\$ -					
	1.5	0.6	46.5	54.7	72.6	60.0	76	Public Relations Expense	70.3	129.1	59.7	51.0	62.0	62.0	\$ -					
49.3	57.6	54.7	506.6	503.9	540.7	567.7	78	Occupancy & Insurance	501.5	563.4	549.8	559.2	580.0	575.9	\$ 4.1					
169.1	155.4	185.5	1,533.1	1,717.8	1,579.0	1,620.1	82	Office Expense and Organizational Dues	1,668.6	1,704.0	1,873.9	1,788.1	1,917.7	1,835.4	\$ 82.3	Increased attendees in courses results in increased printing costs related to increased materials used in education courses.				
133.1	63.7	252.8	1,364.1	1,663.2	1,312.8	1,876.7	84	Outside Services Expense	1,430.1	1,528.0	1,814.3	1,654.6	1,955.4	1,980.0	\$ (24.6)					
163.5	116.4	126.0	512.9	405.5	620.1	476.9	88	Other Expense	493.0	496.8	468.4	487.8	613.5	491.4	\$ 122.1	Primarily driven by credit card expense (higher sales)				
(8.3)	(106.2)		(78.5)	(59.5)	(636.0)		88.1	Prepaid Expense (contra acct)		(18.3)	(64.9)	33.8	(540.0)		\$ (540.0)	IAQA reimbursement for salaries, benefits, etc. paid by ASHRAE				
		8.3	35.5	100.0		91.7	89	Opportunity Fund		35.0	100.0	35.5		100.0	\$ (100.0)	Opportunity Fund was not utilized in 15-16				
47.6	44.8	51.1	556.5	563.0	527.6	543.5	90	Depreciation Expense	695.6	660.9	614.2	631.9	543.5	543.5	\$ -					
(81.1)	(54.0)	(84.8)	(727.5)	(726.0)	(672.9)	(840.0)	91	Allocation of Overhead & BOD	(649.4)	(730.0)	(792.0)	(808.5)	(763.6)	(840.0)	\$ -					
2,246.0	1,710.2	3,326.4	19,112.9	20,396.2	19,645.0	22,451.0	TOTAL EXPENSES						20,316.7	21,654.8	22,644.8	22,297.6	23,260.3	23,302.2		
(785.5)	(86.7)	(1,844.7)	1,820.3	816.6	1,709.1	(1,565.5)	SURPLUS (DEFICIT) before reserve income						184.9	55.4	673.6	904.0	500.6	(449.2)	\$ (273.0)	
(7.8)	1.8		466.5	275.0	509.2	483.6	91.5	Headquarters Building Renewal Contributions		0.3										
							92	Non-recurring Expenses	1,244.8	488.9	300.0	670.7	590.0	590.0	\$ -					
Reserve Investment Income:																				
55.4	65.2	42.9	308.5	659.1	(117.4)	572.9	95	Investmt Income (Loss) - Reserves (net of exp)	1,277.1	1,778.1	719.0	146.5	(32.9)	603.0	\$ (635.9)	Forecasting small investment loss growth in 15-16				
(26.2)	(33.2)	(36.2)	(288.3)	(474.9)	(365.2)	(398.4)	96	Transfer Reserves Portion Used Currently	(510.9)	(489.2)	(518.1)	(314.5)	(398.4)	(398.4)	\$ -					
29.2	32.0	6.7	20.2	184.2	(482.6)	174.5	Remaining Reserve Investment Income						766.2	1,288.9	200.9	(168.0)	(431.3)	204.6		
(748.5)	(56.5)	(1,838.0)	1,374.0	725.8	717.3	(1,874.6)	OVERALL SURPLUS (DEFICIT) after reserve income						(293.7)	855.7	574.5	65.3	(520.7)	(834.6)		

BOARD OF DIRECTORS 2-5nn
STATEMENT OF REVENUES & EXPENSES
MAJOR VARIATIONS
For the Eleven Months Ending May 31, 2016

in thousands US dollars

MONTH OF MAY			Fiscal YTD Through Month of MAY				TWELVE MONTHS ENDING JUNE 30						Variance	Comments					
Actual FY 14-15	Actual FY 15-16	Budget FY 15-16	Actual FY 14-15	Budget FY 14-15	Actual FY 15-16	Budget FY 15-16	Actual FY 12-13	Actual FY 13-14	Budget FY 14-15	Actual FY 14-15	Forecast FY 15-16	Budget FY 15-16	Budget vs. Forecast 15-16						
							roll up												
							acct / Description												
							REVENUES												
\$1.2		\$0.4 (4.8)	\$12.4	\$7.3		\$4.2 (53.2)							\$8.0	\$8.0					
													\$0.0						
													\$0.0						
26.0			247.0	36.7		0.3													
27.2		(4.4)	259.4	44.0		(57.7)													
							TOTAL REVENUES												
							17.9	7.0	48.0	296.5	(50.0)	(50.0)							
							EXPENSES:												
113.5	86.2	114.9	941.4	801.8	1,076.2	1,023.7	771.5	735.7	868.6	1,032.7	1,039.3	1,039.3	\$0.0						
28.6	25.8	27.1	269.1	224.5	307.7	270.3	224.1	214.4	243.2	287.0	286.7	274.4	\$12.3						
3.7	1.4	28.7	9.0	89.4	31.4	101.7	32.8	69.4	97.5	10.0	66.8	107.3	(\$40.5)						
1.3	8.6	3.6	53.3	35.4	73.7	61.2	39.0	71.0	58.8	64.0	61.6	61.6	\$0.0						
														\$120K of Strategic Plan Initiatives 1 and 2 in Budget was not utilized in SY15-16.					
52.7	54.4	83.1	723.0	897.0	707.4	1,000.3	650.8	1,017.9	978.6	887.9	893.5	1,036.8	(\$143.3)						
3.4	2.9	1.5	11.1	3.2	9.8	3.2	9.2	9.1	3.5	14.9	3.7	3.7	\$0.0						
	7.3		7.2	7.5	7.3	7.8	7.0	7.1	7.5	7.2	7.8	7.8	\$0.0						
													\$0.0						
1.1	1.9	1.2	55.3	32.2	26.4	44.1	42.2	42.6	35.1	60.5	44.8	44.8	\$0.0						
														\$75K of Strategic Plan Initiative 5 in Budget was not utilized in SY15-16					
10.9	2.1	20.2	161.2	125.5	52.1	184.9	92.4	69.2	136.9	204.6	117.0	191.6	(\$74.6)						
	0.4	0.9	1.2	2.4	7.0	9.7	5.3	0.5	2.5	1.9	10.6	10.6	\$0.0						
														IAQA reimbursement for salaries, benefits, etc. paid by ASHRAE					
	(42.5)					(498.7)					(540.0)		(\$540.0)						
		8.3	35.5	100.0		91.7		35.0	100.0	35.5		100.0	(\$100.0)	Opportunity Fund was not utilized in SY15-16					
			3.2	2.8	0.2			4.1	3.1	3.2									
(217.6)	(148.4)	(275.8)	(2,270.3)	(2,324.0)	(1,800.3)	(2,877.9)	(1,878.5)	(2,277.4)	(2,535.3)	(2,584.6)	(1,991.8)	(2,877.9)							
(2.4)	0.1	13.7	0.2	(2.3)	0.2	(79.3)													
							TOTAL EXPENSES												
							(0.1)	(0.2)		24.9									
29.6	(0.1)	(18.1)	259.2	46.3	(57.9)	30.3	SURPLUS (DEFICIT) before reserve income							18.0	7.2	48.0	271.6	(50.0)	(50.0)
							Reserve Investment Income:												
							96 Transfer Reserves Portion Used Currently												
							Remaining Reserve Investment Income												
29.6	(0.1)	(18.1)	259.2	46.3	(57.9)	30.3	OVERALL SURPLUS (DEFICIT) after reserve income							18.0	7.2	48.0	271.6	(50.0)	(50.0)

OVERHEAD 2-9nn
STATEMENT OF REVENUES & EXPENSES
MAJOR VARIATIONS
For the Eleven Months Ending May 31, 2016

in thousands US dollars

MONTH OF MAY			Fiscal YTD Through Month of MAY				TWELVE MONTHS ENDING JUNE 30						Variance	Comments
Actual	Actual	Budget	Actual	Budget	Actual	Budget	roll up	Actual	Actual	Budget	Actual	Forecast	Budget	
FY 14-15	FY 15-16	FY 15-16	FY 14-15	FY 14-15	FY 15-16	FY 15-16	acct / Description	FY 12-13	FY 13-14	FY 14-15	FY 14-15	FY 15-16	FY 15-16	Forecast 15-16
			\$5,146.6	\$4,857.9	\$5,168.0	\$4,757.6	REVENUES							
			(1,814.5)	(1,814.5)	(1,898.4)	(1,898.4)	41.1 AHR Exposition Income	\$3,949.9	\$3,973.0	\$4,857.9	\$5,146.6	\$5,168.0	\$4,757.6	\$ 410.4
							41.2 Contributions and Matching Gifts	(2,010.9)	(1,989.2)	(1,814.5)	(1,814.5)	(1,898.4)	(1,898.4)	\$ -
			145.9	60.0	34.0	60.0	41.3 Exposition Income - Other Countries	116.3		60.0	145.9	34.0	60.0	\$ (26.0)
26.2	33.2	36.2	288.3	288.3	365.2	398.4	44 Reserve Transfers	510.9	489.2	314.5	314.5	398.4	398.4	\$ -
(7.2)	(9.8)	4.7	(32.7)	53.7	13.5	31.0	46 Miscellaneous Income	17.0	24.0	58.6	(47.2)	31.7	31.7	\$ -
19.0	23.4	40.9	3,733.6	3,445.4	3,682.3	3,348.6	TOTAL REVENUES	2,583.2	2,497.0	3,476.5	3,745.3	3,733.7	3,349.3	
							EXPENSES:							
294.1	167.8	361.8	1,700.4	1,835.7	1,952.8	2,062.2	51 Salary Expense	1,693.5	1,784.0	1,988.6	1,862.3	2,144.7	2,062.2	\$ 82.5
84.1	50.3	94.7	641.3	532.3	587.5	659.7	52 Payroll Taxes, Benefits, Personnel Exp	513.4	534.2	592.2	715.2	702.5	669.0	\$ 33.5
0.8	3.9	0.9	5.3	34.3	22.3	4.4	61 Publishing and Promotion Expense	8.2	5.1	37.5	21.8	41.8	26.8	\$ 15.0
0.4	0.2	0.8	7.4	11.8	13.2	14.7	64 Meetings & Conferences Expense	19.6	7.8	12.8	10.7	13.3	13.3	\$ -
7.2	8.1	7.8	80.6	76.7	94.1	85.1	66 Travel Expense	95.1	92.4	83.6	87.0	87.0	87.0	\$ -
	1.5	0.4	46.5	52.6	72.6	57.8	76 Public Relations Expense	61.8	127.9	57.3	50.9	59.6	59.6	\$ -
46.7	50.4	51.5	473.0	468.6	502.6	524.5	78 Occupancy & Insurance	464.8	527.1	511.2	523.2	535.8	535.8	\$ -
20.0	18.5	21.7	339.2	310.5	321.2	344.7	82 Office Expense and Organizational Dues	310.9	328.2	338.7	374.5	352.4	352.4	\$ -
26.5	20.4	23.1	451.0	492.5	400.9	492.8	84 Outside Services Expense	429.4	478.7	537.3	454.8	511.0	502.0	\$ 9.0
4.7	7.7	4.8	76.3	63.5	95.4	67.5	88 Other Expense	60.7	93.5	69.3	83.7	108.6	72.1	\$ 36.5
45.4	44.8	51.1	482.9	504.6	508.2	543.5	90 Depreciation Expense	603.5	568.8	550.5	556.0	543.5	543.5	\$ -
(529.3)	(373.6)	(605.6)	(4,303.9)	(4,380.8)	(4,570.7)	(4,923.7)	91 Allocation of Overhead & BOD	(4,261.0)	(4,547.6)	(4,779.0)	(4,740.0)	(5,100.2)	(4,923.7)	
0.6		13.0		2.3	0.1	(66.8)	TOTAL EXPENSES	(0.1)	0.1	0.1				
18.4	23.4	27.9	3,733.6	3,443.1	3,682.2	3,415.4	SURPLUS (DEFICIT) before reserve income	2,583.3	2,496.9	3,476.5	3,745.2	3,733.7	3,349.3	
(7.8)	1.4		24.9		189.7		91.5 Headquarters Building Renewal Contributions		0.3					
							92 Non-recurring Expenses	86.0	14.0		192.4	90.0	90.0	
55.4	65.2	42.9	308.5	659.1	(117.4)	572.9	Reserve Investment Income:							
(26.2)	(33.2)	(36.2)	(288.3)	(474.9)	(365.2)	(398.4)	95 Investmt Income - Reserves (net of exp)	1,277.1	1,778.1	719.0	146.5	(32.9)	603.0	
							96 Transfer Reserves Portion Used Currently	(510.9)	(489.2)	(518.1)	(314.5)	(398.4)	(398.4)	
29.2	32.0	6.7	20.2	184.2	(482.6)	174.5	Remaining Reserve Investment Income	766.2	1,288.9	200.9	(168.0)	(431.3)	204.6	
55.4	54.0	34.6	3,728.9	3,627.3	3,009.9	3,589.9	OVERALL SURPLUS (DEFICIT) after reserve income	3,263.5	3,772.1	3,677.4	3,384.8	3,212.4	3,463.9	

MEMBERS COUNCIL (2-2nn & 2-8nn)
STATEMENT OF REVENUES & EXPENSES
MAJOR VARIATIONS
For the Eleven Months Ending May 31, 2016

in thousands US dollars

MONTH OF MAY			Fiscal YTD Through Month of MAY				TWELVE MONTHS ENDING JUNE 30						Variance	Comments
Actual	Actual	Budget	Actual	Budget	Actual	Budget	roll up	Actual	Actual	Budget	Actual	Forecast	Budget	
FY 14-15	FY 15-16	FY 15-16	FY 14-15	FY 14-15	FY 15-16	FY 15-16	acct / Description	FY 12-13	FY 13-14	FY 14-15	FY 14-15	FY 15-16	FY 15-16	Forecast 15-16
\$614.2	\$630.4	\$638.6	\$6,658.2	\$6,719.1	\$6,850.1	\$6,932.4	REVENUES							
0.4		20.6	1,095.7	1,118.2	1,020.0	1,100.7	31 Membership Dues Earned Income	\$7,077.4	\$7,178.7	\$7,388.0	\$7,281.8	\$7,595.7	\$7,595.7	\$ -
	3.6		16.0	16.6	80.5	8.4	35.1 Meeting & Seminar Income	1,535.2	1,965.7	1,666.3	1,578.5	1,737.5	1,737.5	\$ -
10.0	10.0	10.0	20.0	20.0	20.0	20.4	38 Contribution Income	0.5	25.6	18.1	38.4	18.4	8.4	\$ 10.0
3.2	4.2	8.5	148.8	64.3	114.2	79.2	41.2 Contributions and Matching Gifts	20.0	20.0	20.0	20.0	20.0	20.4	\$ (0.4)
							46 Miscellaneous Income	74.1	103.0	69.9	153.3	83.6	83.6	\$ -
627.8	648.2	677.7	7,938.7	7,938.2	8,084.8	8,141.1	TOTAL REVENUES	8,707.2	9,293.0	9,162.3	9,072.0	9,455.2	9,445.6	
							EXPENSES:							
129.2	101.3	155.7	1,031.7	1,031.2	1,203.2	1,242.9	51 Salary Expense	1,132.4	1,175.4	1,117.2	1,135.0	1,218.4	1,243.3	\$ (24.9)
32.5	30.3	36.1	299.9	288.8	341.0	328.2	52 Payroll Taxes, Benefits, Personnel Exp	348.3	342.6	312.9	313.7	347.9	328.3	\$ 19.6
97.1	32.9	114.7	365.9	392.6	362.2	374.3	61 Publishing and Promotion Expense	325.6	339.3	428.3	422.2	423.7	404.5	\$ 19.2
23.7	72.2	80.5	1,225.1	1,197.3	1,130.7	1,641.4	64 Meetings & Conferences Expense	1,388.7	1,841.9	1,743.3	1,644.0	1,729.4	1,740.7	\$ (11.3)
26.1	35.9	30.0	550.8	698.9	513.2	687.1	66 Travel Expense	571.7	667.6	760.3	668.7	648.0	731.9	\$ (83.9)
13.7	19.1	18.9	63.3	95.9	83.4	95.5	68 Awards, Certif, Logo Cost of Goods Sold	88.5	76.6	104.6	82.8	108.8	108.8	\$ -
			95.2	115.0	114.4	121.6	71 Research Projects & Grants Expense	99.3	99.4	115.0	93.7	119.6	119.6	\$ -
17.8	(7.4)	23.1	262.3	374.5	302.2	317.1	82 Office Expense and Organizational Dues	317.4	330.0	408.5	299.4	359.4	359.4	\$ -
36.0	5.4	42.7	148.0	160.7	154.0	173.2	84 Outside Services Expense	169.2	178.1	175.3	175.2	178.4	178.4	\$ -
19.1	21.5	21.4	262.1	212.8	242.0	243.4	88 Other Expense	237.6	259.2	258.3	294.1	266.1	246.1	\$ 20.0
(8.3)	(63.7)		(98.7)		(137.3)		88.1 Prepaid Expense (contra acct)		2.0		13.5			\$ -
							89 Opportunity Fund							
164.7	128.1	203.5	1,481.8	1,485.5	1,547.4	1,829.6	91 Allocation of Overhead & BOD	1,428.0	1,603.9	1,620.5	1,657.9	1,663.2	1,829.6	
551.6	375.6	726.6	5,687.4	6,053.2	5,856.4	7,054.3	TOTAL EXPENSES	6,106.7	6,916.0	7,044.2	6,800.2	7,062.9	7,290.6	
76.2	272.6	(48.9)	2,251.3	1,885.0	2,228.4	1,086.8	SURPLUS (DEFICIT) before reserve income	2,600.5	2,377.0	2,118.1	2,271.8	2,392.3	2,155.0	
76.2	272.6	(48.9)	2,251.3	1,885.0	2,228.4	1,086.8	OVERALL SURPLUS (DEFICIT) after reserve income	2,600.5	2,377.0	2,118.1	2,271.8	2,392.3	2,155.0	

Open positions for several months during the year.

Travel Expenses tracking close to '14-15 levels

PUBLISHING & EDUCATION COUNCIL (2-4nn & 5-5nn)
STATEMENT OF REVENUES & EXPENSES
MAJOR VARIATIONS
For the Eleven Months Ending May 31, 2016

in thousands US dollars

MONTH OF MAY			Fiscal YTD Through Month of MAY				roll up acct / Description	TWELVE MONTHS ENDING JUNE 30						Variance Budget vs. Forecast 15-16	Comments	
Actual FY 14-15	Actual FY 15-16	Budget FY 15-16	Actual FY 14-15	Budget FY 14-15	Actual FY 15-16	Budget FY 15-16		Actual FY 12-13	Actual FY 13-14	Budget FY 14-15	Actual FY 14-15	Forecast FY 15-16	Budget FY 15-16			
REVENUES																
\$278.3	\$285.8	\$301.5	\$3,150.6	\$3,571.8	\$3,324.9	\$3,489.9	32	Publication Sales Income	\$3,323.4	\$3,803.6	\$3,896.5	\$3,483.9	\$3,773.2	\$3,585.5	\$ 187.7	New Titles; Strong standards sales (188 in particular); Increased digital demand
270.9	239.2	239.0	3,446.4	3,593.9	3,555.3	3,475.1	34	Advertising Income - Display	3,856.1	3,773.1	3,897.0	3,710.8	3,785.3	3,761.0	\$ 24.3	Very strong market share position; print/digital packages
4.8	1.4	3.8	30.6	15.5	17.6	24.0	34	Advertising Income - Classified	19.3	26.5	16.9	32.0	25.0	25.0	\$ -	
61.9	56.4	67.5	534.9	568.3	638.6	576.2	34	Advertising Income - On-line	525.4	470.4	620.0	595.6	695.0	640.0	\$ 55.0	Webinar advertising - strong demand
11.5	12.2	13.7	171.3	146.7	163.9	205.6	35.2	Certification Registration	138.7	148.5	160.0	183.3	180.0	220.0	\$ (40.0)	Demand for high level understanding not yet created
123.2	252.1	140.5	1,327.6	1,329.5	1,659.2	1,392.6	35.3	Education Registration	1,011.3	1,301.6	1,450.4	1,504.5	1,843.2	1,585.0	\$ 258.2	Very strong growth and demand; primarily HVAC Design & eLearning
4.2	1.3	7.1	8.7	12.3	10.1	11.9	37	Special Project Income		45.0	230.0	230.0			\$ -	
	95.0		95.0	95.0	95.0	97.0	38	Contribution Income	15.8	17.0	13.4	10.8	13.9	13.9	\$ -	
31.7	8.4	(6.6)	138.7	199.9	163.9	148.1	41.2	Contributions and Matching Gifts	50.0	110.0	95.0	95.0	95.0	97.0	\$ (2.0)	
							46	Miscellaneous Income	185.9	195.3	218.1	143.1	186.0	155.2	\$ 30.8	
786.5	951.8	766.5	8,903.8	9,762.9	9,628.5	9,420.4		TOTAL REVENUES	9,125.9	9,891.0	10,597.3	9,989.0	10,596.6	10,082.6		
EXPENSES:																
263.8	183.2	308.4	2,024.9	2,120.5	2,197.0	2,364.0	51	Salary Expense	2,157.9	2,232.8	2,297.2	2,218.4	2,348.7	2,364.0	\$ (15.3)	
79.5	54.9	74.1	664.0	632.3	666.5	664.6	52	Payroll Taxes, Benefits, Personnel Exp	673.8	717.3	685.3	706.0	713.9	673.2	\$ 40.7	
283.5	276.6	948.0	2,656.6	2,857.9	2,778.6	3,016.9	61	Publishing and Promotion Expense	3,229.1	3,105.4	3,117.8	3,302.7	3,446.8	3,133.0	\$ 313.8	Unanticipated Handbook reprints needed to maintain inventory - higher COGS due to smaller runs; Higher Special Pubs revenue results in higher expense for digital delivery; Budget low as compared to '14-15; Higher Journal Advertising Revenue results in increased commissions
28.5	71.5	39.9	342.1	319.3	458.4	372.1	64	Meetings & Conferences Expense	320.1	354.7	349.3	451.6	551.7	426.8	\$ 124.9	Increased Education Courses outside of HQ
5.0	7.3	4.1	115.5	196.7	89.2	165.8	66	Travel Expense	170.6	196.9	214.6	178.4	188.1	187.1	\$ 1.0	
0.3		0.2	0.8	2.2	(0.3)	2.3	68	Awards, Certif, Logo Cost of Goods Sold	1.3	0.8	2.4	1.0	2.5	2.5	\$ -	
2.7	7.2	3.2	33.6	35.3	38.1	43.2	76	Public Relations Expense	8.5						\$ -	
							78	Occupancy & Insurance	36.7	36.3	38.5	36.1	44.3	40.1	\$ 4.2	
130.0	142.2	137.8	786.4	908.2	840.5	805.1	82	Office Expense and Organizational Dues	909.3	894.2	990.7	963.5	1,052.8	969.4	\$ 83.4	Increased attendees in courses results in increased printing costs related to increased materials used in education courses.
59.6	35.7	162.6	601.2	831.0	670.6	976.5	84	Outside Services Expense	718.0	744.5	906.6	817.2	1,094.5	1,054.3	\$ 40.2	Commission paid on online bookstore purchases increases with greater sales
139.7	86.9	98.9	173.4	126.6	275.6	156.2	88	Other Expense	122.6	143.7	138.1	108.1	228.1	162.5	\$ 65.6	Higher credit card expenses due to increased sales.
			45.8	37.2			90	Depreciation Expense	61.0	61.0	40.6	45.8				
336.3	231.7	403.2	2,906.3	3,054.5	2,829.1	3,478.9	91	Allocation of Overhead & BOD	2,722.7	3,048.4	3,332.1	3,237.1	3,162.5	3,478.9		
1,328.9	1,097.2	2,180.4	10,350.6	11,121.7	10,843.3	12,045.6		TOTAL EXPENSES	11,131.6	11,536.0	12,113.2	12,065.9	12,833.9	12,491.8		
(542.4)	(145.4)	(1,413.9)	(1,446.8)	(1,358.8)	(1,214.8)	(2,625.2)		SURPLUS (DEFICIT) before reserve income	(2,005.7)	(1,645.0)	(1,515.9)	(2,076.9)	(2,237.3)	(2,409.2)		
(542.4)	(145.4)	(1,413.9)	(1,446.8)	(1,358.8)	(1,214.8)	(2,625.2)		OVERALL SURPLUS (DEFICIT) after reserve income	(2,005.7)	(1,645.0)	(1,515.9)	(2,076.9)	(2,237.3)	(2,409.2)		

**TECHNOLOGY COUNCIL
STATEMENT OF REVENUES & EXPENSES
MAJOR VARIATIONS
For the Eleven Months Ending May 31, 2016**

in thousands US dollars

MONTH OF MAY		Fiscal YTD Through Month of MAY				TWELVE MONTHS ENDING JUNE 30						Variance	Comments		
Actual FY 14-15	Actual FY 15-16	Budget FY 15-16	Actual FY 14-15	Budget FY 14-15	Actual FY 15-16	Budget FY 15-16	Actual FY 12-13	Actual FY 13-14	Budget FY 14-15	Actual FY 14-15	Forecast FY 15-16	Budget FY 15-16		Budget vs. Forecast 15-16	
roll up acct / Description															
REVENUES							REVENUES								
		1.0	\$86.6	22.3	\$3.2	24.3	37 Special Project Income	\$60.9	\$5.0	\$10.0	\$86.6		\$	-	
		1.0	11.2	22.3	13.0	24.3	46 Miscellaneous Income	6.4	17.0	24.3	12.2	25.3	\$	-	
		1.0	97.8	22.3	16.2	24.3	TOTAL REVENUES	67.3	22.0	34.3	98.8	25.3			
EXPENSES:							EXPENSES:								
129.3	85.6	145.7	1,013.5	998.8	1,027.7	1,123.5	51 Salary Expense	1,059.0	1,060.1	1,082.1	1,108.7	1,056.1	1,123.5	\$ (67.4)	Open position for several months during the year.
32.6	25.6	33.8	290.6	279.7	292.1	296.6	52 Payroll Taxes, Benefits, Personnel Exp	310.8	296.7	303.0	322.2	314.4	296.6	\$ 17.8	
		0.2	(0.1)	2.0		0.7	61 Publishing and Promotion Expense	0.5	5.5	2.1	0.8	2.2	2.2	\$ -	
0.6	2.7	0.8	7.2	25.4	8.7	19.0	64 Meetings & Conferences Expense	10.9	11.3	25.4	8.2	19.8	19.8	\$ -	
		7.3	94.8	208.0	70.3	141.4	66 Travel Expense	146.0	163.2	226.7	132.5	191.8	147.4	\$ 44.4	Residential Building Committee expenses were not included in budget
5.9	14.5	0.3	0.3	1.4	0.3	1.6	68 Awards, Certif, Logo Cost of Goods Sold	0.4	0.4	1.5	0.3	1.4	1.6	\$ (0.2)	
31.7		9.2	72.5	160.0	81.3	100.8	73 Special Projects Expense	7.8	50.0	160.0	72.5	110.0	110.0	\$ -	
		0.2		2.1		2.2	76 Public Relations Expense			2.3		2.4	2.4	\$ -	
0.1	0.2	1.7	89.9	92.4	88.8	109.3	82 Office Expense and Organizational Dues	88.8	109.0	100.8	90.1	108.4	109.5	\$ (1.1)	
		4.3	2.8	53.5	35.1	49.4	84 Outside Services Expense	21.1	57.5	58.4	2.8	54.5	53.7	\$ 0.8	
				0.1		0.1	88 Other Expense	66.8		0.1		0.1	0.1	\$ -	
			20.3	(59.5)			88.1 Prepaid Expense (contra acct)		(20.3)	(64.9)	20.3				
2.2			24.7	18.3	19.2		90 Depreciation Expense	27.0	27.0	20.0	27.0				
164.8	108.2	189.9	1,458.7	1,438.8	1,321.7	1,653.2	91 Allocation of Overhead & BOD	1,339.4	1,442.7	1,569.6	1,621.0	1,502.8	1,653.2		
367.2	237.0	392.9	3,075.2	3,221.0	2,945.2	3,497.8	TOTAL EXPENSES	3,078.5	3,203.1	3,487.1	3,406.4	3,363.9	3,520.0		
(367.2)	(237.0)	(391.9)	(2,977.4)	(3,198.7)	(2,929.0)	(3,473.5)	SURPLUS (DEFICIT) before reserve income	(3,011.2)	(3,181.1)	(3,452.8)	(3,307.6)	(3,338.6)	(3,494.7)		
	0.5		441.6	275.0	319.5	483.6	92 Non-recurring Expenses	1,158.8	474.8	300.0	478.3	500.0	500.0		
(367.2)	(237.5)	(391.9)	(3,419.0)	(3,473.7)	(3,248.5)	(3,957.1)	OVERALL SURPLUS (DEFICIT) after reserve income	(4,170.0)	(3,655.9)	(3,752.8)	(3,785.9)	(3,838.6)	(3,994.7)		

**REPORT TO BOARD OF DIRECTORS
From Finance Committee
Meeting of Friday, June 24, 2016**

Recommendations for Board approval:

1. Finance Committee recommends that the 2016-17 draft budget for the General Fund, inclusive of council budgets, showing a total deficit of \$273,000 be approved.

Background: Finance Committee makes its recommendation based on a three year budget cycle. Member programs can then be included in each budget year despite fluctuations in revenue streams, such as Expo royalties, continuous maintenance standards and the volume of the ASHRAE Handbook published in a given year. For 2015-16, 2016-17 and 2017-18 the surpluses/(deficits) are \$500,600, (\$273,000) and \$397,600 respectively. The surplus/(deficit) for the three years combined nets a surplus of \$625,200. The committee will continue to look at the budgets in two to three year increments watching trends and cycles to balance protection of Society's assets with providing member benefits. (Motion passed 8-0-0 CNV)

2. Finance Committee recommends to the Board of Directors that the 2016-17 budget for the Research Fund showing total revenues and expenses of \$5,863,200 be approved.

Background: The Research Fund proposed budget includes a transfer of 4% of the Research Reserve Fund portfolio value of as of 6/30/15, based on the needs of Research Administration Committee. The Rules of the Board require a minimum transfer of 4% of the portfolio value, and the Finance Committee may recommend a higher percentage up to 10% of the Research Reserve Fund portfolio value provided that the assets in the Research Reserve Fund are at least equal to the annual Research Fund expenditures. (Motion passed 8-0-0, CNV)

3. Finance Committee recommends to the Board of Directors that they approve a discretionary capital expenditure budget of \$200,000 for fiscal year 2016-17. Finance Committee also recommends to the Board of Directors that they approve an additional \$200,000 for bEQ Web Portal Development and \$200,000 for a rebuild of the Online Comment Database (both software assets – 3 Year Amortization)

Background: In regards to the discretionary capital budget for normal operations, this has been historically set at \$200,000. In regards to the bEQ Web Portal, the bEQ Committee feels that the development of an online portal will accomplish multiple goals intended to potentially expand the market of bEQ to include international markets. Finally, the Standards Committee unanimously supported the pursuit of a complete rebuild of the OCD user interface for mobile devices giving a better user experience for years to come. A rebuild will not only modernize the OCD but it will also create a one-stop-shop for ASHRAE Standards participation thereby increasing performance of the overall application. Finance Committee (Motion passed 8-0-0, CNV)

4. Finance Committee recommends to the Board of Directors that they approve the revision of ROB 1.201.027.3 – Applicability (Current Language):

Current Wording:

A. President – Travel expenses for the President and spouse for presidential activities shall be reimbursed, when requested.

To be as follows (Proposed Wording Changes to ROB):

A. President – Travel expenses for the President and spouse, [including subscriptions to cell phone overseas global data plans](#), for presidential activities shall be reimbursed, when requested.

Background: The ASHRAE Society President's spouse regularly travels with the president, which includes travel outside their home country (overseas). When traveling overseas the use of a cell phone by the president's spouse becomes an added cost related to this travel but this cost is not currently an authorized reimbursement expense. This generally requires that the president's spouse pay for a subscription to a cell phone overseas global data plan since he/she will regularly travel outside his/her own country during the President's time in office. (Motion passed 8-0-0, CNV)

Fiscal Impact: \$800-\$1,500 Annually

5. Finance Committee recommends to the Board of Directors that they approve the proposed revision to the Rules of the Board 2.102.002.3 and 2.102.002.4.

Proposed Revisions:

2.102.002.3 [General and Research Fund Disbursement Approval](#)(77-02-13-02/83-06-26-02) General and Research [Fund](#) account [disbursements \(checks, wires, ACH\)](#) shall require [at least one](#)~~two~~ signatures [approval](#) which shall include either the President, ~~and the~~ Treasurer, ~~or the President or the Treasurer along with either of the~~ Executive Vice President or the Comptroller. [The individual originating the disbursement cannot be the approver.](#)

2.102.002.4 Operating Funds (93-01-24-15)
The operating funds of the Society shall be with banks that have a [minimum S&P credit high national](#) rating [of BBB. Examples of this include such as the](#) Sun-Trust, [Wells Fargo, etc. Bank of Atlanta.](#)

Background: Finance Committee passed a motion revising the ROB 2.102.002.3 and 2.102.002.4. This issue was referred to Finance from SRC to clarify current operating procedure.

Information Items:

1. Finance Investment subcommittee discussed and recommended to the Finance Committee keeping the General and Research Reserve Fund investments with Oakbridge Partners for the 2016/17 Society Year. The committee, with the assistance of the Comptroller, looked at two other investment firms and did not find a reason (fees or performance) to change firms at this time. However, they did recommend that this

position be reconsidered if Oakbridge's performance falls below the indexes next year.

2. The General Reserve Fund as of May 31, 2016 had total assets of \$11,954,004. The General Reserve Fund represents 52% of the average of the General Fund total expenses for the last three years (2012-2013 through 2014-2015). The ROB targets a General Reserve Fund balance that is between 1/3 and 2/3's of a typical annual General Fund total expense. The Research Reserve Fund as of May 31, 2016 had total assets of \$6,352,557. There is no ROB target range established for the Research Reserve Fund. Fiscal YTD, both Funds are down one percent (1.0%) in value.
3. Finance Committee discussed MBO #4 – Evaluate projects with operating deficits (bEQ, HPB, Certification, ISO Standards) – and several questions were raised about the total cost, recurring maintenance cost, partnership opportunities - all related to Business Plans for these efforts (specifically in regards to bEQ). Such a plan does not exist at this time but it is expected that a similar document would be developed at the time budgeted funds are expended. The decision was made to formally ask each committee annually for a Business Plan.
4. All of the 2016/17 MBOs are complete except for the following:
 - #1 Make the presentation of finance/budget easier to understand for the Board
 - #3b Cost of new committees

June 24, 2016

Date



Bjarne Olesen, Chair

Building Energy Quotient Committee

St. Louis Annual Meeting
June 2016

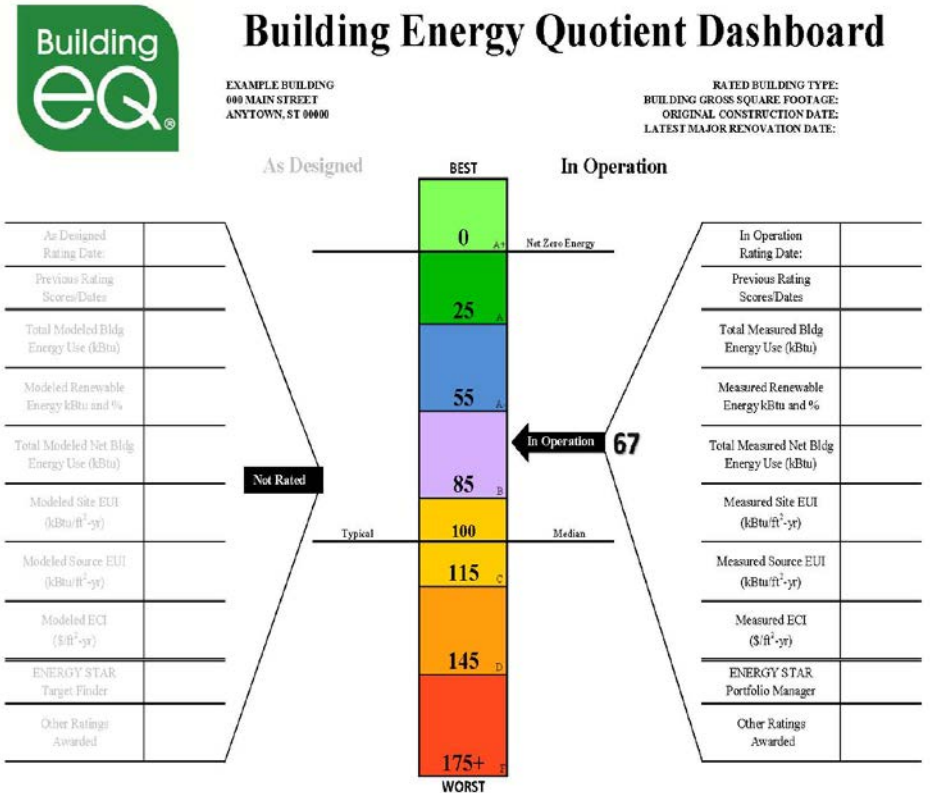


Building
eQ[®]

The logo consists of a dark green rounded square containing the word "Building" in a white sans-serif font above the lowercase letters "eQ" in a larger, white, stylized font. A registered trademark symbol (®) is located to the right of the "Q".

Today's Objectives

- Update on refocusing Building EQ program
- Marketing plan
- Web portal
- Collaborations
- Outreach
- Looking ahead



A stylized, semi-transparent image of a city skyline with various skyscrapers and buildings, set against a light blue background. The skyline is positioned at the top of the slide, behind the main title.

Refocused Role for Building EQ

- Maintain labeling and rating program
 - Proposing Building EQ as alternative compliance path for LEED EBOM
 - Participating with NYSERDA efforts
 - Growing international interests
 - Opportunities with utilities and efficiency program administrators
- Greatest value: Building EQ as framework for realizing energy improvements in existing buildings
 - Actionable recommendations for improving building energy performance
 - Standard and consistent process
 - Platform for integrating and promoting ASHRAE standards (e.g., SPC 211P), guidelines, and publications
 - Vehicle for delivering related education and certification

A stylized, blue-tinted image of the Orlando skyline, featuring various skyscrapers and buildings against a light blue background. The title "Orlando Plan" is overlaid in the center in a dark blue, sans-serif font.

Orlando Plan

- Refocus Marketing
 - Message: Building EQ is the most comprehensive assessment program providing actionable recommendations for today's commercial buildings
 - Committee approved marketing concept
 - Godfrey developing marketing implementation plan
- Develop Web Portal
 - Online data entry
 - Data exchange with Portfolio Manager and others
 - Connection to other ASHRAE online products and services
 - Generate data on use of Building EQ as assessment tool

A stylized, semi-transparent image of the Orlando skyline is positioned at the top of the slide, serving as a background for the title. The buildings are rendered in shades of blue and green, with a bright yellow sunburst effect behind them.

Orlando Plan

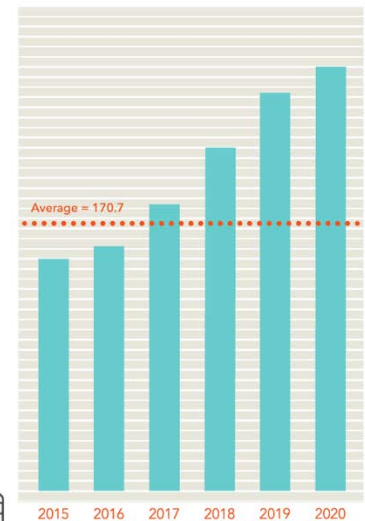
- **Coordination and Cooperation**
 - Closer alignment with EPA and DOE
 - Consolidator rather than competitor
 - Opportunity to translate and reconcile disparate set of existing ratings
 - Coordinate with ISO/CEN activities
 - Utilities and energy efficiency program administrators
- **Foster Labeling Potential**
 - Mandatory US labeling and rating efforts (state, municipal)
 - International programs, including non-CBECS databases

Marketing

- Godfrey has completed contract to survey market, develop brand messaging platform, develop marketing concepts, and prepare implementation plan
- Committee has worked with ASHRAE marketing staff to identify short-term needs
- Committee has requested proposal from Godfrey to prepare branding toolkit based on “Advance” concept
- Expect to take *à la carte* approach to future implementation of plan

ADVANCE

Take on a bright, optimistic tone and a friendly visual presence to introduce a program that actively helps people get better performance from the spaces they manage.



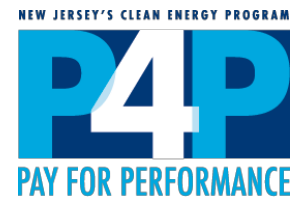
A stylized, semi-transparent image of a city skyline with various skyscrapers and buildings, set against a light blue background. The skyline is positioned at the top of the slide, behind the title.

Web Portal

- Requested funds for development of web portal
- Committee has prepared functional specification to solicit bids if approved
- Features:
 - Easier user input and preliminary data checking
 - Reduced staff time for submission processing
 - Enhanced information and control of ASHRAE assets
 - Data exchange with EPA, DOE, Architecture 2030
 - Coordination with Standard 211P (energy audits)
 - Designed to reconcile multiple rating systems and databases
 - Future capability to incorporate customized databases and baselines (for fee?)

Collaborations

- Voted to align our baseline methodology with EPA for 21 building types in North America
- USGBC considering our proposal for EBOM ACP
- Adopting DOE BuildingSync data exchange and evaluating DOE Building Energy Asset Score
- Participating in NYSERDA National Labeling Group
- Working to include Building EQ as compliance path for New Jersey Pay for Performance (P4P) incentive program
- Working with GGAC on local, state, national, and international opportunities
- Opportunities to coordinate with APPA performance measurement services





Outreach

Education

- Developing eLearning courses
- Participating in Presidential Ad Hoc to deliver university course through student branches
- Exploring APPA coordination for integration with university course

International

- Interest from Hong Kong, Malaysia, Thailand, Dubai
- Incoming Chair Hoy Bohanon delivered series of DL presentations in Asia in April
- Targeting Thailand as strong opportunity for rating system and university course

A stylized, blue-tinted silhouette of a city skyline with various skyscrapers and buildings. The title 'Looking Ahead' is overlaid on this background in a large, bold, black font.

Looking Ahead

- Expect to have branding toolkit in three months
- If funding is approved, expect to have web portal beta by Las Vegas meeting
- Launch marketing effort to promote new focus and web portal with new branding
- Presidential Ad Hoc expected to complete university course for student branches by Las Vegas meeting
- Research project underway (2 year duration) to relate design standards and ratings (e.g., 90.1, 189.1, LEED, As Designed) with operational ratings (e.g., Portfolio Manager, In Operation)

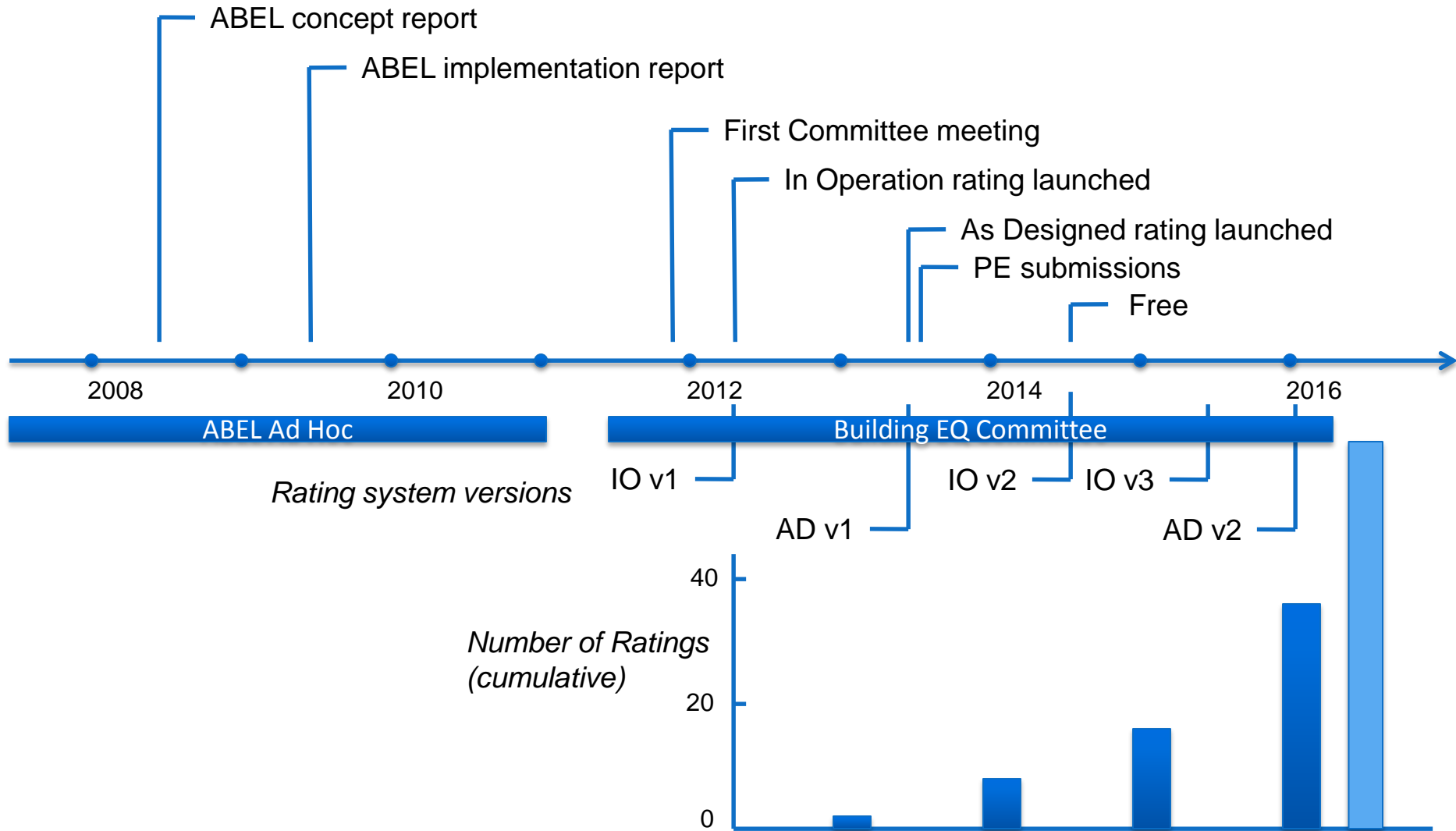
A stylized, blue-tinted silhouette of a city skyline with various skyscrapers and buildings, set against a light blue background with faint sunburst patterns.

Questions?



www.buildingenergyquotient.org

Building EQ Timeline



EPA ENERGY STAR® and Portfolio Manager

- Portfolio Manager is an online portal for benchmarking existing commercial building energy performance in approximately 80 different building categories
 - Track building performance (energy, water, emissions, etc.) and compare with other buildings in Portfolio Manager
- ENERGY STAR® score available for 21 building types
 - Uses statistical analysis of CBECS data to compare with national averages for peer buildings
 - Score (1-100) represents percentile of energy performance among peers
 - ENERGY STAR® label available for score of 75 or greater, i.e., energy performance better than 75% of existing buildings in peer group
 - ENERGY STAR® label requires PE to certify data
 - EPA will recalculate ENERGY STAR® scores with new 2012 CBECS data in 2018

**REPORT TO EXCOM ON CLIMA 2016 ADVISORY COMMITTEE
ASHRAE ADVISORY COMMITTEE FOR CLIMA 2016
CONFERENCE REPORT**

SUBJECT: CLIMA 2016 IN AALBORG, DENMARK

DATE: 6/15/2016

CLIMA 2016 took place in Aalborg May 22 to 25. The program consisted of:

- 41 scientific sessions in which 500+ presentations were made.
- 25 REHVA Workshops (2 ALI sessions)
- 6 IEA Annex Sessions and 7 IEA Workshops
- 5 EU Project Sessions
- 5 Industrial Sessions with a trade exposition
- 3 Technical Tours
- 2 Student Competitions

The table below compares the 2016 CLIMA with previous editions.

Year	City	Papers	US/Can Authors	Attendance	Other
1985	Copenhagen	400+	80	1000	
1989	Sarajevo	400	35	600+	
1993	London	229	30	500	
1997	Brussels	151	21	400	
2001	Naples	300	21	500	
2005	Lausanne	300	47	350	15 REHVA Workshops
2007	Helsinki	480	43	1000	19 REHVA Workshops
2010	Antalia	517	60	830	25 REHVA Workshops; 3 ALI
2013	Prague	702	39	911	25 REHVA Workshops; 2 ALI
2016	Aalborg	500 +	30	875	25 REHVA Workshops, 2 ALI

It is estimated that of the 875 registrants, 200 were professors of HVAC technology and 350 were students, either at the PhD level or recent PhD graduate level. The conference focused on presentation of academic and research works and is an effective gathering place for that constituency – especially Europe (Italy, Finland, Spain, Denmark, Netherlands, Slovakia, Czech Republic in particular). An increasing number of Asians attended compared to previous years; supporting organizations included China Heating Ventilation and Air-Conditioning (CHVAC), Society of Heating, Air-Conditioning and Sanitary Engineers of Japan (SHASE).

CLIMA was attended by ASHRAE representatives:

- David Underwood, President
- Bjarne Olesen, Treasurer and member of Organizing Committee
- Costas Balaras, chair, ASHRAE Coordinating Committee CLIMA 2016
- William Bahnfleth, member, ASHRAE Coordinating Committee CLIMA 2016
- Eckhard Groll, member, ASHRAE Coordinating Committee CLIMA 2016
- Steve Comstock, staff liaison to ASHRAE Coordinating Committee CLIMA 2016

President Underwood welcomed attendees on behalf of ASHRAE at the Opening Session.

The ASHRAE Coordinating Committee provided input to the host organizers, facilitated activities to enhance the Society's role as an international technical resource for the engineering profession, solicited papers from ASHRAE members in North America and abroad, assisted in review of papers, selected the ASHRAE entrant in the first REHVA World Student Competition, and selected the ASHRAE PhD student participant.

ASHRAE held 2 ALI sessions at the Congress:

- Commissioning of High Performance Buildings: Attended by 19 individuals (of which 11 were non-members and 17 were either PhD students or recent PhD graduates).
- Design of High Performing Health Care Facilities: Attended by 13 individuals (of which 4 were non-members and 9 were PhD students or recent PhD graduates).

The ASHRAE entrant in the first REHVA World Student Competition for students earning Bachelors or Masters Degrees placed second. Entrants were from Europe, Japan, Korea India, and China along with the ASHRAE representative (student from Canada). ASHRAE also awarded an attendance honorarium to a PhD student who authored the best paper at the proceeding ASHRAE Winter Conference.

ASHRAE operated a sales desk where publications were sold and membership information distributed.

ASHRAE hosted a dinner on Sunday evening for the REHVA Board and a reception on Monday evening for ASHRAE members and prospective members in attendance (attended by approximately 125 individuals).

Prior to CLIMA, ASHRAE representatives attended the REHVA General Assembly and REHVA Committee meetings. The minutes of the REHVA/ASHRAE MOU Coordinating Committee will be issued by REHVA. Noted at the meeting was the following:

- The next CLIMA will take place in Bucharest in May 26-29, 2019.
- ASHRAE reported the MCI study was not yet approved.
- Bjarne Olesen described his plans to create a region in Europe and stated an ad hoc would be formed to study the issue.

- REHVA officials stated their desire to assist ASHRAE in providing services to ASHRAE members in Europe.
- ASHRAE's role as secretariat of the IEQ Global Alliance was reviewed.
- The presidents of REHVA and ASHRAE signed a letter to be sent to ISIAQ expressing their concern about the new ISIAQ meeting schedule which conflicted with the ASHRAE IAQ conference and CLIMA schedules.

For your information, the next REHVA General Assembly will take place at Loughborough University, Leicestershire, England, April, 7 and 8, immediately following the CIBSE / ASHRAE Technical Symposium which will occur April 5 and 6.

This completes the charge of the CLIMA 2016 Advisory Committee and we thank ExCom for the opportunity to serve the Society through this the Presidential Ad Hoc and support ASHRAE's role as an international organization in this major event.

Postponed Motion – LBNL/ASHRAE Memorandum of Understanding Attachment A

Mr. Olesen reported that this is the second version of the memorandum of understanding to establish a private/public agreement to work on issues such as “the internet of things” and building control systems. At the present time there is no fiscal impact but research dollars may be requested in the future.

Mr. Olesen moved

- (2) that Excom recommends to the Board of Directors the approval of the Lawrence Berkeley National Laboratory (LBNL)/ASHRAE Memorandum of Understanding.

Discussion included:

- Is the LBNL/ASHRAE alliance the only groups involved or are there other groups to be contacted to join?
- Are the agreements research provisions aligned with ASHRAE’s routine research approval process?
- Any current financial commitment by ASHRAE?
- Other MOUs may be in conflict with this MOU.

Mr. Littleton will research the MOUs that potentially conflict with an LBNL/ASHRAE MOU especially those with the Department of Energy.

- (2A) that the motion to approve the LBNL/ASHRAE MOU be postponed until the meeting in St. Louis.

MOTION 2A PASSED (Unanimous, CNV)

Memorandum of Understanding

between

**The Regents of the University of California, as Management and Operating Contractor for
Lawrence Berkeley National Laboratory**

and

ASHRAE

On collaboration in the field of Energy Technologies, Energy Efficiency, Urban Systems and Monetization of Efficiency and Resiliency

This Memorandum of Understanding (MOU) is between The Regents of the University of California, manager and operator of the Lawrence Berkeley National Laboratory (LBNL) and ASHRAE, collectively referred to as “Participants” or separately as “Participant.” LBNL is a U.S. Department of Energy National Laboratory managed and operated by The Regents of the University of California pursuant to Contract No. DE-AC02-05CH11231 (Contract 31). ASHRAE advances the arts and sciences of heating, ventilating, air-conditioning and refrigeration to serve humanity and promote a sustainable world.

1. Purpose

The purpose of this MOU is to explore potential future collaboration between the Participants in the fields of energy efficiency; energy technologies and policy; monetization and financing of sustainable buildings, energy analytics necessary for asset valuation and new growth capital on worldwide basis; and other topics determined to be of mutual interest. To accelerate the attainment of US and international future energy use goals, LBNL is engaged in creating the **Global Partnership Alliance (GPA)** – a **public private partnership**, which would be the vehicle for this collaboration.

The Participants understand that this MOU is not intended to, and does not, create legally binding obligations but serves only as a record of their intention to identify areas of potential future joint interest and possible future collaborations. Any activities by LBNL under this MOU, or any subsequent agreements, should comply with the terms and conditions of Contract 31.

2. Proposed Areas of Cooperation

The Participants express their intention to collaborate in one or more of the following areas:

- a) Development of co-marketing plans in regards to ASHRAE sponsored conferences, meetings, working groups and other online channels as they relate to fields of mutual interest and furthering **development of GPA**.
- b) Research, development and dissemination relating to the **GPA strategic initiatives** of

Guaranteed Performance, Integrated Systems, and **Internet Buildings Operating System**, including the development of best practices and tools and the furtherance of their adoption by means of standards and best practice guidelines, education and training and other such activities of mutual interest to the Participants. The Participants would jointly develop scopes of work (SOW) for these activities in the context of ASHRAE Multidisciplinary Task Groups, comprised of ASHRAE members, GPA representatives and other acceptable interested persons. The resulting projects would be co-funded by the Participants and by other organizations acceptable to the Participants. An **open Request for Proposals would be issued and managed by ASHRAE. Sole source proposals from GPA that meet jointly agreed criteria would be considered. ASHRAE would co-fund selected projects from its normal research budget.**

- c) Exploration of organizational opportunities within ASHRAE for the purpose of maximizing the success of strategic initiatives, including fast market adoption of relevant outcomes of GPA strategic initiatives.

The scope of above activities and cooperation may be changed or extended to other areas by separate, mutual written agreement of the Participants.

3. Designated Representatives

- A. To administer the implementation of this MOU, each Participant should designate one principal coordinator in charge of the collaboration, through whom all requests and plans of that Participant should be made.
- B. The principal coordinators may hold meetings when necessary to discuss matters related to cooperation under this MOU.
- C. The principal coordinators, and other senior representatives of each Participant should meet annually in order to:
 - Ensure ongoing advancement of collaborative projects.
 - Keep each respective organization informed of major initiatives.
 - Discuss new opportunities for collaboration.
- D. For purposes of this MOU, the designated representative for LBNL is intended to be the Energy Technologies Area (ETA) Associate Laboratory Director, or LBNL designated principal coordinator. The designated representative for ASHRAE is intended to be a member of the Executive Committee or other ASHRAE designee.

LBNL shall take responsibility for initiating the first annual liaison meeting. Action items with assigned responsibilities shall be recorded at each meeting. The parties responsible for ensuring this MOU is actively pursued through the term of the agreement are:

For: LBNL

For: ASHRAE

Name: _____

Name: _____

Title: _____ Title: _____

4. Commencement, Modification and Discontinuation

- A. Cooperative activities under this MOU may commence upon signature of all Participants and continue for a three (3) year period, unless discontinued in accordance with Paragraph B of this Section 4.
- B. The Participants may discontinue this MOU at any time in writing. A Participant that wishes to discontinue its participation in this MOU should endeavor to provide at least thirty (30) days written notice to the other Participant.
- C. This MOU may be modified in writing by mutual consent of the Participants, and may be extended for additional periods.

5. General Terms

- A. Each Participant should conduct the activities contemplated by this MOU in accordance with all applicable laws, regulations and other requirements to which it is subject, including, without limitation, export control laws and environment, health and safety laws and regulations.
- B. This MOU does not create any legally binding obligations.
- C. The conduct of cooperative activities contemplated by this MOU is subject to the availability of funding, personnel, and other resources.
- D. Each Participant is responsible for the costs it incurs in participating in cooperative activities under this MOU.

Signed in duplicate.

THE REGENTS OF THE UNIVERSITY
OF CALIFORNIA, LAWRENCE
BERKELEY NATIONAL LABORATORY

ASHRAE

By: _____

By: _____

Name: Dr. A. Paul Alivisatos

Name: _____

Title: Laboratory Director

Title: President

Date _____

Date _____

Nominating Feedback on Members Council Motion Regarding Term of Service

From: dunderwood@hvacrtdu.com
Sent: Saturday, April 23, 2016 1:06 PM
To: Littleton, Jeff; tim.wentz@windstream.net; Bjarne W. Olesen; sheila.hayter@nrel.gov
Subject: FW: Nominating Feedback on Members Council Motion Regarding Term of Service

Jeff,

Please put this on the St Louis agenda.

Thanks,

David

From: William Bahnfleth [<mailto:WBahnfleth@engr.psu.edu>]
Sent: Thursday, March 31, 2016 8:28 AM
To: David Underwood
Cc: thphoenix@mmpa.com; mtownsend (MTownsend@ashrae.org)
Subject: Nominating Feedback on Members Council Motion Regarding Term of Service

Dear President Underwood,

As you are aware, a motion passed by Members Council at its spring 2016 meeting regarding Nominating Committee term of service/eligibility to serve will come before the Board at some point in the future.

This e-mail is Nominating Committee's response to your request for feedback on the motion.

On March 21, 2016, the following message was sent to all members of the Nominating Committee:

Dear Nominating Committee Members 2015-2016

At its web meeting on March 2, 2016, Members Council this passed the postponed motion dealing with term of service on Nominating Committee in the following form. (I am showing clean copy for clarity.) It will now move forward to the Board of Directors for a final approval vote, presumably at the Annual meeting in June and with effect starting in 2017-2018. Society Rules Committee has reviewed and approved the proposed language.

Members Council Postponed Motion 5E (11/5/2015) / Motion 12 (01/26/2016):

That the Nominating Committee ROB 2.415.002.3, Term of Service below be revised as shown effective Society year 2017-2018.

2.415.002.3 Term of Service (86-06-22-16/94-01-23-01)

A. Members and Alternates are elected annually for a single year of service. (SBL 7.6)

- B. Committee Members and Alternates may serve no more than a total of 8 years on the committee, whether BOD elected or regionally elected. Service as chair or vice chair shall not be counted in this 8-year maximum service. A person who has attended a fall or Winter Meeting of the committee is considered to have served one full year. A maximum of four years of service during any ten year window will be allowed (excluding service as vice chair or chair).*

Background: This will give regions more flexibility when nominating candidates.

There are two significant changes to the prior rule:

1. Eligibility is now extended to eight (8) one-year terms from the previous six (6), with service as chair or vice chair not counted against the total, increasing the pool of eligible members substantially.
2. No more than four (4) one-year terms may be served in any 10-year period, not including terms served as chair or vice chair. In other words, the shortest period of time during which an individual could exhaust their eligibility is increased from six years to 14 years (e.g., 4 consecutive terms + 6 years off + 4 consecutive terms).

Although the background for the motion states that the change “will give regions more flexibility when nominating candidates,” the discussions of the motion in which I participated were focused on the concern that Regions frequently put inexperienced members on the committee who exhaust their eligibility too early in their ASHRAE service and are prevented from serving later when they are more experienced and in a better position to contribute. Certainly, the extension of the minimum time frame for completion of eligibility from 6 to 14 years should be helpful from that perspective.

By rule, this motion requires neither consultation with nor vote of approval from Nominating Committee. However, and very appropriately, President David Underwood has requested that comments be solicited from Nominating Committee and forwarded to the Board as information to be considered when the motion is discussed there. If you wish to comment on this change, please forward your remarks to Mary Townsend (MTownsend@ashrae.org) by Monday, April 4 with copy to me (wbahnfleth@psu.edu). We will assume that “silence implies consent” so if you agree with the change as moved by Members Council, no response is necessary.

Best regards,

Bill Bahnfleth
2015-2016 Nominating Committee Chair

Two written response to this request were received: one from NC Vice Chair Tom Phoenix and one from Region XI representative Eileen Jensen. In addition, Mr. Phoenix and I had occasion to discuss the motion with Rob Craddock, also representing Region XI.

I would summarize these comments as follows:

-Region XI currently uses a six-year cycle (3 years alternate, 3 years member) that would be precluded by the proposed rule change (maximum 4 years in a 10 year period, so there could be no more than four consecutive terms). They feel that three years as alternate are needed to build sufficient experience to function as the voting member. Change would create a short term issue with restructuring their

transition plan. (Based on Eileen Jensen's written comment essentially supported by Rob Craddock's comments during a phone call with Tom Phoenix and myself.)

-The current rule does not cause inexperienced members to serve, it permits them to serve if selected . The BOD nominating subcommittee and CRC should apply appropriate standards when doing their work. If this is not sufficient, the qualifications for service could be enhanced by requiring Society experience such as service as RVC, member of standing committee, and other comparable positions. (Craddock, Phoenix, and I concur in this view.)

The verbatim comments from Tom Phoenix and Eileen Jensen are copied at the end of this summary.

My further observations are that:

- 1) The great majority of members had no comments, indicating indifference to or agreement with the proposed change.
- 2) Adoption of the motion would help prevent members from exhausting their eligibility quickly, but creates a problem for at least one Region (XI) that was unanticipated. Perhaps there are other consequences that would only become apparent once the new rule is in effect. More examination of the consequences of implementation may be needed, which might lead to a decision to keep the existing rule or change the proposed one. For example, has anyone looked at the consequences of four terms in a ten year window compared relative to five terms, or compared to a rule that prohibits more than, say, three consecutive years of service...or 2, or 4...? I don't believe so. This would be a good task for an ad hoc committee.
- 3) I was surprised to find that the opinion that Nominating Committee service is a "6-year commitment" or a "4-year commitment" is fairly prevalent at the Regional level. It is absolutely clear in the ROB that a term is one year and that a member may serve up to 6 terms. Having chaired the Board subcommittee for NC nominations, I can say that when we proposed members for Board-elected positions, the main considerations were (not necessarily in priority order) were regional balance as required by the rules, and diversity. In addition , my recollection is that in the two years I was involved, it was explicitly a goal to rotate out members who had served several consecutive terms and rotate in a reasonable number of new members – another aspect of diversity: cumulative experience. The choice to treat Regional service as a continuous four or six year commitment is not prohibited by the rules, but neither is it required and, if that is the practice, Regions have a responsibility to fill their positions with people who are ready to serve or can become effective in a relatively short period of time. Perhaps this motion provides an opportunity for rethinking of such practices.
- 4) Based on my own two-year service on NC as vice chair and chair, I would say that understanding how ASHRAE works and, therefore, what kind of leaders it needs, combined with as much personal knowledge of potential candidates is what is needful – and are primarily not obtained by attending NC meetings. The mechanics of the Society committee itself are not terribly complicated.

It is up to the Board to decide what to do with this motion. Nominating Committee, as a body, makes no recommendation one way or the other, but I think this feedback may help to seed the conversations among the officers and directors that will lead to an appropriate outcome.

Please feel free to contact me if you have any questions regarding this response.

Full comments from Tom Phoenix and Eileen Jensen follow.

Best regards,

Bill Bahnfleth
2015-2016 Nominating Committee Chair

Comments from Tom Phoenix (3/21/16)

Bill and all,

It has been a couple weeks since the email threads about this Nominating Committee change were bouncing around. Now that the discussion has come back, I think it is time to weigh in. In an earlier email, you said that “silence implies consent”, so let me be loud and clear, and certainly not silent. I have been thinking about this a lot in the last couple weeks, and, to me, this is an excellent example of a solution that is looking for a problem to solve. I have had several conversations with people from Members Council, and I have yet to hear a good reason for making this change.

I do clearly understand the desire to give someone the opportunity for extra service on Nominating as they gain more experience in ASHRAE. However, the way this motion is written, I do not see how this helps anyone. If this new rule is implemented, a person gets to serve for up to 4 years, and then they have to wait 10 years before they can serve again! [WB NOTE – THE PROPOSAL APPROVED BY MEMBERS COUNCIL IS NO MORE THAN 4 TERMS IN A 10 YEAR WINDOW AND 8 TOTAL, WHICH STRETCHES MINIMUM TIME TO COMPLETE 8 TERMS TO 14 YEARS BUT DOES NOT REQUIRE A LONG HIATUS.] By that time no one will remember who they are, so there is a good chance that they would never be asked to be on Nominating again. Plus, the candidates they discussed when they were first on Nominating will be long gone by the time they get back to Nominating; so they would have to learn about a new group all over again. What does this waiting period really accomplish? [Side note: My personal opinion is that after 6 years, no matter how young or old you are, if you don't know the workings of the Society and the people who are working for the Society, you shouldn't have been on Nominating in the first place. I served on Nominating for 6 years straight early in my ASHRAE career, and I became familiar with just about everyone whose name came before the committee, and who was active in Society, after only the first year or so].

If the goal is to have more experienced people on Nominating, which I support, there are certainly much simpler ways to accomplish that goal. You could change the rules to require some level of experience in ASHRAE before serving on Nominating; or you could just change the 6-year maximum term to 8 or 10 years. The motion that just passed Members Council, however, is a really bad idea; and I would encourage the current ASHRAE leadership to make sure it goes no further.

Thanks.

Tom

Comments from Eileen Jensen (3/23/16)

Thank you for giving us the opportunity to become aware of this motion, and to allow us to comment on it. The discussions that indicate this change was proposed due to the concern that Regions frequently put inexperienced members on the committee is interesting to me. Before I ever served on Nominating, some very experienced Nominating Members explained to me that the reason we have a 6 year commitment (3 as Alternates, and 3 as Members), was so people would have an opportunity to gain any experience they may be lacking as they come onto the committee. To actually reduce that time to 4 years would run counter to that intent. Speaking from personal experience, I was very grateful to have the time to learn the ropes as the Regional Alternate before I stepped into the Member role and I do not believe 2 years is sufficient time to do that. I would also point out that because we don't keep written meeting minutes for much of the work we do, we rely heavily on the institutional knowledge of the members present at any given time. If we shorten that time frame, we risk losing some of that knowledge, to the detriment of all.

Bottom line, I think the current 6 year cycle is a better approach. If someone still wants to find a way to bring people back into Nominating after the 6 year cycle, maybe we could help craft something that would work.

However, in recognition of the possibility that this motion may get passed, I would like to point out that they will be creating a similar problem with staggered roll-offs of Regional Members, as we are currently trying to deal with in our RVC positions. To implement this all at once in 2017-18 would cause unnecessary chaos. I would hope that they would instead implement this in a phased manner so that we don't have too many people rolling off at the same time.

Thanks again for considering these comments. Please let me know if you have any questions.

Eileen

William P. Bahnfleth, PhD, PE, FASHRAE, FASME
Professor and Director, Indoor Environment Center
Department of Architectural Engineering
The Pennsylvania State University
104 Engineering Unit A
University Park, PA 16802
814.863.2076

Action may not always bring happiness; but there is no happiness without action. ~Benjamin Disraeli

Never confuse movement with action. ~Ernest Hemingway

Proposal for ASHRAE membership of INIVE.

I suggest that ASHRAE should become member of INIVE. This is a network on Ventilation and Energy performance. INIVE collect a lot of information and are running several projects like Build UP and AIVC. This will give ASHRAE members access to a lot of valuable information.

There is a yearly fee for the membership (5-7.000€). I am in contact with INIVE to clarify the exact fee and the details on information that will be available for our members.

INIVE eeig (International Network for Information on Ventilation and Energy performance) www.inive.org

1. A guiding hand in the huge information minefield

Over the past 30 years, there has been a tremendous growth in the volume of available knowledge on indoor climate, energy efficiency and the ventilation of buildings. It is therefore increasingly important to efficiently handle the available information, to make it accessible in a format suitable for the (various types of) users, to identify major trends and to have intelligent centralisation of information. This kind of work can be done at the level of an individual organisation or country, but there clearly are major synergetic benefits if done in an international and multi-organisational context. This is why INIVE (International Network for Information on Ventilation and Energy performance) was founded in 2001.

2. About INIVE

INIVE is a registered European Economic Interest Grouping ([EEIG](#)), whereby from a legal viewpoint its full members act together as a single organisation and bring together the best available knowledge from its member organisations. The present full members are all leading organisations in the building sector, with expertise in building technology, human sciences and dissemination/publishing of information. They also actively conduct research in this field - the development of new knowledge will always be important for INIVE members.

INIVE has multiple aims, including the collection and efficient storage of relevant information, providing guidance and identifying major trends, developing intelligent systems to provide the world of construction with useful knowledge in the area of energy efficiency, indoor climate and ventilation. Building energy-performance regulations are another major area of interest for the INIVE members, especially the implementation of the European Energy Performance of Buildings Directive.

With respect to the dissemination of information, INIVE EEIG aims for the widest possible distribution of information.

The following organisations are members of INIVE EEIG :

- [BBRI](#) - Belgian Building Research Institute - Belgium
- [CETIAT](#) - Centre Technique des Industries Aérauliques et Thermiques - France
- [CSTB](#) - Centre Scientifique et Technique du Bâtiment - France
- [IBP](#) - Fraunhofer Institute for Building Physics - Germany

- [SINTEF](#) - SINTEF Building and Infrastructure - Norway
- [NKUA](#) - National & Kapodistrian University of Athens - Greece
- [TNO](#) - TNO Built Environment and Geosciences, business unit Building and Construction - Netherlands

The following organisations are associated members or have a collaboration agreement with INIVE EEIG:

- [eERG](#) - End-use Efficiency Research Group, Politecnico di Milano, Italy
- [ENTPE](#) - Ecole Nationale des Travaux Publics de l'Etat, Vaulx en Velin, France
- [TMT US](#) - Grupo Termotecnia, Universidad de Sevilla, Spain

- **Projects**

- [AIVC](#)
- [BUILD UP](#)
- [DYNASTE](#)
- [SAVE ASIEPI](#)
- [TightVent Europe](#)
- [Venticool](#)
- [QUALICheck](#)



Shaping Tomorrow's Built Environment Today

BUILDING ENERGY DATA: A CRITICAL RESOURCE

THE ISSUE

Reducing the energy use of buildings requires the availability of a robust database of building energy data to define the baseline against which progress can be measured. Because buildings account for approximately 40% of U.S. energy use¹ and about 74% of U.S. electricity consumption², they can be a significant source to reduce energy use. However, limited data exists to actually understand the energy use associated with individual buildings and the factors that affect that energy use. Despite increased focus on improving the ability for all new buildings to use energy more efficiently, existing buildings represent the greatest source of energy use within the sector, and when initially occupied, new buildings become existing buildings.

Better understanding of the energy use characteristics of existing buildings will clarify the relationship between intended and actual performance. Understanding these gaps can result in better building design, inform operations and maintenance practices, and provide input to energy codes and standards that establish design and construction criteria for new and renovations and additions to existing buildings.

ASHRAE'S ROLE

As a technical society whose priorities include reducing the energy use of buildings, ASHRAE has the resources and expertise to guide the development of more energy efficient buildings. ASHRAE disseminates best practices to professionals across the building sector by developing standards, guidance, and educational resources. However, those best practices must be informed by robust data on the actual energy performance of buildings. To help building owners and operators understand the energy use of their buildings and opportunities for improvement, ASHRAE has developed a building performance and building energy labeling program (the Building Energy Quotient) that requires valid data across building types and climate zones, and is updating its Standard 105, which addresses measuring and expressing building energy performance.

ASHRAE'S VIEW

Existing federal and state programs, like the U.S. Energy Information Administration's Commercial Buildings Energy Consumption Survey (CBECS), serve as the baseline for many initiatives designed to reduce energy consumption in both new and existing buildings. The importance of this data will continue to grow as the nation and the building community focus on reducing energy use.

Recommendations for maintaining and enhancing the availability of building energy data:

- Adequately fund the U.S. Energy Information Agency to allow for the timely release of robust datasets focused on the energy use of buildings and increase their coverage. Also support the agencies and programs that make use of this data, including EPA's Energy Star program and the Department of Energy's Building Technologies Program.
- Support the development and implementation of technically sound private sector programs designed to reduce building energy use and report on the actual energy use of buildings, such as ASHRAE's Building Energy Quotient program.
- Support the adoption, application, and use of ASHRAE Standard 105 to provide a uniform and robust method for measuring and expressing building energy performance.

¹ U.S. Department of Energy. 2011. "2011 Buildings Energy Data Book". <http://buildingsdatabook.eren.doe.gov/TableView.aspx?table=1.1.3>

² U.S. Department of Energy. 2011. "Buildings Share of U.S. Electricity Consumption (Percent)". <http://buildingsdatabook.eren.doe.gov/TableView.aspx?table=1.1.9>



Shaping Tomorrow's
Built Environment Today

CLIMATE CHANGE AND BUILDING ENERGY EFFICIENCY

THE ISSUE

Improving building energy efficiency reduces greenhouse gas (GHG) emissions. GHGs contribute to rising global temperatures. Heating, ventilating, air conditioning, and refrigeration (HVAC&R) systems directly contribute to GHG emissions through CO₂ emissions associated with the energy needed to operate buildings and building systems, and to a lesser extent indirectly through the release of refrigerants if not properly contained. Buildings also account for about 40% of America's total energy consumption³. Therefore, by implementing building energy efficiency, climate change can be forestalled, as indicated by the International Panel on Climate Change (IPCC), which found that the global building sector has the greatest potential for economical GHG mitigation between now and 2030⁴.

ASHRAE's ROLE

ASHRAE and its members help policymakers promote the implementation of energy efficient design practices and sustainable technologies, most notably through ASHRAE Standard 189.1, that addresses sustainability in buildings and building sites. In addition, ASHRAE's Building Energy Labeling Program, called Building Energy Quotient (bEQ), has been developed to help building owners manage their energy use via in depth performance analyses. Our expertise on GHG emissions reductions can help policymakers address climate change.

ASHRAE's VIEW

ASHRAE encourages policymakers to implement integrated approaches including:

- Funding for research that improves energy efficiency/utilization in HVAC&R technology to minimize energy-use CO₂ emissions.
- Funding for building science research leading to advanced equipment and systems, and increased understanding of how building design affects long-term operations and responds to climate change.
- Full evaluation of building climate impacts and energy performance.
- Policies that address both existing and new buildings.
- Consideration of all environmental impacts attributable to buildings.
- Opportunities to make buildings more energy efficient.
- Policies encouraging building owners and operators to optimize energy efficiency.
- Promotion of life-cycle-cost analysis to building owners to encourage sustainable building construction, operation, and renewal.
- Strategies that consider all phases of a building's life, including design, construction, commissioning, and operation; recognizing that operational energy use is a dominant factor in total impact.

ASHRAE Resource Documents

ASHRAE Position Document on Climate Change

International Green Construction Code and ASHRAE Standard 189.1

ASHRAE Standard 90.1

ASHRAE Standard 90.2

ANSI/ASHRAE Standard 105

ASHRAE Standard 62.1ASHRAE Standard 62.2

ASHRAE Standard 34

ASHRAE Standard 15

ASHRAE Advanced Energy Design Guides for Buildings

ASHRAE Energy Efficiency Guide for Existing Commercial Buildings: The Business Case for Building Owners and Managers

ASHRAE Energy Efficiency Guide for Existing Commercial Buildings: Technical Implementation

³ U.S. Department of Energy. 2011. "2011 Buildings Energy Data Book". <http://buildingsdatabook.eren.doe.gov/TableView.aspx?table=1.1.3>

⁴ IPCC. 2007b. Mitigation of Climate Change. Contribution of Working Group II to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change. Geneva: International Governmental Panel on Climate Change.



Shaping Tomorrow's Built Environment Today

COMMERCIAL BUILDING ENERGY USE DISCLOSURE

THE ISSUE

Commercial buildings (i.e., offices, schools, stores, similar nonresidential facilities – whether publicly or privately owned) account for almost 20% of U.S. energy consumption⁵.

ASHRAE's ROLE

- ASHRAE helps policymakers understand the technical and implementation barriers that can prevent the market from obtaining cost-effective energy efficiency.
- ASHRAE is committed to developing and promoting building energy rating programs and other technical tools to assist the commercial building industry design, construct and operate the most energy efficient buildings feasible.
- ASHRAE disseminates credible evidence-based practices and technical information to professionals across the building sector by developing standards, guidance, and educational resources informed by robust data on the actual energy performance of buildings.

ASHRAE's VIEW

Public display and disclosure of the energy efficiency attributes of a building and its energy use intensity (EUI) will lead the market (i.e., building owners, lenders, tenants) to consider cost-effective energy efficiency improvements at the time of design and construction, during maintenance and operation, and in any subsequent renovations.

Energy efficient buildings should command more value in the real estate market, while buildings documented as having high energy use/operating costs should be perceived as having less value in the real estate market.

Policymakers should support development, adoption, and implementation of technically sound, cost-effective, public and private sector programs and standards aimed at reducing building energy use. To further these aims, policymakers can look to ASHRAE, which has the resources and expertise to guide the development of a more energy efficient built environment.

- ASHRAE's **Building Energy Quotient (bEQ)** rating program requires valid data across building types and climate zones; contains both As Designed (Asset) and In Operation (Operational) rating protocols; and builds in a high level of quality assurance by requiring building assessments to be performed by qualified professionals.⁶
- ASHRAE is developing **Standard 214P** which will provide a standardized approach and methodology for measuring and expressing building energy performance in a rating program.
- ASHRAE is updating **Standard 105**, which addresses measuring and expressing building energy performance⁷; and is developing **Standard 211P** which establishes consistent practices for conducting and reporting commercial building energy audits.⁸
- ASHRAE has published *Procedures for Commercial Building Energy Audits* and *Performance Measurement Protocols: Best Practices* to guide owners and operators in their decision-making.
- ASHRAE continues to update its high performance and energy efficiency related standards, such as 189.1, 100, 90.1, 62.1, 55, and 180.

Commented [D1]: Is this statement valid in assessing buildings with high density electrical use where this may be required to maintain mission critical activities?

⁵ U.S. Department of Energy. 2011. "2011 Buildings Energy Data Book". <http://buildingsdatabook.eren.doe.gov/TableView.aspx?table=1.1.3>.

⁶ For more information, see <http://buildingenergyquotient.org/>.

⁷ For more information, see <https://www.ashrae.org/standards-research-technology/standards-guidelines/titles-purposes-and-scopes#105>.

⁸ For more information see <https://www.ashrae.org/standards-research-technology/standards-guidelines/titles-purposes-and-scopes#SPC211P>.



Shaping Tomorrow's Built Environment Today

CONSENSUS STANDARDS: EXPERT SOLUTIONS TO MEET GLOBAL NEEDS

THE ISSUE

Consensus standards developed in the voluntary sector are essential for a sound global economy and to facilitate global commerce. Standards underlie communication about technology. Standards foster building technology innovation by providing a transparent baseline and needed metrics for assessing how that technology can impact building design and performance. They are necessary for comparing technologies in the expanding global marketplace. U.S. federal policy recognizes the value of voluntary consensus standards by requiring their use in regulations when consistent with agency policy and appropriate for agency purposes.⁹

Voluntary consensus standards are developed through the participation of any and all interested and affected stakeholders including manufacturers, users, and representatives of government and academia. Standards accreditors such as the American National Standards Institute (ANSI)², the International Organization for Standardization (ISO), and the International Electrotechnical Commission (IEC) follow several principles such as including consensus, openness, balance, transparency, and due process.

ASHRAE's ROLE

ASHRAE develops and publishes robust standards; many of which are adopted into building codes. ASHRAE standards establish recommended practice in the areas of indoor air quality, energy conservation and management, high-performance green buildings, and others. ASHRAE is one of only six standards-developing organizations in the U.S. that can self-certify that its standards have followed ANSI's procedures. ASHRAE also serves on U.S. Technical Advisory Groups (TAGS) for ISO Committees and in the role of international secretariat for ISO Technical Committees to help ensure that ASHRAE views are represented. These standards are supported by technical committees that develop publications and educational materials to assist in the application of ASHRAE standards.

ASHRAE's VIEW

Since voluntary consensus standards are used widely at all levels of government, it is important that the needs of government are addressed in ASHRAE standards. If not, the standards cannot be adopted and used, or must undergo time-consuming and costly revision.

Recommendations for government participation in the development and use of consensus standards for the built environment:

- Legislative and Executive Branch entities should support voluntary consensus standards in laws and regulations.
- Agencies should work with standards developers and industry to identify situations where societal interests could be addressed through the use of voluntary consensus standards and work together for common solutions.
- Governments should continue to foster and support the unique character and strengths of the public-private partnership in standards development as they pursue trade and other international agreements, regulatory harmonization, and legislative and regulatory approaches.
- Governments should support policies, both domestically and internationally, which ensure the continued ownership and control of the copyrights and trademarks of standards developers, or develop other mechanisms to cover the costs and value of these standards.
- Government agencies should increase participation in the development of voluntary consensus standards, by encouraging government experts to participate, through release time and expenses incurred.

⁹ The National Technology Transfer and Advancement Act of 1995 (P.L. 104-113) (NTTAA) and OMB Circular A-119



Shaping Tomorrow's Built Environment Today

ENERGY EFFICIENCY FOR BUILDINGS AND HVAC&R EQUIPMENT

THE ISSUE

In the United States, residential and commercial buildings account for approximately 40% of the total primary energy use. Specifically, heating, ventilation, air conditioning, and refrigerating (HVAC&R), and water heating are responsible for about 75% of residential¹⁰ and 54% of commercial building site energy use¹¹. Cost effective energy efficiency is critical for the economy, the environment and energy security.

ASHRAE members participate in integrated building design, operation and evaluation. They support building sustainability to assure safe, comfortable indoor environments while limiting the impact on the earth's natural resources. ASHRAE collaborates with other leading technical societies and is the leading developer of building energy standards. For example, federal law mandates ANSI/ASHRAE/IES Standard 90.1 as the basis for state energy codes for larger buildings. ASHRAE's 2013 version of Standard 90.1 improves minimum energy efficiency by approximately 37.7% from the 2004 edition of Standard 90.1 for regulated loads and almost 50% more efficient than 1999 edition. Other standards and guidance from ASHRAE include Standard 189.1 for the Design of High-Performance Green Buildings Except Low-Rise Residential Buildings, Standard 202 – Commissioning Process for Buildings and Systems, Standard 100 – Energy Conservation in Existing Buildings, and the Advanced Energy Design Guides which provide tools for going beyond minimum requirements. Additionally, ASHRAE promotes design, construction and operation of highly energy efficient buildings through its professional certifications, and by providing and disseminating technical information for the building and policymaking community.

ASHRAE helps policymakers address the technical and implementation barriers that can prevent the market from obtaining cost-effective energy efficiency.

ASHRAE'S VIEW

Congress should adopt legislation that improves building energy efficiency through equipment standards and performance-oriented building codes. Code-adopted standards can save more energy than any other policy tools, and consensus standards (e.g., ANSI/ASHRAE/IES Standard 90.1) help ensure technical and economic feasibility.

Congress should assure that federal policies related to energy efficiency support innovation, reduce market barriers, include full environmental considerations, and ensure that government leads by the example of outstanding design, construction, and operation of its own buildings, whether owned or leased. Making new technologies and practices mainstream is the key to win-win strategies for the owners, the economy and the environment. The federal government itself is the nation's largest building owner, so the potential savings from leadership are greatest when government sets the example, and as a result encourages building owners to follow suit.

Congress should appropriate increased funding for research, development, demonstration and deployment to advance energy efficiency and renewable energy technologies and practices. Funding by successive Administrations in Washington, DC has historically been based on technological innovation as a critical tool for ensuring that the nation has affordable, clean, and reliable energy, and helping stimulate innovation in the private sector.

ASHRAE Resource Documents

ANSI/ASHRAE/IES Standard 202, Commissioning Process for Buildings and Systems
International Green Construction Code and ASHRAE Standard 189.1, Standard for the Design of High-Performance Green Buildings Except Low-Rise Residential Buildings
ANSI/ASHRAE/IESNA Standard 104-0, Energy Conservation in Existing Buildings
ASHRAE Standard 90.1, Energy Standard for Buildings Except Low-Rise Residential Buildings
ASHRAE Standard 90.2, Energy Efficient Design of Low-Rise Residential Buildings
ASHRAE Standard 62.1, Ventilation and Acceptable Indoor Air Quality
ASHRAE Standard 62.2, Ventilation and Acceptable Indoor Air Quality in Low-Rise Residential Buildings
ASHRAE Advanced Energy Design Guides for Buildings

¹⁰ U.S. Department of Energy. 2011. "Building Energy Data Book: Chapter 2: Residential Sector". <http://buildingsdatabook.eren.doe.gov/ChapterIntro2.aspx?2#1>.

¹¹ U.S. Department of Energy. 2011. "Building Energy Data Book: Commercial Sector Energy Consumption". <http://buildingsdatabook.eren.doe.gov/TableView.aspx?table=3.1.4>



Shaping Tomorrow's Built Environment Today

ENERGY USE METRICS AND TARGETS FOR COMMERCIAL BUILDINGS

THE ISSUE

Commercial buildings¹² consume almost 20% of all energy used in the United States¹³. Energy efficiency helps create jobs, reduce pollution, and improve energy security. A building's utility costs are some of the largest, yet most controllable, operating expenses; therefore, managing a building's energy efficiency is an integral part of the building's operational and financial performance.

You can't manage what you don't measure, and building owners, operators, and policymakers can't effectively communicate goals, evaluate potential investments, and measure success if they don't speak the same language. Common, widely accepted and validated definitions and metrics of building energy use do not currently exist. By working with stakeholder groups and federal agencies to develop, validate, and establish these common metrics and associated targets, Congress can help solve this communication problem.

ASHRAE's ROLE

ASHRAE and its partners¹⁴, develop building energy standards that federal agencies, states, and local governments adopt in their energy codes. ANSI/ASHRAE/IES Standard 90.1 has been the basis for state commercial building energy codes since 1975. Standard 90.1- also serves as DOE's baseline for measuring relative energy use improvement in federal buildings. ASHRAE uses data from the Commercial Buildings Energy Consumption Survey (CBECS) in its standards, and in its building energy labeling program – the Building Energy Quotient (bEQ)¹⁵. ASHRAE is committed to developing and promoting building energy data and other technical tools to assist the commercial building design, construction and operation industry in moving towards the most efficient buildings feasible. To this end, ASHRAE has updated its Standard 100 – Energy Conservation in Existing Buildings, and is updating its Standard 105 – Standard Methods of Determining, Expressing and Comparing Building Energy Performance and Greenhouse Gas Emissions. ASHRAE will continue to be a resource to the federal government by providing technical tools and by serving as a voice of the industry.

ASHRAE's VIEW

Energy use targets must be based on the best technologies available, to foster innovation. They must include all building loads, from lighting and HVAC to plug-in appliances.

Congress should foster collaboration among DOE, NIST, EPA, ASHRAE and others to 1) Establish a single objective definition of energy use intensity¹⁶ (EUI), including plug and process loads; 2) Identify an objective set of commercial building types and simulation models for establishment of target EUIs; 3) Produce one set of target EUIs for the commercial building sector for use in state building energy codes; 4) Undertake measures that disseminate, educate, and lead all parties in the building industry to use these objective measures to demonstrate the economic and environmental value of their actions.

Congress should support regular updates to the Commercial Buildings Energy Consumption Survey. The recent 2012 update was the first in 9 years. Maintaining recent data on energy consumption in the U.S. will make it easier to identify opportunities to increase efficiency and assess progress towards energy efficiency goals. ASHRAE should also encourage international efforts to gather and disseminate data on commercial buildings worldwide.

¹² "Commercial buildings" are defined as offices, schools, stores, and similar non-residential facilities, whether ownership is private or public.

¹³ U.S. Department of Energy. 2011. "2011 Buildings Energy Data Book". <http://buildingsdatabook.eren.doe.gov/TableView.aspx?table=1.1.3>.

¹⁴ Including the Illuminating Engineering Society of North America, the U.S. Green Building Council, the American Institute of Architects, the International Code Council, and the Air Conditioning Contractors of America.

¹⁵ Additional information on ASHRAE's bEQ is available at www.buildingeq.com.

¹⁶ Energy Use Intensity (EUI) is the most commonly accepted metric to measure a building's absolute energy use performance. It is traditionally measured in kBtu/sf-yr.



Shaping Tomorrow's Built Environment Today

RESEARCH AND DEVELOPMENT NEEDS TO MEET NATIONAL GOALS

THE ISSUE

Federally funded research and development provides cross-cutting results to meet national goals of economic growth, increased energy efficiency, a globally competitive workforce, and a clean environment. For example, the National Research Council report, *Energy Research at DOE: Was It Worth it?* (2001) found that the economic benefit to the nation of a few advanced technologies whose research and development (R&D) was supported by the Department of Energy's (DOE) energy efficiency programs was over four times greater than DOE's R&D investment in energy efficiency over its entire history. The results of just six case studies showed sufficient savings to justify the entire government R&D spending in energy efficiency. Significant environmental and energy security benefits also were realized. Other federally supported research programs contribute to meeting other national goals.

ASHRAE's ROLE

As an organization, ASHRAE funds and supervises a robust research program to develop timely technical and educational information, standards and guides on, among others, the interaction between people and the indoor and outdoor environment through the operation of heating, ventilating, air conditioning, and refrigerating systems in buildings and other applications. ASHRAE supported research has advanced indoor air quality to increase occupant productivity and decrease the spread of airborne diseases; building design that supports a reduction in energy use and associated operating costs; and food preservation and storage that reduces the risk of contamination.

ASHRAE's VIEW

R&D funding by the federal government has historically been based on technological innovation as a critical tool for ensuring that the nation has affordable, clean, and reliable energy, as well as to help stimulate innovation in the private sector to produce more energy efficient equipment and systems. Adequate funding is necessary to assure that R&D to advance these goals continues. While R&D programs by ASHRAE and other private sector organizations provide valuable insight and tools for the built environment, some necessary research and development can only be performed with the support and initiative of government. Integrative research that covers multiple industry sectors and high risk basic research are unlikely to be supported in the private sector, but will prove extremely valuable to society.

Specific research and development needs include:

- Advanced energy efficiency and renewable energy R&D to reduce energy use.
- Understanding influences on Indoor Air Quality (IAQ) and tools to assure good IAQ.
- Increased understanding of the relationship between the design of buildings and actual energy use during occupancy to allow for better building design that supports more efficient and less costly operation and the development of more accurate energy use models.
- The need for a robust database of case studies of energy use in real buildings, for better benchmarking.
- Efficiency, design and energy research to support the development of increasingly energy efficient buildings and eventually net-zero energy and carbon neutral buildings
- Research focused to improve teaching and learning of science, technology, engineering and mathematics (STEM) concepts and critical thinking skills to ensure a competent technological workforce



Shaping Tomorrow's
Built Environment Today

SCIENCE, TECHNOLOGY, ENGINEERING AND MATHEMATICS EDUCATION

THE ISSUE

Strong education in science, technology, engineering and mathematics (STEM) to develop the future supply of technicians, engineers, and scientists is critical to our future standard of living. Even students pursuing non-STEM specialties need basic knowledge of scientific and technological applications for effective participation in the workforce, success in their personal lives, and responsible citizenship. The National Academy of Sciences (NAS) report, *Rising Above the Gathering Storm* (2007) expresses a "deep concern that the scientific and technological building blocks critical to our economic leadership are eroding at a time when many other nations are gathering strength." Alarming, only about one-third of U.S. fourth, and one-fourth of eighth graders perform at or above a "proficient" level in mathematics. Similarly, about one-fifth of fourth graders, and more than one-fourth of eighth graders lack the competence to perform even basic mathematical computations.¹⁷

ASHRAE'S ROLE

As professionals focused on design, construction, operation, and maintenance of the nation's buildings and infrastructure, and as educators of future generations of engineers, ASHRAE members recognize the importance of a solid foundation in science, technology, engineering and mathematics. ASHRAE members are active in their local communities and in national programs, bringing exciting science and engineering programs to students. ASHRAE is actively engaged in the Solar Decathlon, National Engineers Week, STEM Education Coalition and other STEM education efforts in the U.S., and supports STEM worldwide through its Chapters and student activities programs.

ASHRAE'S VIEW

Parents, educators, governments at all levels, and the private sector have important roles in ensuring that future generations possess the skills and critical competencies necessary to be successful in a highly competitive, global, and technologically sophisticated economy. We must work cooperatively to ensure that children receive the STEM training essential for future success. ASHRAE encourages policymakers to implement the following recommendations:

- Increase governmentally funded research to improve teaching and learning of STEM concepts and critical thinking skills.
- Recruit, train and retain qualified STEM teachers through the development of programs recognizing educators who excel in STEM education, and incentives that encourage the best and brightest scientists and engineers to teach.
- Foster partnerships among educational institutions, industry, and non-profit organizations and their members.
- Encourage the adoption of curriculum standards that cultivate high student performance; the development of curricula that foster creativity, experiential problem solving and critical thinking; and the development of assessments aligned with these standards and curricula.
- Create opportunities and incentives for women and minorities to pursue STEM coursework and careers.

¹⁷ National Center for Education Statistics, "Trail Urban District Assessment: Mathematics 2011, Results at Grades 4 and 8". 2011. <http://nces.ed.gov/nationsreportcard/pdf/dst2011/2012452.pdf>.



ASHRAE ASSOCIATE SOCIETY ALLIANCE APPLICATION REQUEST FORM

GENERAL INFORMATION

Society Name: _____

Address Line 1: _____

Address Line 2: _____

Address Line 3: _____

Country: _____

Telephone: _____

Facsimile: _____

Email: _____

Web Address: _____

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: _____ Title: _____

Email: _____

ASHRAE Member? Yes Membership Number: _____

No

SOCIETY PRESIDENT

Name: _____

Email: _____

Term of Office: From: _____ To: _____

ASHRAE Member? Yes Membership Number: _____

No

ASSOCIATE SOCIETY ALLIANCE REPRESENTATIVE

Name: _____

Address Line 1: _____

Address Line 2: _____

Address Line 3: _____

Country: _____

Telephone: _____

Facsimile: _____

Email: _____

ASHRAE Member? Yes Membership Number: _____

No

PUBLICATIONS

<u>Publication Name</u>	<u>Publication Frequency</u>
_____	_____
_____	_____
_____	_____
_____	_____

MEMBERSHIP

Total Membership: _____

<u>Membership Grades</u>	<u>Approximate Number of Members</u>
_____	_____
_____	_____
_____	_____
_____	_____

SOCIETY MEETINGS (include 5 year listing)

<u>Dates</u>	<u>Location</u>
_____	_____
_____	_____
_____	_____
_____	_____

OTHER SOCIETY INFORMATION

Native Language: _____

Objectives: _____

Submitted by:

Name: _____
Title: _____
Email: _____
Date: _____

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



CÁMARA CHILENA DE REFRIGERACIÓN Y CLIMATIZACIÓN

Estatutos de la Cámara Chilena de Refrigeración y Climatización A.G.

Modificación acordada en Asamblea Extraordinaria de Socios el 29 de diciembre de 2015

ARTÍCULO PRIMERO:

Créase una Asociación Gremial que se denominará CÁMARA CHILENA DE REFRIGERACIÓN Y CLIMATIZACIÓN A.G., de la República de Chile. Su duración será indefinida y el número de sus socios ilimitado. El domicilio será la ciudad de Santiago (Región Metropolitana). La Cámara está constituida al amparo de la legislación vigente. Se regirá por los presentes Estatutos, por el Código de Ética y las Normas de Responsabilidad Empresarial.

ARTÍCULO SEGUNDO:

De los objetivos.

El objetivo de la Asociación Gremial es promover la racionalización, desarrollo y protección de las actividades que son propias de sus empresas asociadas y en general, las que sean comunes a ellas, en razón a sus especialidades y/o rubros. Las actividades deberán también propender a la agrupación de todas las empresas que ejerzan la actividad que representa la Asociación Gremial, dentro de su radio jurisdiccional y velar por la dignidad y buenas artes de sus empresas asociadas. Deberá además propender a difundir y fomentar las aplicaciones de la refrigeración, aire acondicionado, calefacción, ventilación, aislación térmica y acústica, filtrado de aire, uso de la energía solar, ahorro energético y eficiencia energética en el país. Podrá ser también Centro de Evaluación y Certificación de Competencias Laborales para los profesionales que ejerzan cualquiera de las actividades que representa la Asociación Gremial.

ARTÍCULO TERCERO:

La Asociación Gremial según las leyes, no podrá desarrollar actividades políticas.

ARTÍCULO CUARTO:

Habrán socios activos, sean éstos personas naturales o jurídicas. Además habrá socios cooperadores, carácter que se otorgará a quienes efectúan prestaciones voluntarias, los cuales en las Asambleas tendrán derecho a voz pero no a voto.

ARTÍCULO QUINTO:

Para ser socio se requiere ser empresa o empresario del rubro representativo de la Asociación Gremial.

1. Se completará una solicitud de ingreso en la que se expresen los datos y antecedentes.
2. Las empresas asociadas tendrán que actualizar mínimo cada dos años su información.
3. El comité a cargo de la evaluación de la empresa o empresario presentará al Directorio la propuesta de aceptación o rechazo.
4. La aprobación de la solicitud se hará por mayoría de los Directores de la Cámara.
5. En caso que el informe resulte negativo, la Cámara enviará una carta a la empresa solicitante, especificando las causas de la negación del ingreso y se le otorgará un plazo a definir de acuerdo a cada situación en particular, para reparar las causales del rechazo. En el caso de que se rechace una segunda vez la solicitud de ingreso, deberá esperar un año a partir de la fecha de comunicación para postular nuevamente.
6. La admisión o rechazo de la nueva empresa quedará registrada en el acta del Directorio.



7. El valor de la cuota social será informado al momento del ingreso de la empresa. Las empresas que ingresen durante el primer semestre deberán cancelar el 100% de la cuota anual, y las que ingresen durante el segundo semestre cancelarán el 50% de la cuota anual.
8. La empresa aceptada como socia deberá cancelar la cuota social de forma inmediata y este será un requisito más para su ingreso.
9. Las empresas socias que presentan la actualización de su información debe estar al día con las cuotas sociales.
10. Si él o los socios de la empresa postulante están o han sido asociados a una empresa que mantiene deudas con la Cámara, solamente estará aceptada previa cancelación del monto adeudado, con eventuales multas e intereses por mora indicados en los Estatutos.
11. El Directorio presentará anualmente en la Asamblea General Ordinaria de socios un informe, respecto a las empresas incorporadas y desafiliadas durante el año.

Solicitud de Ingreso para las Empresas en General:

1. Identificación de la empresa y Actividad Comercial.
2. Escrituras vigentes con Anotaciones.
3. Extractos actualizados.
4. RUT.
5. Dirección de la Casa Matriz, Teléfonos, Correos electrónicos, Sitios WEB.
6. Ídem punto 5 de los Sucursales y/o Filiales si tuviera.
7. Patente Municipal al día.
8. Aceptar que la Cámara solicite Informes Comerciales.
9. Descripción resumida de los perfiles Profesionales de las Jefaturas que trabajan en la empresa.
10. Certificado de Imposiciones al día.
11. Tener más de dos años de constitución legal y funcionamiento en el sector.
12. Entregar referencias de tres empresas con las que mantenga contacto comercial.
13. Ser presentado por un socio activo, mediante carta original dirigida a la Cámara.
14. Declaración escrita del conocimiento de los Estatutos, Reglamentos, Código de Ética y Normas de Responsabilidad Empresarial que se apliquen y que está de acuerdo con someterse a éstos.
15. Copia de Certificados de Calidad que la empresa posea, ISO u otros.
16. Declaración de compromiso que cumplirán con lo indicado en las Normas aplicadas al área.
17. Declaración de compromiso que cumplirán con lo indicado en el Reglamento RITCH.

Solicitud de Ingreso para las Empresas Projectistas:

Además de lo indicado en los requisitos para las Empresas en General deben:

1. Identificar cada Profesional y su Especialidad que trabaja en la empresa.

Solicitud de Ingreso para las Empresas Instaladoras y de Servicio Técnico:

A demás de lo indicado en los requisitos para las Empresas en General deben:

1. Identificar cada Profesional y su Especialidad que trabaja en la empresa.
2. Identificar las personas de montaje y mantención que han sido capacitados en el curso "Buenas Prácticas en Sistemas de Refrigeración". Se debe anexar el Certificado.



3. Informar si la empresa cuenta con Máquinas Recuperadoras y Recicladoras de Refrigerantes.
4. Informar si la empresa cuenta con otras máquinas especiales.

Solicitud de ingreso para las empresas extranjeras y grandes empresas fuera del rubro

1. Identificación de la empresa y actividad comercial
2. Rut
3. Extracto de Escritura
4. Dirección de casa matriz, teléfonos, correos electrónicos, sitios web.
5. Tener más de dos años de constitución legal (en Chile o el extranjero)
6. Ser presentado por un socio activo.
7. Declaración escrita del conocimiento de los estatutos, Reglamento, Código de Ética y normas de responsabilidad empresarial que se apliquen y que estén de acuerdo a someterse a estos.

ARTÍCULO SEXTO:

De las Responsabilidades, de los Derechos y de las Obligaciones de los Socios.

Responsabilidades:

1. Solicitar los buenos oficios de la Directiva para resolver los problemas que se susciten entre los socios en razón de su actividad.
2. Velar por el correcto uso del sello de la Cámara en la papelería, vehículos e indumentaria de trabajo con el debido decoro.

Derechos:

1. A todos los beneficios que entregue la Asociación Gremial.
2. Participar en las actividades y actos sociales de la Asociación Gremial
3. Asistir con voz y voto a las Asambleas Generales Ordinarias y Extraordinarias. En caso de no poder asistir, podrá delegar su voto a una persona de su confianza mediante Poder Simple.
4. Elegir miembros del Directorio, Revisores de Cuenta y temas sometidos a elección.
5. Ser elegido como Director y Revisor de Cuenta. Para ser elegido director debe tener a lo menos 2 años como socio.
6. Ser escuchado en las sesiones del directorio o en las comisiones de trabajo de la Asociación Gremial.
7. Poseer un ejemplar de los Estatutos, de los Reglamentos, del Código de Ética, de la Norma de Responsabilidad Empresarial y del el documento Beneficios para los Asociados a la Cámara Chilena de Refrigeración y Climatización A.G. desde su ingreso a la Asociación Gremial.
8. Ser informado de los acuerdos adoptados por los órganos de la Asociación Gremial.
9. Solicitar el acceso a la documentación interna de la Asociación Gremial.
10. Acogerse a la modalidad de aportar 1/1000 (Un por mil) de sus ventas anuales como cuota social, si este monto fuera inferior a la cuota social establecida. Para ello, deberá entregar la documentación requerida por la Cámara.
11. Proponer al Directorio o a la Asamblea General, proyectos o iniciativas de beneficio para la actividad de los Asociados.
12. Usar el sello de la Cámara en la papelería, vehículos e indumentaria de trabajo.



Obligaciones:

1. Cumplir los preceptos que marcan los Estatutos, los Reglamentos, el Código de Ética y las Normas de Responsabilidad Empresarial, así como los acuerdos que adopte la Asociación Gremial.
2. Desempeñar con celo y oportunidad, las Comisiones o encargos que el Directorio les encomiende.
3. Pagar puntualmente las cuotas sociales, sean éstas ordinarias o extraordinarias.
4. Desempeñar con celo y máximo profesionalismo sus actividades comerciales, cumpliendo con la legislación vigente.
5. Mantener actualizada la información que la Cámara solicita a la empresa asociada al menos cada 2 años, o cuando el Directorio lo solicite.
6. Cooperar en el desarrollo del trabajo de la Asociación Gremial y en la ejecución de las actividades que se determinen.
7. Desempeñar las funciones que les sean encomendadas por la Mesa Directiva.
8. Asistir a las Asambleas Ordinarias y Extraordinarias.

ARTÍCULO SÉPTIMO:

Los socios podrán ser sancionados por las faltas que cometan, con alguna de las siguientes medidas disciplinarias:

1. Amonestación verbal.
2. Amonestación por escrito.
3. Suspensión de toda actividad gremial por un plazo de hasta seis meses y en casos de faltas reiteradas o graves, con la suspensión de todo beneficio social.
4. Expulsión, en los casos de haber cometido actos que comprometan el prestigio o la existencia misma de la Asociación Gremial. Los delitos relacionados con bienes de la institución darán lugar a la expulsión de él o de los socios comprometidos, sin perjuicio de las acciones civiles o penales que el Directorio acuerde entablar, por mayoría absoluta de sus miembros en ejercicio. Será circunstancia agravante que el socio sea miembro del Directorio.
5. Expulsión por haberse constituido en mora por más de un año del pago de sus cuotas sociales, de acuerdo a lo establecido en el Reglamento, sin oportuno aviso o solicitud de espera. Un socio expulsado por mora en los pagos de las cuotas podrá reincorporarse, poniéndose al día con las cuotas retrasadas más un cobro de una cuota anual extraordinaria.
6. Cuando exista incumplimiento grave con lo indicado en los Estatutos y/o los Reglamentos y/o el Código de Ética y/o las Normas de Responsabilidad Empresarial.

Las medidas disciplinarias se acordarán por el Directorio y por la mayoría de los asistentes a una reunión especialmente citada para el efecto, previa investigación sumaria efectuada por el Comité de Ética designados por el Directorio para este objetivo, con exclusión en esa comisión, de él o de los socios que aparezcan directa o indirectamente involucrados en los hechos, o que pudieren tener intereses en el resultado de la investigación.

Si el afectado fuera miembro del Directorio o de la Comisión Revisora de Cuentas, el sólo hecho de que el Directorio designe un Comité de Ética en que se le incluye como posible autor, cómplice o encubridor, producirá la suspensión del cargo que se desempeñe hasta la resolución definitiva.



Las medidas disciplinarias serán notificadas personalmente al socio afectado o por carta certificada, según lo disponga el Directorio. El afectado dispondrá de cinco días hábiles para apelar, contados desde su notificación. Para resolver la apelación, el Directorio deberá citar a una Asamblea General Extraordinaria, a la mayor brevedad posible, no procediendo en contra de la resolución de la asamblea recurso alguno. Los Reglamentos establecerán el procedimiento a que se sujetará el Comité de Ética, cuidando en todo caso que sea oído el afectado y que pueda presentar descargos verbales o escritos. Las declaraciones de terceros sólo serán admitidas por escrito. Mientras no se dicte el Reglamento respectivo, se atenderá a lo que sobre la materia disponen los presentes Estatutos.

ARTÍCULO OCTAVO:

La calidad del Socio se pierde por las siguientes causales:

1. Por fallecimiento.
2. Por renuncia. Los socios podrán solicitar en cualquier momento su baja voluntaria de la asociación. Esta petición deberá realizarse por medio de carta formal dirigida al Directorio de la Cámara e indicar el motivo de su retiro.
3. Por expulsión. En cualquier caso, la expulsión de un asociado, será tratada por el Comité de Ética. Uno de los miembros del comité actuará como representante de la Cámara y garantizará la audiencia del interesado. El Directorio de la Cámara será el encargado de ratificar o denegar el informe realizado por el Comité de Ética.

ARTÍCULO NOVENO:

De las Asambleas Generales.

Las Asambleas Generales serán Ordinarias o Extraordinarias. Las primeras se celebrarán dentro del Primer Trimestre de cada año y tendrán por objetivo pronunciarse sobre la Memoria o Cuenta y el Balance Anual, este último suscrito por un contador. Para la aprobación de la Memoria o Cuenta y el Balance Anual, se requiere la mayoría absoluta de los socios asistentes a la Asamblea. Copia del Balance deberá quedar a disposición del Ministerio de Economía, Fomento y Turismo. Habrá una sola Asamblea Ordinaria Anual. En la misma Asamblea se procederá a la elección del Directorio y de una Comisión Revisora de Cuentas cuando corresponda.

Las Asambleas Extraordinarias se convocarán cada vez que lo soliciten al Directorio, el 30% a lo menos de los asociados con cuotas al día, con expresa indicación de las materias que en dicha Asamblea se tratarán, cuando lo soliciten los dos tercios de los directores en ejercicio o a petición del Presidente aprobada por la mayoría de los directivos asistentes a una sesión especialmente destinada al efecto.

En las Asambleas Extraordinarias sólo podrán tratarse las materias incluidas en la convocatoria; no siendo posible que durante ellas se cambien las materias.

Las Tablas de las Asambleas serán realizadas por el Presidente en conjunto con el Directorio y si las hubiere por peticiones de socios.

ARTÍCULO DÉCIMO:

Las citaciones a las Asamblea General se realizarán mediante comunicación escrita a los socios, dentro de los diez días anteriores a la Asamblea, por correo electrónico o correo certificado, sin perjuicio de emplear otros medios que acuerde el Directorio.



ARTÍCULO DÉCIMO PRIMERO:

Las Asambleas se constituirán en primera citación con la mayoría absoluta de sus socios y en segunda citación con los socios que asistan. Los acuerdos se tomarán por mayoría absoluta de los socios asistentes con cuotas al día, sin perjuicio de las mayorías especiales que establezca la ley o estos Estatutos y Reglamentos para casos específicos.

ARTÍCULO DÉCIMO SEGUNDO:

Las Asambleas serán presididas por el Presidente del Directorio, o por quien lo reemplace y actuará de Secretario, el Secretario o quién lo reemplace. El Secretario llevará un libro de Actas en el que se extractará cada materia tratada en la reunión y se dejará constancia íntegra de los acuerdos que se tomen y el quórum con que fueron adoptados. Cualquier Socio podrá solicitar que se deje constancia de su expreso rechazo al acuerdo o su abstención, como asimismo, de los acuerdos, con una breve explicación de los motivos de hecho y/o estatutarios o reglamentarios que motivan su disconformidad o abstención. El Presidente queda expresamente facultado para decidir si la votación es económica, personal o secreta, exceptuados los casos en que la ley o los estatutos exijan que sea secreta. Se entiende económica aquella en que se solicita que los que están de acuerdo levanten la mano y posteriormente los que no lo están. Es personal, cuando cada uno de los socios debe expresar a viva voz si está a favor o en contra de una moción o se abstiene de votar. Y es secreta, cuando se reparte una papeleta a cada socio para estampar en ella su voto.

ARTÍCULO DÉCIMO TERCERO:

Corresponde a la Asamblea General Ordinaria:

1. Pronunciarse sobre el Balance del ejercicio financiero del año inmediatamente anterior.
2. Pronunciarse sobre la Memoria o Cuenta correspondiente al mismo período señalado precedentemente.
3. Solicitar que el Directorio dé cuenta detallada de determinados actos, sean administrativos o contables. Si el Directorio no pudiera hacerlo en esa oportunidad, inmediatamente se deberá citar a una Asamblea Extraordinaria, la que deberá celebrarse para esos solos efectos, dentro del plazo de quince días posteriores a la Asamblea.
4. Aprobar, rechazar o enmendar los Reglamentos que el Directorio les somete a su consideración, relativos a materias de la competencia de las Asociaciones Gremiales, según los objetivos que señala el artículo primero del Decreto Ley número dos mil setecientos cincuenta y siete.
5. Elegir en votación secreta, u otras, ocho socios que constituirán el Directorio.
6. Fijar anualmente las cuotas ordinarias de los socios.
7. Conocer de las apelaciones que se deduzcan en contra de medidas disciplinarias acordadas por el Directorio en contra de un socio.
8. Nombrar una Comisión Revisora de Cuentas que estará integrada por un número de tres asociados.

ARTÍCULO DÉCIMO CUARTO:

Sólo en Asamblea General Extraordinaria se pueden tratar las siguientes materias:

1. Pronunciarse sobre la modificación de los Estatutos de la Asociación Gremial.
2. Fijar cuotas extraordinarias, para fines previamente determinados y por la mayoría absoluta de los asistentes en votación secreta.



3. Pronunciarse sobre la compra, venta o hipoteca de bienes raíces de propiedad de la Asociación Gremial.
4. Conocer de las apelaciones que se deduzcan en contra de medidas disciplinarias acordadas por el Directorio en contra un miembro del directorio.
5. Acordar la disolución de la Asociación Gremial. La disolución de la Asociación Gremial requerirá el voto conforme de la mayoría de sus afiliados, en votación secreta y se citará especialmente para este efecto.

ARTÍCULO DÉCIMO QUINTO:

La Administración de la Asociación corresponde a un Directorio integrado por nueve miembros, ocho de los cuales serán elegidos por la Asamblea General Ordinaria de Socios, de acuerdo con lo dispuesto por los Artículos 9º y 13º de estos Estatutos. Asimismo, integrará el Directorio por derecho propio el Past-President, que es el Presidente que ejerció el cargo en el período inmediatamente anterior al del actual titular.

Situación del Past-President al no poder continuar en el cargo en caso de ser reelegido Presidente:

- 1) Recurrir al Past-President del período anterior.
- 2) Dejar vacante el puesto, es decir la Mesa Directiva, funcionaría con sólo 8 Directores.

Situación si el Past-President renuncia al Directorio y no puede asumir sus funciones: Recurrir al Past-President del período anterior, y si él fuera elegido Presidente, se deja vacante el puesto, es decir la Mesa Directiva funcionaría con sólo 8 Directores.

ARTÍCULO DÉCIMO SEXTO:

El Directorio durará dos años en sus funciones y sus miembros podrán ser reelegidos indefinidamente.

ARTÍCULO DÉCIMO SÉPTIMO:

El Directorio, en la primera sesión que celebre después de su elección, procederá a designar de entre sus miembros a un Presidente, un Vice-Presidente, un Secretario y un Tesorero. No podrá ser elegido Presidente de la Mesa Directiva un Director que se esté incorporando por primera vez al Directorio.

ARTÍCULO DÉCIMO OCTAVO:

Los Directores serán elegidos en votación secreta, disponiendo cada socio de un voto. Resultarán elegidos los candidatos que obtengan las ocho primeras mayorías en una misma y única votación. En caso de empate se procederá a efectuar una nueva elección entre quienes hayan obtenido la misma votación, proclamándose elegidos a quienes en esta nueva elección hayan obtenido el mayor número de votos.

ARTÍCULO DÉCIMO NOVENO:

En ausencia, el Presidente será reemplazado sucesivamente por el Vice-Presidente, por el Secretario y por el Director, que se determine por acuerdo del Directorio.



ARTÍCULO VIGÉSIMO:

Para ser elegido miembro del Directorio se requiere:

1. Gerente General o Representante legal de una entidad afiliada a la organización con a lo menos tres años de funcionamiento en Chile y dos años como miembro de la Cámara.
2. Representante designado por el Gerente General o Representante legal de la entidad afiliada a la organización con a lo menos tres años de funcionamiento en Chile y dos años como miembro de la Cámara.
3. Ser mayor de veintiún años de edad.
4. Además debe cumplir con los requisitos establecidos en el artículo 10 del DL 2.757 de 1979
 - a) Ser chileno. Sin embargo, podrán ser directores los extranjeros siempre que sus cónyuges sean chilenos, o sean residentes por más de cinco años en el país o tengan la calidad de representantes legales de una entidad, afiliada a la organización, que tenga a lo menos tres años de funcionamiento en Chile.
 - b) Ser mayor de 18 años de edad;
 - c) Saber leer y escribir;
 - d) No haber sido condenado por crimen o simple delito, y
 - e) No estar afecto a las inhabilidades o incompatibilidades que establezcan la Constitución Política o las leyes.

ARTÍCULO VIGÉSIMO PRIMERO:

El Directorio sesionará una vez al mes a lo menos, en forma ordinaria y extraordinariamente, cuando lo cita el Presidente por sí o a petición de cuatro Directores. El Directorio sesionará con la mayoría absoluta de sus miembros y los acuerdos se tomarán por mayoría absoluta de los Directores asistentes. Si un Director desee salvar su responsabilidad en un acuerdo, deberá hacer constar en actas su abstención o rechazo. Existirá un Libro de actas del Directorio en el cual se dejará constancia breve de cada tema tratado y la transcripción total del acuerdo adoptado, la mayoría con que se obtuvo el acuerdo y los Directores que se abstuvieron o hicieron constar su disconformidad en forma expresa.

ARTÍCULO VIGÉSIMO SEGUNDO:

El Libro de Actas será redactado por el Secretario o por la persona que él designe con aprobación del directorio y quedará bajo su custodia. A menos de dejarse constancia de que uno o más acuerdos rijan de inmediato, el acta de una sesión será aprobada o enmendada en la sesión siguiente.

ARTÍCULO VIGÉSIMO TERCERO:

El Directorio tendrá las siguientes atribuciones específicas:

1. Dirigir administrativamente la Asociación Gremial y administrar sus bienes.
2. Citar a Asambleas Generales Ordinarias y Extraordinarias en la forma y oportunidades establecidas por estos Estatutos y sus Reglamentos.
3. Someter a la Asamblea General una Memoria o Cuenta y un Balance Anual, éste último debidamente suscrito por un contador para su discusión y posterior aprobación, rechazo o enmienda.
4. Someter a la Asamblea General la aprobación de los Reglamentos que fueren necesarios.
5. Hacer cumplir los acuerdos de las Asambleas Generales, tanto Ordinarias como Extraordinarias.
6. Aplicar las medidas disciplinarias que establecen los Estatutos.



7. Proponer a la Asamblea General las cuotas ordinarias y/o extraordinarias que deberán pagar los socios y las modalidades de su cobranza.
8. Designar por mayoría absoluta de sus miembros, en caso de que un Director no pueda desempeñar su cargo por más de cuatro meses, un reemplazante, por el resto del período.
9. Crear un Comité de Ética compuesto por 3 miembros, un Director y dos socios.

ARTÍCULO VIGÉSIMO CUARTO:

El Directorio como administrador de los bienes sociales tendrá todas las facultades inherentes a dicha administración, sin perjuicio de otras que establezcan estos Estatutos o los Reglamentos.

ARTÍCULO VIGÉSIMO QUINTO:

El Presidente del Directorio lo será también de las Asambleas Generales y tendrá la representación judicial y extrajudicial de la Asociación Gremial. Son también atribuciones del Presidente:

1. Presidir las sesiones del Directorio y de las Asambleas Generales.
2. Fiscalizar la marcha administrativa, Financiera y Social de la Asociación Gremial
3. Cumplir y hacer cumplir los acuerdos del Directorio y los de las Asambleas Generales y velar por la correcta aplicación de estos Estatutos y de sus Reglamentos.
4. Firmar la correspondencia administrativa de la Asociación Gremial o a quien delegue.
5. Firmar conjuntamente con el Tesorero todos los documentos bancarios y/o mercantiles relacionados con los bienes de la Asociación Gremial, solicitar la autorización a instituciones financieras o bancarias para trabajar con cartolas electrónicas y todas las nuevas aplicaciones que se presenten en el futuro, para el buen desempeño del control contable de las cuentas corrientes de la Asociación.

En su ausencia firma el Vicepresidente o el Past President.

6. Resolver por sí, cualquier asunto urgente que puede presentarse, debiendo dar cuenta de ello al Directorio en su más próxima sesión.
7. La representación del Presidente y del Tesorero ante los bancos, se extenderá hasta que estén vigentes los nuevos representantes, después de la Asamblea en que sea elegido un nuevo directorio, esto es con el propósito de facilitar la transición con los nuevos representantes.

ARTÍCULO VIGÉSIMO SEXTO:

Corresponderá al Vice-Presidente:

1. Reemplazar al Presidente en su ausencia, en el orden de precedencia que corresponda.
2. Mantener el control y funcionamiento de las comisiones.
3. En caso de renuncia o ausencia permanente del Presidente, lo reemplazará por el resto del período.

ARTÍCULO VIGÉSIMO SÉPTIMO:

Corresponde al Secretario:

1. Reemplazar al Vice-Presidente en caso de su ausencia.
2. Corresponde al Secretario o a quien asigne llevar toda la correspondencia administrativa de la Asociación Gremial.

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3. Serán también atribuciones y deberes del Secretario o a quien asigne llevar el Libro de Actas y atender a su custodia y además velar para que se dé curso a la correspondencia de mero trámite de la Asociación Gremial.

ARTÍCULO VIGÉSIMO OCTAVO:

Corresponde al Tesorero o a quien asigne llevar al día la documentación de la Asociación Gremial que diga relación con la administración de sus bienes. Serán también otras atribuciones:

1. Mantener al Presidente debidamente informado del movimiento bancario de la Asociación Gremial.
2. Asegurar que se lleve al día toda clase de documentación necesaria para la confección del Balance Anual.
3. Firmar con el Presidente todos los documentos bancarios y/o mercantiles y en especial, cheques, letras de cambio, pagarés y otros. En ausencia del Presidente firma el Vice-Presidente o el Past-President.

ARTÍCULO VIGÉSIMO NOVENO:

Corresponderá a los Directores de acuerdo al orden de precedencia establecido en el artículo décimo noveno de estos Estatutos, reemplazar al Presidente, en caso de ausencia de éste, del Vice-Presidente o Secretario. Para asumir las funciones de reemplazo del Presidente por el Vice-Presidente o Secretario, se requiere acuerdo del Directorio.

Corresponde al Director:

1. Presidir las comisiones de trabajo que establezcan los Reglamentos o el mismo Directorio.
2. Cumplir con las labores específicas que les encomiende el Presidente.
3. Proponer específicamente a la integración del mayor número de asociados a la Asociación Gremial.

ARTÍCULO TRIGÉSIMO:

Corresponderá al Comité de Ética:

1. Realizar la investigación sumaria de las sanciones indicadas en el artículo séptimo.
2. Revisar y actualizar el Reglamento de Ética cada 2 años y someterlo a la Asamblea Ordinaria de Socios para su aprobación.
3. El Comité de Ética estará compuesto por 3 miembros, un Director y dos socios los cuales serán elegidos por el Directorio.

ARTÍCULO TRIGÉSIMO PRIMERO:

La Comisión Revisora de Cuentas tendrá dos años de duración y será designada por la Asamblea General de la Asociación Gremial, en la misma oportunidad en que elija el Directorio, pudiendo ser reelegido indefinidamente. La Comisión estará compuesta por tres socios que deberán tener los requisitos necesarios para ser elegidos Director, pero sólo necesitarán una antigüedad de más de seis meses. No podrán integrar la Comisión Revisora de Cuentas, los socios elegidos directores, ni aquellos socios que sean directores salientes del período inmediatamente anterior. Corresponderá a la Comisión Revisora de Cuentas:

1. Efectuar una inspección a la Tesorería a lo menos semestralmente.
2. Revisar los Reglamentos de la Tesorería.
3. Revisar el proyecto de Balance General Anual.
4. Presentar informes al Directorio sobre el resultado de sus inspecciones o revisiones de Tesorería.



ARTÍCULO TRIGÉSIMO SEGUNDO:

El patrimonio de la Asociación Gremial estará compuesto:

1. Por las cuotas o aportes ordinarios o extraordinarios fijados por la Asamblea General.
2. Por las donaciones entre personas en vida o asignaciones por causa de muerte que se hicieren a la Asociación Gremial.
3. Por el producto de sus bienes y servicios.
4. Por las multas que se impongan a los asociados en virtud de lo previsto en estos Estatutos y lo que dispongan los Reglamentos que se dictaren.
5. Por la venta de sus activos.
6. Por las rentas, utilidades, beneficios o excedentes de los bienes o actividades de la Asociación Gremial, quedando expresamente prohibido disfrutarlos entre sus asociados, ni aún en caso de disolución de la Asociación Gremial.

ARTICULO TRIGÉSIMO TERCERO:

La Asociación Gremial podrá conservar y enajenar bienes de toda clase y cualquier Título, de acuerdo a lo dispuesto en sus Estatutos y Reglamentos.

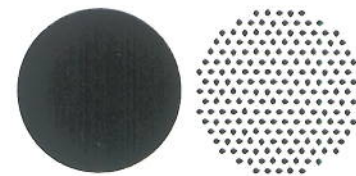
ARTÍCULO TRIGÉSIMO CUARTO:

La reforma de los Estatutos sólo podrá ser acordada en Asamblea General Extraordinaria, especialmente citada para este efecto, con el voto conforme de los dos tercios de los socios asistentes a ella. Se entregará a cada socio un ejemplar de los Estatutos reformados, inmediatamente después de tener la aprobación del Ministerio de Economía, Fomento y Turismo.

ARTÍCULO TRIGÉSIMO QUINTO:

En caso de disolución de la Asociación Gremial, por cualquier causa, sus bienes pasarán a la Federación Gremial denominada Cámara Nacional de Comercio, Servicios y Turismo de Chile, Federación Gremial Nacional.

Mayo 2016
Revista Frío&Calor N°138
Órgano oficial de la Cámara Chilena de
Refrigeración y Climatización A.G.



frío&calor

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Imprenta Gonsa S.A.
www.gonsa.cl

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Peter Yufer S.
de Rojo y Azul Ing. y Proyectos S.p.A.
Klaus-Peter Schmid S.
de Inra Refrigeración Industrial S.p.A.
Carlos Mitroga
de Danfoss Industrias Ltda.
María Angélica Figueroa I.
de Imp. y Com. NVL Ltda.

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CChRyC

Quienes somos

La CChRyC fue fundada el 21 de noviembre de 1989 como una Organización sin fines de lucro, por un grupo de empresarios y profesionales, que visualizaron la necesidad de resguardar y proteger los derechos e intereses de las empresas pertenecientes al rubro de la climatización, refrigeración, calefacción y ventilación.

En la actualidad la CChRyC cuenta con cerca de 120 empresas asociadas: proyectistas, instaladoras, transnacionales y representantes de un importante número de marcas internacionales.

El principal objetivo de la Asociación es promover la racionalización, desarrollo y protección de las actividades que son propias de sus asociados y en general, las que sean comunes a ellos, en razón a su profesión u oficio.

La CChRyC no sólo representa los intereses de sus asociados, además es una plataforma comercial para empresas nacionales y extranjeras que quieren contactarse con el sector.

Dentro de las principales actividades que desarrolla la Cámara, podemos destacar:



Expo Frío Calor: feria internacional que se realiza cada dos años en Santiago de Chile y que cuenta con la participación de las empresas más destacadas del sector,

con gran éxito de asistentes y expositores, siendo el evento sectorial más importante del país y uno de los más relevantes en Sudamérica.



Centro de Evaluación y Certificación
de Competencias Laborales
FRIOCALOR

Centro FRÍOCALOR: único Centro de Evaluación y Certificación de Competencias Laborales acreditado en el país por ChileValora, con el propósito de la certificación de técnicos de nuestro sector.

Participación con organismos internacionales:

FAIAR: la CChRyC es asociada de FAIAR, Federación de Asociaciones Iberoamericanas de Aire Acondicionado y Refrigeración, fundada el año 2011, logrando el intercambio de información y de participación en congresos y actividades internacionales del área. Esta federación reúne a las asociaciones de Argentina, Brasil, Chile, Cuba, Ecuador, España, México, Paraguay, Perú, Portugal, República Dominicana, Uruguay y Venezuela, teniendo una estrecha relación con ASHRAE, compartiendo sus mismos principios.

CIAR: la CChRyC forma parte del CIAR, Congreso Ibero-Americano de Aire Acondicionado y Refrigeración, el cual se ha convertido en el más importante foro de discusión en idioma español y portugués, sobre los temas relacionados con nuestra área y todas las actividades anexas, como conservación de energía, automatización, calidad e impacto ambiental, entre otros; compartiendo experiencias y tendencias mundiales en la materia.



Beneficios para Asociados

Ser parte de la CChRyC, implica beneficios como los siguientes:

- Uso del sello institucional, el que opera como símbolo de calidad y excelencia técnica.
- Emitimos certificados de antigüedad de la empresa en nuestra asociación gremial, para efectos de propuestas u otros.
- Representa a los asociados a nivel nacional ante diferentes organizaciones, tales como:
Ministerio del Medio Ambiente
Ministerio de Salud
ChileValora
Comisión Nacional de Energía (SEC)
Cámara Chilena de la Construcción
Instituto de la Construcción
Instituto Nacional de Normalización (INN)
SENCE
ASHRAE Chile
Otros
- Nuestra institución es la única asociación gremial que reúne a las empresas de Climatización, Refrigeración, Calefacción y Ventilación en Chile y está asociada a diferentes organizaciones internacionales, representando los intereses de los asociados, contando con acuerdos de colaboración internacional con las siguientes organizaciones:
-FAIAR (Federación de Asociaciones Iberoamericanas de Aire Acondicionado y Refrigeración), organización sin fines de lucro que reúne a las asociaciones de Argentina, Brasil, Chile, Colombia, Cuba, Ecuador, España, México, Paraguay, Perú, República Dominicana, Uruguay y Venezuela.

ASHRAE (Sociedad Americana de Ingenieros de Calefacción, Refrigeración y Aire Acondicionado).

CIAR (Congreso Iberoamericano de Aire Acondicionado y Refrigeración).

IIAR (International Institute of Ammonia Refrigeration).

- Somos el punto de encuentro de las empresas del rubro, realizamos charlas y seminarios de carácter técnico, con beneficios para nuestros asociados.

Organizamos y producimos eventos técnicos/comerciales con resultados garantizados y valores preferenciales para las empresas asociadas.

- Realizamos contactos continuos y enlaces con los departamentos comerciales de las diferentes Embajadas, con el objeto de generar encuentros e intercambio de información y negocios.



- Revista Frío&Calor: contamos con nuestra revista, de carácter técnico/comercial, de publicación bimestral, en formato impreso y digital, de distribución gratuita a nuestros socios y a un universo aproximado de 7.000 puntos de contacto en forma digital. Destacan las publicaciones de artículos técnicos, climanoticias, Columnas de especialidades, avisos comerciales.





Entregamos tarifas preferenciales a nuestros asociados, les ofrecemos la posibilidad de destacar su presencia en este medio a través de la publicación de artículos técnicos, y la opción de llegar a toda la base de datos en cada edición.

- Newsletter: recepción periódica, con información de las actividades, tanto gremiales como comerciales, que permiten estar actualizado.
- Bolsa de trabajo: publicación gratuita de avisos, tanto para la contratación de personal como para la búsqueda de nuevas alternativas de trabajo, a través de la "bolsa de trabajo" de nuestro sitio web www.cchryc.cl.
- Presencia de los asociados en la base de datos de nuestro sitio web y en nuestra revista Frio&Calor.

- Importantes descuentos en ferias, charlas y exposiciones en países donde nuestra Cámara mantiene acuerdos.
- Uso exclusivo y con condiciones preferenciales del salón multiuso de la Cámara, ideal para presentaciones, actos y otros eventos que realicen los asociados, con capacidad para 50 personas.
- Organización de eventos para nuestros asociados.
- Somos organizadores de la Expo Internacional Frio Calor, desde el año 2012; única feria en nuestro país del rubro, los asociados cuentan con importantes descuentos para acceder a stands o a las diferentes actividades que se organizan en cada edición. Con más de 100 expositores y cerca de 6.000 asistentes, expo frío calor Chile está posicionada como la segunda feria en Sudamérica.

- La CChRyC es la única institución que cuenta con un Centro de Evaluación y Certificación de Técnicos y con un laboratorio propio a escala, acreditado por ChileValora, lo que facilita y acorta los tiempos de evaluación en los 4 perfiles autorizados actualmente:

Instalador y Mantenedor de Sistemas de Climatización Comercial
 Instalador y Mantenedor de Sistemas de Climatización Industrial
 Instalador y Mantenedor de Sistemas de Refrigeración Comercial
 Instalador y Mantenedor de Sistemas de Refrigeración Industrial

Dentro de los próximos meses se incluirán nuevos perfiles de certificación.

El centro FRIOCALOR ofrece promociones para el cofinanciamiento de las evaluaciones, con subsidios de hasta un 100%, y cuenta con franquicia SENCE.



Directorio



Alejandro Requeséns P.
Presidente
Business to Business Ltda.



Jorge Sandrock H.
Vicepresidente
Rojas, Sandrock y Cía. Ltda.



Secretario
Facundo Muencke M.
Intercambiadores de Calor S.A.



Tesorero
Marcelo Contreras B.
Mimec Ltda.



Directora
María Angélica Figueroa I.
Importadora y Comercializadora NVL Ltda.



Director
Carlos Mitroga
Danfoss Industrias Ltda.



Director
Klaus-Peter Schmid
INRA Refrigeración Industrial S.p.A.



Director
Peter Yufer S.
Rojo y Azul Ingeniería y Proyectos S.p.A.



Expo Frío Calor Chile

Centro de Evaluación y
Certificación de
Competencias Laborales
FRÍOCALOR



Sala Multiuso CChRyC



Cámara Chilena de
Refrigeración y
Climatización A.G.

Avda. José Miguel Claro 1909, Providencia
Santiago, Chile
(56-2) 2204 8805 / 2341 4906
info@cchryc.cl
www.cchryc.cl

DIRECTORIOS Y ASAMBLEAS DE CAMARA CHILENA DE REFRIGERACION Y CLIMATIZACION A.G.

	FECHA	DIRECCION	HORA
	2011		
REUNION DIRECTORIO	5/24/2011	AV. GENERAL BUSTAMANTE 16 DEPTO 2C, PROVIDENCIA, SANTIAGO, CHILE	19:00
	6/30/2011	AV. GENERAL BUSTAMANTE 16 DEPTO 2C, PROVIDENCIA, SANTIAGO, CHILE	19:00
	7/28/2011	AV. GENERAL BUSTAMANTE 16 DEPTO 2C, PROVIDENCIA, SANTIAGO, CHILE	19:00
	9/1/2011	AV. GENERAL BUSTAMANTE 16 DEPTO 2C, PROVIDENCIA, SANTIAGO, CHILE	19:00
	9/29/2011	AV. GENERAL BUSTAMANTE 16 DEPTO 2C, PROVIDENCIA, SANTIAGO, CHILE	19:00
	11/2/2011	AV. GENERAL BUSTAMANTE 16 DEPTO 2C, PROVIDENCIA, SANTIAGO, CHILE	19:00
	12/13/2011	AV. GENERAL BUSTAMANTE 16 DEPTO 2C, PROVIDENCIA, SANTIAGO, CHILE	19:00
	2012		
REUNION DIRECTORIO	1/19/2012	AV. GENERAL BUSTAMANTE 16 DEPTO 2C, PROVIDENCIA, SANTIAGO, CHILE	19:00
	3/8/2012	AV. GENERAL BUSTAMANTE 16 DEPTO 2C, PROVIDENCIA, SANTIAGO, CHILE	19:00
ASAMBLEA ANUAL	3/29/2012	HOTEL SANTIAGO, PARK PLAZA, RICARDO LYON 207, PROVIDENCIA, SANTIAGO, CHILE	19:15
REUNION DIRECTORIO	4/19/2012	AV. GENERAL BUSTAMANTE 16 DEPTO 2C, PROVIDENCIA, SANTIAGO, CHILE	19:00
	5/31/2012	AV. GENERAL BUSTAMANTE 16 DEPTO 2C, PROVIDENCIA, SANTIAGO, CHILE	19:00
	6/28/2012	AV. GENERAL BUSTAMANTE 16 DEPTO 2C, PROVIDENCIA, SANTIAGO, CHILE	19:00
	7/19/2012	AV. GENERAL BUSTAMANTE 16 DEPTO 2C, PROVIDENCIA, SANTIAGO, CHILE	19:00
ASAMBLEA EXTRAORDINARIA	8/6/2012	AV. GENERAL BUSTAMANTE 16 DEPTO 2C, PROVIDENCIA, SANTIAGO, CHILE	19:00
REUNION DIRECTORIO	8/30/2012	AV. GENERAL BUSTAMANTE 16 DEPTO 2C, PROVIDENCIA, SANTIAGO, CHILE	19:00
SESIÓN EXTRA ORDINARIA DE DIRECTORIO	9/21/2012	AV. GENERAL BUSTAMANTE 16 DEPTO 2C, PROVIDENCIA, SANTIAGO, CHILE	19:00
REUNION DIRECTORIO	10/4/2012	AV. GENERAL BUSTAMANTE 16 DEPTO 2C, PROVIDENCIA, SANTIAGO, CHILE	19:00
	10/25/2012	AV. GENERAL BUSTAMANTE 16 DEPTO 2C, PROVIDENCIA, SANTIAGO, CHILE	19:00
	11/13/2012	AV. GENERAL BUSTAMANTE 16 DEPTO 2C, PROVIDENCIA, SANTIAGO, CHILE	19:00
	12/18/2012	AV. GENERAL BUSTAMANTE 16 DEPTO 2C, PROVIDENCIA, SANTIAGO, CHILE	19:00
	2013		
REUNION DIRECTORIO	1/16/2013	AV. GENERAL BUSTAMANTE 16 DEPTO 2C, PROVIDENCIA, SANTIAGO, CHILE	18:30
	2/28/2013	AV. GENERAL BUSTAMANTE 16 DEPTO 2C, PROVIDENCIA, SANTIAGO, CHILE	18:30
ASAMBLEA ANUAL	3/7/2013	HOTEL PLAZA EL BOSQUE, RICARDO LYON 207, PROVIDENCIA, SANTIAGO, CHILE	18:30
REUNION DIRECTORIO	4/4/2013	AV. GENERAL BUSTAMANTE 16 DEPTO 2C, PROVIDENCIA, SANTIAGO, CHILE	18:30
	4/30/2013	AV. GENERAL BUSTAMANTE 16 DEPTO 2C, PROVIDENCIA, SANTIAGO, CHILE	18:30
	6/4/2013	AV. GENERAL BUSTAMANTE 16 DEPTO 2C, PROVIDENCIA, SANTIAGO, CHILE	18:30
	7/4/2013	AV. GENERAL BUSTAMANTE 16 DEPTO 2C, PROVIDENCIA, SANTIAGO, CHILE	18:30
	8/6/2013	AV. GENERAL BUSTAMANTE 16 DEPTO 2C, PROVIDENCIA, SANTIAGO, CHILE	18:30
	9/3/2013	AV. GENERAL BUSTAMANTE 16 DEPTO 2C, PROVIDENCIA, SANTIAGO, CHILE	18:30
	10/3/2013	AV. GENERAL BUSTAMANTE 16 DEPTO 2C, PROVIDENCIA, SANTIAGO, CHILE	18:30
	11/5/2013	AV. GENERAL BUSTAMANTE 16 DEPTO 2C, PROVIDENCIA, SANTIAGO, CHILE	18:30
	12/5/2013	AV. GENERAL BUSTAMANTE 16 DEPTO 2C, PROVIDENCIA, SANTIAGO, CHILE	18:30
	2014		
REUNION DIRECTORIO	1/14/2014	AV. GENERAL BUSTAMANTE 16 DEPTO 2C, PROVIDENCIA, SANTIAGO, CHILE	18:30
	3/4/2014	AV. GENERAL BUSTAMANTE 16 DEPTO 2C, PROVIDENCIA, SANTIAGO, CHILE	18:30
ASAMBLEA ANUAL	3/26/2014	HOTEL PLAZA EL BOSQUE, CALLE EBRO 2828, LAS CONDES, SANTIAGO, CHILE	19:15
REUNION DIRECTORIO	4/1/2014	AV. GENERAL BUSTAMANTE 16 DEPTO 2C, PROVIDENCIA, SANTIAGO, CHILE	18:30
	5/6/2014	AV. GENERAL BUSTAMANTE 16 DEPTO 2C, PROVIDENCIA, SANTIAGO, CHILE	18:30
	6/3/2014	AV. GENERAL BUSTAMANTE 16 DEPTO 2C, PROVIDENCIA, SANTIAGO, CHILE	18:30
	7/1/2014	AV. GENERAL BUSTAMANTE 16 DEPTO 2C, PROVIDENCIA, SANTIAGO, CHILE	18:30
	8/5/2014	AV. GENERAL BUSTAMANTE 16 DEPTO 2C, PROVIDENCIA, SANTIAGO, CHILE	18:30
	9/9/2014	AV. GENERAL BUSTAMANTE 16 DEPTO 2C, PROVIDENCIA, SANTIAGO, CHILE	18:30
	10/14/2014	AV. GENERAL BUSTAMANTE 16 DEPTO 2C, PROVIDENCIA, SANTIAGO, CHILE	18:30
	11/11/2014	AV. GENERAL BUSTAMANTE 16 DEPTO 2C, PROVIDENCIA, SANTIAGO, CHILE	18:30
	2015		
REUNION DIRECTORIO	1/13/2015	AV. GENERAL BUSTAMANTE 16 DEPTO 2C, PROVIDENCIA, SANTIAGO, CHILE	18:30
	3/10/2015	AV. JOSE MIGUEL CLARO 1909, PROVIDENCIA, SANTIAGO, CHILE	18:30
ASAMBLEA ANUAL-ASAMBLEA EXTRAORDINARIA	3/26/2015	AV. JOSE MIGUEL CLARO 1909, PROVIDENCIA, SANTIAGO, CHILE	18:30
REUNION DIRECTORIO	5/12/2015	AV. JOSE MIGUEL CLARO 1909, PROVIDENCIA, SANTIAGO, CHILE	18:30
	7/7/2015	AV. JOSE MIGUEL CLARO 1909, PROVIDENCIA, SANTIAGO, CHILE	18:30
	8/11/2015	AV. JOSE MIGUEL CLARO 1909, PROVIDENCIA, SANTIAGO, CHILE	18:30
	9/10/2015	AV. JOSE MIGUEL CLARO 1909, PROVIDENCIA, SANTIAGO, CHILE	18:30
	10/13/2015	AV. JOSE MIGUEL CLARO 1909, PROVIDENCIA, SANTIAGO, CHILE	18:30
	11/10/2015	AV. JOSE MIGUEL CLARO 1909, PROVIDENCIA, SANTIAGO, CHILE	18:30
ASAMBLEA EXTRAORDINARIA	12/14/2015	AV. JOSE MIGUEL CLARO 1909, PROVIDENCIA, SANTIAGO, CHILE	18:30
REUNION DIRECTORIO	12/10/2015	AV. JOSE MIGUEL CLARO 1909, PROVIDENCIA, SANTIAGO, CHILE	18:30
ASAMBLEA GENERAL EXTRAORDINARIA DIRECTORIO	12/29/2015	AV. JOSE MIGUEL CLARO 1909, PROVIDENCIA, SANTIAGO, CHILE	18:30
	2016		
REUNION DIRECTORIO	1/12/2016	AV. JOSE MIGUEL CLARO 1909, PROVIDENCIA, SANTIAGO, CHILE	18:30
	3/8/2016	AV. JOSE MIGUEL CLARO 1909, PROVIDENCIA, SANTIAGO, CHILE	18:30
ASAMBLEA ANUAL	3/30/2016	AV. JOSE MIGUEL CLARO 1909, PROVIDENCIA, SANTIAGO, CHILE	18:45
REUNION DIRECTORIO	4/12/2016	AV. JOSE MIGUEL CLARO 1909, PROVIDENCIA, SANTIAGO, CHILE	18:30
	5/17/2016	AV. JOSE MIGUEL CLARO 1909, PROVIDENCIA, SANTIAGO, CHILE	18:30



FRIO CALOR



frío&calor

11, 12 y 13 de Mayo de 2016

Centro Cultural Estación Mapocho



Guidelines for Professional Practice

Jeff,

The Professional Practices Committee was a subcommittee of Certification I believe and you are correct it centered around the MOE from NCEES. There was also an ad hoc discussing the requirement to be a PE to allow writing the CPMP examination and this was defeated after much heated debate. At this time there are CPMP holders who are not licensed PE's nor necessarily holders of an engineering degree. Our membership is made up of PE's, engineering degree holders, licensed trades persons and persons with no formal post-secondary education. This is not a requirement for ASHRAE membership.

Please put this on our agenda, it may take some time in discussion.

Regards,

David

Email: dunderwood@hvacrtdu.com

The information transmitted, including attachments, is intended only for the person(s) or entity to which it is addressed and may contain confidential and/or privileged material. Any review, retransmission, dissemination or other use of, or taking of any action in reliance upon this information by persons or entities other than the intended recipient is prohibited. If you received this in error, please contact the sender and destroy any copies of this information.

-----Original Message-----

From: Littleton, Jeff [<mailto:JLittleton@ashrae.org>]

Sent: Monday, May 16, 2016 8:58 AM

To: David Underwood

Subject: FW: FW: question about determining who in ASHRAE sets guidance on professional practice?

Hi David,

There was a typo in your email address below so I'm resending

Thanks,

Jeff Littleton

Executive Vice President

Email: JLittleton@ashrae.org

Tel: 1100

The information transmitted, including attachments, is intended only for the person(s) or entity to which it is addressed and may contain confidential and/or privileged material. Any review, retransmission, dissemination or other use of, or taking of any action in reliance upon this information by persons or entities other than the intended recipient is prohibited. If you received this in error, please contact the sender and destroy any copies of this information.

-----Original Message-----

From: Littleton, Jeff

Sent: Monday, May 16, 2016 8:57 AM

To: 'tim.wentz@windstream.net'; bjarne Olesen; Hayter, Sheila; Pat Graef; Walid Chakroun; Ginger Scoggins; Edward Tsui; dunderwood@hvacrdtu.com; cgulledge@accorporation.com; jvallort@esdglobal.com

Subject: RE: FW: question about determining who in ASHRAE sets guidance on professional practice?

Thanks, Tim. The Professional Practices Committee that Bill references below was actually formed and then disbanded. Dick Hayter led the charge for both the formation and then the elimination of the committee, tied to his work on the NCEES MOE issue. I believe it resided in PEC due to the ties to education. The question of code mandated certifications is challenging. I suspect we would get enormous push-back from members if they became aware that we advocated for mandatory certification, even if ASHRAE's CPMP is an approved path. My understanding is that the vast majority of members feel that a PE license is sufficient and that other certifications should be voluntary. Although this question was referred to GGAC, I'd suggest that the Certification Committee should have the lead on providing a recommendation for ExCom's consideration.

The fact that ICC continues to move forward with an ANSI Commissioning Standard that conflicts with Standard 202 is something I've talked to Dom Sims a lot about. The last time we spoke, he said he thought the ICC Committee would ultimately pull the plug on the ICC standard and reference Standard 202, but that hasn't happened yet.

In any case, we will add this to the draft Sunday ExCom agenda for David's review.

Thanks,
Jeff

-----Original Message-----

From: tim.wentz@windstream.net [<mailto:tim.wentz@windstream.net>]

Sent: Friday, May 13, 2016 3:59 PM

To: bjarne Olesen; Hayter, Sheila; Pat Graef; Walid Chakroun; Ginger Scoggins; Edward Tsui; Littleton, Jeff; dunderwood@hvacrdtu.com; cgulledge@accorporation.com; jvallort@esdglobal.com

Subject: Fwd: FW: question about determining who in ASHRAE sets guidance on professional practice?

Dear ExCom:

I am forwarding the following to you in my capacity as CO of GGAC for your consideration. I think this is a topic that needs our attention and, with David's approval, would ask that it be added to the ExCom agenda for St. Louis.

Thanks,

Tim

> From: William Bahnfleth <WBahnfleth@engr.psu.edu>
> To: "tim.wentz@windstream.net" <tim.wentz@windstream.net>
> CC: "Ferguson, Steve" <SFerguson@ashrae.org>, "Scarborough, Jim" <JScarborough@ashrae.org>
> Subject: FW: question about determining who in ASHRAE sets guidance on professional practice?
> Date: Fri, 13 May 2016 14:18:22 +0000
>
> Tim –
>
> From GGAC chair to GGAC CO...
>
> The very broad question in the subject line is hard to answer simply. During my time on ExCom, we really struggled with any issue that would tend to favor or not favor registered engineers relative to contractors or some other group operating in the same space.
>
> As far as I know, ASHRAE has no specific body that develops policy on professional practice – other than the BOD, which can develop policy on anything it chooses. There was a move to create a professional practice standing committee a few years ago, but I was opposed on the grounds that most of what was claimed as its scope already belonged – appropriately – to other committees. There may, however, be a need for some kind of a board-approved position on registration and certification developed by an ad hoc or board subcommittee.
>
> The narrow issue here is about replacing a requirement for registration with a requirement for certification in order to do commissioning (see attached and lengthy e-mail chain below).
>
> This came to GGAC because some thought that we were responsible for positions on matters like this. Clearly, we are not, as the cited rule below shows. So, my primary reason for contacting you is to refer this issue to where I believe it belongs, Society Executive Committee.
>
> Let me know if you have any questions.
>
> Regards,
>
> Bill
>
> -----
> William P. Bahnfleth, PhD, PE, FASHRAE, FASME Professor and Director,
> Indoor Environment Center Department of Architectural Engineering The
> Pennsylvania State University
> 104 Engineering Unit A
> University Park, PA 16802
> 814.863.2076
>

>
> From: William Bahnfleth
> Sent: Thursday, May 12, 2016 7:14 PM
> To: 'Ferguson, Steve' <SFerguson@ashrae.org>; Scarborough, Jim
> <JScarborough@ashrae.org>
> Cc: 'Thomas Phoenix' <Thomas@mmpa.com>; Ames, Mark <MAmes@ashrae.org>
> Subject: RE: question about determining who in ASHRAE sets guidance on professional practice?
>
> Steve,
>
> Thanks. I believe that the GGAC ROB speak clearly on this:
>
> “2.402.003.4 The Committee shall review ASHRAE documents on relevant government affairs issues annually. Where new or additional ASHRAE Position Documents or Public Policy Issue Briefs may be helpful, the Committee will request they be considered using existing procedures and will review them prior to final approval.
>
> On matters in which a clear ASHRAE position does not exist or for which a timely response is required, the Committee will seek a position from ExCom.”
>
> This issue gets off into territory that we ventured into once before around the time of the proposed merger with NEBB. At some point after that had fallen apart, but while the initial version of the Building Performance Alliance was still active, ASHRAE was asked to make a statement on whether only a registered engineer could be in charge of commissioning. That was a definitely an ExCom matter.
>
> In general, as I have said many times, it is the job of GGAC to conduct effective advocacy based on society positions, not to create them. GGAC can use any clear position – a standard, a position document, etc. and has discretion to decide when ASHRAE actually has a position, but if it cannot identify a clear position, the matter needs to be kicked upstairs to ExCom. There is no doubt that this is one of those issues.
>
> Bill
> -----
> William P. Bahnfleth, PhD, PE, FASHRAE, FASME Professor and Director,
> Indoor Environment Center Department of Architectural Engineering The
> Pennsylvania State University
> 104 Engineering Unit A
> University Park, PA 16802
> 814.863.2076
>
> Action may not always bring happiness; but there is no happiness
> without action. ~Benjamin Disraeli
>
> Never confuse movement with action. ~Ernest Hemingway

>
> From: Ferguson, Steve [<mailto:SFerguson@ashrae.org>]
> Sent: Thursday, May 12, 2016 4:43 PM
> To: Scarborough, Jim
> <JScarborough@ashrae.org<<mailto:JScarborough@ashrae.org>>>
> Cc: William Bahnfleth
> <WBahnfleth@engr.psu.edu<<mailto:WBahnfleth@engr.psu.edu>>>; 'Thomas
> Phoenix' <Thomas@mmpa.com<<mailto:Thomas@mmpa.com>>>; Ames, Mark
> <MAmes@ashrae.org<<mailto:MAmes@ashrae.org>>>
> Subject: RE: question about determining who in ASHRAE sets guidance on professional practice?

>
> Thank you Jim,
> For everyone's referenced, I've attached the proposal to the IECC I referred to earlier.
> Steve Ferguson
> Manager of Codes
> ASHRAE
> 1791 Tullie Circle NE
> Atlanta, GA 30329
> Tel: 678-539-1138
> SFerguson@ashrae.org<<mailto:SFerguson@ashrae.org>>
> www.ASHRAE.org<<http://www.ashrae.org>>

>
From: Scarborough, Jim
> Sent: Thursday, May 12, 2016 3:59 PM
> To: Ferguson, Steve
> <SFerguson@ashrae.org<<mailto:SFerguson@ashrae.org>>>
> Cc: 'William Bahnfleth'
> <WBahnfleth@engr.psu.edu<<mailto:WBahnfleth@engr.psu.edu>>>; 'Thomas
> Phoenix' <Thomas@mmpa.com<<mailto:Thomas@mmpa.com>>>; Ames, Mark
> <MAmes@ashrae.org<<mailto:MAmes@ashrae.org>>>
> Subject: RE: question about determining who in ASHRAE sets guidance on professional practice?

>
> Hi Steve,
>
> Thanks for the clarification. I am copying Bill Bahnfleth, Tom Phoenix and Mark on this. It may need to go to the BOD or ExCom since it would be ASHRAE taking an "official" position on an issue. I'm not sure if GGAC can make the decision on that. We may be able to but I'd rather Bill and Tom weigh in on this. I don't think we would be opposed since ASHRAE certifications and certificant would benefit from it but it can get a bit thorny when the state licensing boards are involved.

>
> Thanks.
>
> Jim
> Jim Scarborough | Manager - Grassroots Government Affairs
> From: Ferguson, Steve
> Sent: Thursday, May 12, 2016 3:45 PM
> To: Scarborough, Jim

> <JScarborough@ashrae.org<mailto:JScarborough@ashrae.org>>
> Subject: RE: question about determining who in ASHRAE sets guidance on professional practice?
>
> Jim,
>
> It's more general than state occupational licensing boards, especially in that this is related to a model energy code proposal that may or may not promulgate to the state level.
> It's 'who decides what ASHRAE's position is when it comes to setting policy'?
>
> I was at Energy Code (IECC) hearings two weeks ago. The attached proposal came up.
> The implication would be that you HAVE to be certified (and one could be certified using ASHRAEs accredited commissioning certification program) in order to do commissioning.
> Just being a registered PE in the state would not be sufficient.
>
> This proposal failed, however it's going to come back in some form or another. The proponents have asked where ASHRAE sits on this.
>
> On the one hand, it would be good for our certification program if ANSI/ISO/IEC 17024 is specifically referenced and allowed for this.
> On the other hand, I presume our membership would not want ASHRAE to support a proposal that disallows PEs from doing commissioning just because they haven't gotten a certification, even if they're perfectly qualified.
>
> Who within ASHRAE decides our position on that? Traditionally, my positions are determined by what's in ASHRAE Standards. However, since we're dealing with certification programs and licensing, this is a policy issue that wouldn't be set in an ASHRAE Standard.
>
> Comstock thinks it's GGAC, he doesn't think it's PubEd even though they oversee the certification program since it deals with more generic membership issues.
>
> I have a feeling that this will come back to say "registered professional or certified" rather than just "certified". Should I support that? Oppose it? Stay out of it?
>
> Thanks
> Steve
>
> From: Scarborough, Jim
> Sent: Thursday, May 12, 2016 3:35 PM
> To: Ferguson, Steve
> <SFerguson@ashrae.org<mailto:SFerguson@ashrae.org>>
> Subject: RE: question about determining who in ASHRAE sets guidance on professional practice?
>
> Hi Steve,
>
> Left you a voice mail earlier. Is your question regarding scope of practice for state occupational licensing boards? That would, loosely, fall under GGAC so glad to answer (or try to answer) your question.
>

> Thanks.

>

> Jim Scarborough | Manager - Grassroots Government Affairs

> Extension:1003 | Fax:202-833-0118 | Email:

> jscarborough@ashrae.org<mailto:jscarborough@ashrae.org>

>

>

>

> From: Ferguson, Steve

> Sent: Thursday, May 12, 2016 12:06 PM

> To: Scarborough, Jim

> <JScarborough@ashrae.org<mailto:JScarborough@ashrae.org>>

> Subject: question about determining who in ASHRAE sets guidance on professional practice?

>

> Jim,

> I'm trying to figure out who in ASHRAE sets guidance on professional practice. This is related to the commissioning discussion we had to Arlene other day.

> Steve Comstock seems to think GGAC is responsible for making those sorts of decisions (essentially who should be allowed to do what).

> Is that right? If so, I have a question for you.

>

> Thank you

> Steve Ferguson | Manager of Codes

> Extension:1138

>

>

>

Canadian Energy Efficiency Alliance (CEEA)

Background Information:

CEEA's Chairman – Martin Luymes – is the Director of Programs/Relations for the Heating, Refrigeration and Air Conditioning Institute of Canada (HRAI).

CEEA is 21 years old and it is Canada's only national advocate dedicated to promoting the economic and environmental benefits of energy efficiency. As a not-for-profit organization, CEEA works closely with the federal and provincial governments, and a variety of stakeholders, monitoring and, where needed, developing or championing energy efficiency public policy initiatives, programs and standards. Over the past several years, CEEA has become an effective resource for policy makers, businesses, consumers and energy companies.

This is membership renewal time as we are aligning as many memberships as possible to June 1. The board and I are excited to report that this upcoming fiscal year (2016–2017) will be one of unprecedented opportunity for energy efficiency in Canada:

- Our Policy Committee will be reaching out to members to ensure CEEA's inputs into the First Ministers Meetings in October will reflect members' concerns. We are already meeting with ministerial offices to remind them of the importance of energy efficiency to meeting the nation's climate goals;
- Our "Doing Business in Ottawa Day" (Day on the Hill) is now planned for November 22-23 – we address government on energy efficiency as a factor in procurement policy and will hold political/bureaucratic meetings to reinforce our messages and requests for Budget 2017, including important tax changes. This annual event has contributed to more Canadian Government RFP's that refer directly to energy efficiency – especially at the Dept. of National Defense that has the most real estate of any federal Department;
- We will be working more closely with the Alliance To Save Energy (ASE) to ensure that continental energy efficiency standards have Canadian industry input;
- On May 9th of this year we hosted Minister Amarjeet Sohi, Minister for Infrastructure and Communities at our AGM held in Ottawa on May 9th. We expect that next year's AGM will attract a similar level of speaker and we will ensure another informative event with great networking opportunities;
- CEEA is working with the IESO on a project designed to attract millennials to the culture of conservation. We will soon report to members on this project and will discuss with NRCan the opportunity to do similar research on a national basis.

As you know, CEEA is principally an advocacy organization that has the reputation of being collaborative in its approach to government relations. We facilitate dialogue between our members and government officials and public servants who are developing policy related to the energy efficiency industry. CEEA also works with regional partners on the implementation of building energy codes, product standards, strategy development and the regulatory framework for utility. We are very active in Ontario in particular but also work with the Atlantic Provinces, Alberta, Saskatchewan and BC.

Other CEEA Membership Benefits:

- **Directing the future of the Alliance:** Members are welcome to participate on CEEA committees most importantly our Policy Committee that oversees the Policy directions

that CEEA pursues. You or a delegate would also be welcome to put their name forward for our Board of Directors.

- **Public awareness and marketing:** Company exposure on the CEEA webpage, company news and press releases on Twitter, LinkedIn and electronic newsletters. We will be launching a new magazine that will be distributed widely federally and across the country that will come out twice a year.
- **Market intelligence:** CEEA's market research supports program design, including its annual survey on public attitudes related to energy efficiency – the 2014 *Canadian Business Attitudes towards Energy Efficiency* and the 2013 *Energy Efficiency & Canadians: Opinion Research for CEEA*.
- **Sector enabling:** CEEA creates a forum for discussion among key industry stakeholders with an interest in energy efficiency (e.g. trade associations, utilities).
- **Participation:** CEEA members participate exclusively at events like our annual "Hill Day" in Ottawa. They are eligible for a free annual pass to EE Global held in Washington in May. They also are eligible for reduced fees for CEEA events and other partner events.

CEEA is looking forward to another productive year in the service of its members. We really want to see ASHRAE among our members. Please act now to ensure the continuation of service and if you have any questions or concerns please do not hesitate to let us know. Our fees are very reasonable:

CEEA Membership Fees

Fees are based on size and category:

Founding Members	\$15,000
Utility companies & Associations*	\$ 5,000
Businesses & Organizations (Manufacturing or providing energy efficiency products + services)	
▪ 500+ employees	\$ 5,000
▪ 100 – 499 employees	\$ 3,000
▪ 10 – 99 employees	\$ 1,500
▪ 1 – 9 employees	\$ 500
Educational & governmental institutions	\$ 1,000
Individuals (non-voting)	\$ 125
Students (non-voting)	\$ 80

* 20% discount for members of CEEA "Association" Members

We will be launching a national magazine highlighting energy efficiency and the companies and products that are available in Canada – this should be out by October 31, 2016.

#

Please let me know what, if anything else I can help you with.

Best regards,
Mark

Mark Ames | Senior Manager of Federal Government Affairs

Extension:1116 | Fax:202-833-0118 | Email: mames@ashrae.org

CANADIAN
Energy Efficiency Alliance



L'Alliance de l'Éfficacité Énergétique
DU CANADA

**CANADIAN ENERGY EFFICIENCY ALLIANCE
MEMBERSHIP APPLICATION**

Company Name: _____

Address: _____

City: _____ **Prov:** _____ **Postal Code:** _____

Phone: _____ **Fax:** _____

Web Site: _____ **E-Mail:** _____

Official Representative to CEEA: (Mr./Mrs./Ms.) _____

Phone: _____ **E-Mail:** _____

We hereby make application for membership in the Canadian Energy Efficiency Alliance and certify that we are engaged in these industry related activities in accordance with the CEEA definition of member.

Membership Category (select one option):

Founding Members	\$15,000	_____
Utility Company	\$5,000	_____
Association	\$4,000	_____

Businesses and Organizations (manufacturing or providing energy efficiency products/services)

500+ Employees	\$5,000	_____
100-499 Employees	\$3,000	_____
10-99 Employees	\$1,500	_____
1-9 Employees	\$500	_____

Educational and government institutions	\$1,000	_____
Individuals (non-voting)	\$125	_____
Students (non-voting)	\$80	_____

We understand that all Membership Applications must be formally approved by a majority vote of the CEEA Board of Directors for final approval. On approval, our membership will be effective from the date of this application. An invoice will be issued upon approval.

(Signature)

(Name)

(Date)

(Title)



COMPANY PROFILE

CEEA MEMBER CORPORATE PROFILE

(All applicants must complete and attach to Membership Application Form)

1. Company name: _____
2. Number of employees: _____
3. Area of work/services/products provided:

4. Corporate profile (50-100 words):

5. Employee contacts (email addresses) to be added to CEEA's distribution list:

REPORT TO THE EXECUTIVE COMMITTEE
From the Foundation Board of Trustees
Meeting of June 27, 2016

RECOMMENDATIONS FOR VOTE:

None.

INFORMATION ITEMS:

1. That the Foundation Board of Trustees approved the newly revised Foundation Job Description.
2. That the Foundation Board of Trustees approved the creation of the following new endowed funds:
 - o San Diego Chapter Awarded Scholarship, San Diego Chapter ALI Fund, San Diego YEA Leadership Weekend Fund. Total amount \$110,000
 - o Dayton Chapter Awarded Scholarship. Total amount \$30,000
 - o Spacecoast Chapter Awarded Scholarship. Total amount \$30,000
 - o Alamo Chapter Awarded Scholarship. Total amount \$30,000
3. That the Foundation Board of Trustees approved the following nominating committee for 2016-17;
 - o Dan Pettway (Chair)
 - o Don Colliver
 - o Dick Hayter
 - o Mike Hart
 - o Jeff Clarke
 - o Buddy Doll (Alt.)

06/27/2016
Date

James E. Wolf
Foundation Chair

**REPORT TO EXECUTIVE COMMITTEE
From Scholarship Trustees
Meeting of June 28, 2016**

RECOMMENDATIONS FOR A VOTE

1. The Scholarship Trustees recommend the Board of Directors approve the following criteria for all post High School scholarship applicants effective January 1, 2017:
 - Must be a student member of ASHRAE
2. The Scholarship Trustees recommend the Board of Directors approve changing the name of the ASHRAE Region I Boggarm & Barthy Setty Scholarship to the ASHRAE Region I Setty Family Foundation Scholarship.
3. The Scholarship Trustees recommend the Board of Directors approve changing the name of the ASHRAE Region III Boggarm Setty Scholarship to the ASHRAE Region III Setty Family Foundation Scholarship

INFORMATION ITEMS

1. The Scholarship Trustees selected students to receive the Society's High School Senior, Freshman, and Engineering Technology Scholarships, including the Lynn G. Bellenger Engineering Technology Scholarship, for the 2016-2017 academic year as follows:

Lynn G. Bellenger Engineering Technology Scholarship

Kathleen Agustin, Humber College, Sustainable Energy & Building Technology

Engineering Technology Scholarships

Francisco Iniguez, Ferris State University, HVAC Engineering Technology and Energy Management

Justin Dean, Ferris State University, HVAC&R Technology

Seth Helliker, Pittsburg State University, Construction Management

Freshman Scholarship

Muhammad Abassi, Minnesota State University, Mechanical Engineering

High School Senior Scholarships

Daryl Williams, North Carolina State University, Engineering

Tyler McCubbins, University of Tennessee, Mechanical Engineering

Anne Wellford, Trinity University, Engineering

Emily Ruble, Western Kentucky University, Engineering

2. The Scholarship Trustees re-elected Chuck Curlin as Chair and elected Darin Nutter as Vice Chair of the Scholarship Trustees for the 2016-2017 Society Year.



June 28, 2016

Date

Chair

REPORT TO THE BOARD OF DIRECTORS EXECUTIVE COMMITTEE
From the Life Member's Club Executive Committee
Meeting of June 28, 2016

RECOMMENDATIONS FOR VOTE:

Recommend change to the Rules of the Board 2.105 and 2.105.010 per attached. Vote 5/0/00m chair voting.

Recommend approval of attached MOP of LMC.

INFORMATION ITEMS:

1. The year to date giving is up \$2,000 from this time last year.
2. LMC executive board approved their Reference Manual

Date

Chair

The Life Members Club recommends to the BOD changes to 2.105.001 Organizational / Staff and to add **2.105.010** as indicated (in red) below.

Background: The Life Members Club (LMC) has been a separate non-profit entity since 1956 involved in fund raising activities and is now to be integrated into corporate ASHRAE to ensure the continuation of the many activities and benefits the LMC performs. This will allow the LMC to continue to have the ability to solicit funds, to develop and administer awards programs (currently, E. K. Campbell Award of Merit, Grants-in-Aid, YEA), to recognize and reward outstanding educators and to support students and young engineers in ASHRAE in the fields of heating, ventilation, air conditioning, and refrigeration and to provide fellowship within its membership.

2.105 ORGANIZATIONAL / STAFF

2.105.001 Standing Bodies

(10-01-27-01/11-06-26-21C/12-10-26-13)

The standing bodies of the Society are the Board of Directors and those listed in the table below:

<u>Standing Body</u>	<u>Authorized Number of Meetings per Year</u>	<u>Reporting To</u>
Members Council*	4	Board of Directors
Publishing & Education Council	4	Board of Directors
Technology Council	4	Board of Directors
Advocacy	4	Board of Directors
College of Fellows (COF)**	2	Executive Committee
Building Energy Quotient	4	Executive Committee
Certification	4	Publishing & Education Council
Chapter Technology Transfer	2	Members Council
Chapters Regional	1	Members Council
Conferences and Expositions	2	Publishing & Education Council
Electronic Communications	3	Technology Council
Environmental Health	4	Board of Directors

Executive*	4	Board of Directors
Finance*	4	Members Council
Grassroots Government Activities Handbook	2	Publishing & Education Council
	3	Publishing & Education Council
Historical	2	Members Council
Honors and Awards	2	Executive Committee
Joint Exposition Policy	2	Members Council
Membership Promotion	3	Board of Directors
Life Members Club (LMC)**	2	Executive Committee
Nominating*	2	Board of Directors
Planning	4	Executive Committee
President-Elect Advisory	4	Publishing & Education Council
Professional Development	4	Publishing & Education Council
Publications	4	Technology Council
Refrigeration	2	Technology Council
Research Administration*	4	Members Council
Research Promotion	2	Board of Directors
Society Rules	4	Technology Council
Standards*	4	Members Council
Student Activities	2	Technology Council
Technical Activities*	4	Members Council
Young Engineers in ASHRAE	2	

*Given specific authority or duties by Bylaws or other rules of the Board

**COF and LMC positions are not eligible for travel or transportation reimbursement from ASHRAE for attendance at meetings.

2.105.010 Life Members Club

(xx-xx-xx-xx)

ASHRAE shall establish a Life Members Club (LMC) to improve the status of Life members and their activity in the Society. The Life Members Club shall report directly to the ASHRAE Executive Committee (Ex-Com).

2.105.010.1 Scope and Purpose

The LMC shall perform services to enhance the continued relationship with Society of long-time members, to recognize the contributions of outstanding HVAC&R educators, to encourage the academic and professional growth of HVAC&R graduate students and to support younger members. To these ends, the Club shall solicit funds to award the E.K. Campbell Award of Merit, fund Grants-in-Aid to worthy graduate students and support selective YEA activities.

2.105010.2 Membership

There shall be two grades of membership in the Club.

Member -- Any member of ASHRAE who has attained Life Membership status in the Society shall be a Member.

Honorary Member -- Any Presidential Member of the Society who has not attained Life Membership in the Society shall be an Honorary Member and shall become a Member when achieving Life Member status in the Society.

2.105.010.3 Executive Committee

The affairs of the Club shall be administered by an Executive Committee (LMC - ExCom) consisting of the LMC Chair, LMC Vice Chair, LMC Secretary/Treasurer and not less than four additional LMC members.



Manual of Procedures (MOP)
Life Members Club (LMC)
Effective 06/28/2016

Forward

The Life Members Club is a General Standing Committee of the Society and operates under the direction of the Board of Directors. The Rules of the Board (ROB) are the constitution of the committee. Proposed changes to the ROB and their appendices must be approved by the Board of Directors.

This Manual of Procedures (MOP) describes the methods and procedures by which the committee accomplishes the duties and responsibilities assigned to it. The MOP is an internal document of the committee for its own guidance. The MOP and revision thereto, shall be submitted to the Board of Directors for approval.

Proposed MOP and ROB changes shall normally only be presented to the Board of Directors for approval once a year for consideration.

1. Life Members Club (LMC) – General..... 1

2. Membership..... 1

3. Meetings of Members..... 1

4. Quorum 1

5. Officers 1

6. Executive Committee (LMC ExCom)..... 1

7. Subcommittees and Liaisons..... 2

8. Awards 2

9. Fiscal..... 2

10. Staff Liaison..... 2

11. Revisions..... 3

1. Life Members Club (LMC) – General
 - 1.1. Scope and Purpose
 - 1.1.1. The LMC shall perform services to enhance the continued relationship with Society of long-time members, to recognize the contributions of outstanding HVAC&R educators, to encourage the academic and professional growth of HVAC&R graduate students and to support younger members
 - 1.1.2. The LMC shall also provide fellowship within its membership
 - 1.2. The Life Members Club Reference manual provides detailed operating procedures**
2. Membership
 - 2.1.1. Membership in the LMC is as described in Rule of the Board xx.xxx.xxx
 - 2.1.2. No member of the club shall be required to pay dues
3. Meetings of Members
 - 3.1. Regular LMC meetings shall be scheduled during the Society’s Annual [summer] and Winter Conferences as luncheon meetings
 - 3.2. ASHRAE Standing Committee meetings are conducted using Robert’s Rules of Order.
4. Quorum
 - 4.1. The Chair shall establish the quorum for a meeting of the LMC members as those members who are present but not less than 10. For an electronic or written ballot, the Chair shall establish the quorum as the total of those returning ballots but not less than 10
 - 4.2. In all matters that call for the vote of LMC members, each member shall have one vote. Each member shall be entitled to vote in the election of directors and in any other matter that requires the vote of members
5. Officers
 - 5.1. The officers of the LMC shall consist of a Chair, a Vice Chair and a Secretary/Treasurer who serve two-year terms
 - 5.1.1. A person may hold only one office.
 - 5.1.2. The term of each officer shall commence on the first day of the ASHRAE fiscal year following election to office
 - 5.2. Any LMC officer (regardless of how elected or appointed) may be removed with cause by the ASHRAE Board of Directors
 - 5.3. Chair
 - 5.3.1. The Chair shall preside at and serve as Chair of LMC meetings and shall perform other duties and have other authority as may from time to time be delegated by ASHRAE’s Board of Directors. The Chair has the authority to appoint LMC committees as needed
 - 5.4. Vice Chair
 - 5.4.1. The Vice Chair shall, in the absence or disability of the Chair, or at the direction of Society’s Board of Directors, perform the duties and exercise the powers of the Chair. The Vice Chair shall perform any other duties and have any other authority as from time to time may be delegated by the Chair or LMC ExCom
 - 5.5. Secretary/Treasurer
 - 5.5.1. Shall be responsible for preparing agendas for LMC meetings and LMC ExCom meetings
 - 5.5.2. Shall be responsible for recording minutes of LMC ExCom meetings
 - 5.5.3. Shall perform any other duties and have any other authority as from time to time may be delegated by the Chair of LMC ExCom
 - 5.5.4. Shall be responsible for overseeing of all funds and securities belonging to the Life Members Club and for the receipt, deposit, or disbursement of these funds and securities under the direction of the LMC ExCom unless otherwise provided by the LMC ExCom, in conjunction with the Society’s financial officer,
6. Executive Committee (LMC ExCom)

- 6.1. The affairs of the Life Members Club shall be administered by an Executive Committee (LMC - ExCom) consisting of the Chair, Vice Chair, Secretary/Treasurer and not less than four (4) additional LMC members (ROB xxxxxxxxxx).
 - 6.1.1. LMC ExCom members must be members of the ASHRAE Life Members Club in good standing
 - 6.1.2. Members of the Board shall have 3-year staggered terms
- 6.2. Vacancies
 - 6.2.1. A vacancy occurring in the LMC ExCom may be filled for the un-expired term, unless the members have elected a successor, by the affirmative vote of a majority of the remaining LMC ExCom members, whether or not the remaining LMC ExCom members constitute a quorum
- 6.3. Regular Meetings
 - 6.3.1. A regular meeting of LMC ExCom shall be held in conjunction with each meeting of members.
- 6.4. Special Meetings
 - 6.4.1. Special meetings of LMC ExCom may be called by or at the request of the Chair or any LMC ExCom member in office at that time
- 6.5. Place of Meetings
 - 6.5.1. LMC ExCom may hold their meetings in conjunction with Society Annual and Winter Conferences
- 6.6. ExCom Voting
 - 6.6.1. A majority of the LMC ExCom members then in office shall constitute a quorum for the transaction of business
 - 6.6.2. ASHRAE Standing Committee meetings are conducted using Robert's Rules of Order.
 - 6.6.3. All matters shall be decided by a majority of those voting, with fiscal matters requiring a two thirds majority. Letter ballots require a majority of the LMC ExCom voting membership to cast an affirmative vote. Letter ballots for fiscal matters must be approved by at least 2/3 of the voting membership of the Committee
 - 6.6.4. Motions involving Society policy (Found in ROB Volume 1) shall be approved by a 2/3 vote of the LMC ExCom members present in accordance with the quorum requirements and shall be submitted to the BOD for final approval
7. Subcommittees and Liaisons
 - 7.1. The LMC ExCom Chair shall appoint subcommittees and liaisons as required
 - 7.2. The Chair shall appoint a member of the LMC ExCom to be the liaison to the ASHRAE Development Committee
8. Awards
 - 8.1. Details of current awards and procedures are found in the LMC Reference Manual.
 - 8.2. E. K. Campbell Award of Merit
 - 8.2.1. The Club shall sponsor an annual award, known as the "E.K. Campbell Award of Merit", to a deserving educator, who is an ASHRAE Member in good standing, and who is associated with a recognized institution of learning; to offer encouragement to teach the subjects covered by the profession and industry as related to the American Society of Heating, Refrigerating and Air Conditioning Engineers.
 - 8.3. Other Potential Awards
 - 8.3.1. Consider other special awards, which from time to time have been established by the LMC ExCom or may be established in the future for such worthy causes as the LMC ExCom may select.
9. Fiscal
 - 9.1. Approval of expenditures of Life Member Club funds
 - 9.1.1. By majority vote of the LMC Executive Committee (LMC ExCom) as prescribed in section 3.
 - 9.1.2. By majority vote of the members present at a regular meeting, provided that there are at least 5 voting members physically present at the time of the vote

9.2. Disbursements of up to \$1000.00 may be approved by the Treasurer (or in his absence, any other LMC officer) in writing or by E-mail. Disbursements exceeding this amount shall require the additional approval of the Chair or another LMC officer

9.3. All funds of The Club are donations and shall not be used for any purpose except as outlined

10. Staff Liaison

10.1. Shall be the ASHRAE LMC Staff Liaison shall be listed on the LMC Roster.

11. Revisions

11.1. Revisions to the Manual of Procedures may be initiated by any three (3) members of LMC ExCom or by six (6) members of the LMC and must be submitted in writing to LMC ExCom with signatures

11.2. All such revisions, if approved by three (3) or more members of LMC ExCom, shall be submitted for vote at the next LMC meeting

11.3. Revisions shall be forwarded to the approving body if they receive a majority vote at a regular meeting of The Club, provided that there are not less than ten [10] affirmative votes

Report to ASHRAE ExCom
on the
DiscoverE Spring Steering Committee Meeting

from Don Colliver 6/17/2016

The meeting was held in Reston VA at the ASCE Headquarters on June 17, 2016. Don Colliver attended on behalf of ASHRAE.

An extensive report from the DiscoverE staff is attached; however a few key issues and/or new items discussed which are not included in that report and which may be of interest to ExCom are included below.

- It was reported that the program is financially stable. Financial decisions are under the control of the National Engineers Week Foundation Board of Directors that consists of NSPE board members and current and recent past E-Week society sponsors. A bill for the organizations participating will be sent within a couple of months. A grant from the Bechtel Foundation has enabled the hiring of two additional staff.
- The 2015-2016 campaign was led by Boeing / AIAA / SAE. A report highlighting the 2015-'16 campaign is highlighted in the attached summary report. 2016 marked the 65th anniversary of the National Engineers Week celebration. Social media was the major topic discussed. There was a big growth in social media from 8,000 to 32,000 tweets during EWEEK this year. EWEEK2016 hashtag had 24,000+ tweets by more than 6,500 contributors. One individual had 38K views of her Girl Day video. The number of tweets for Global Marathon doubled. There were 45 countries represented in the tweets although 55 countries participated in the global marathon. Five countries are now hosting Future City competitions. "Funny or Die" (Producer of NAE's "What if we covered engineers like celebs") was #1 contributor with 1 tweet which had 12.7 million impressions.
- The 2016-2017 campaign is being led by ASCE. The theme is "Dream Big". The kickoff will be in early fall. If ASHRAE wants original editable files for advertising literature so it would include the ASHRAE logo, the files can be obtained from Thea Sahr at DiscoverE.
- The legacy project for 2017 will be a 45-minute 3-D IMAX film "Dream Big: Engineering Wonders of the World" that is being produced by ASCE and Bechtel. The movie will show viewers how engineers push the limits of ingenuity and innovation in unexpected, imaginative and amazing ways. This movie will be premiered at Smithsonian Air and Space in DC and several other IMAX theaters on Feb 17, 2017. There will be opportunities for using the film (3-D or regular theater version) at other venues. Online toolkits to support the movie will be published at DiscoverE.org. See dreambigfilm.org for more info on booking or www.discovere.org/our-programs/dream-big for info and activities about how to engage people in engineering. Gwen Hearn is the contact (gwen@discovere.org). ASHRAE could help in working to developing content for the toolkit. (DGC Editorial Comment: This might be something that could be considered for use at CRCs as one of the entertainment events.)
- There is a change in that there will be a "Leadership Council" where the corporations will join together and not have a single corporation leader each year. The Leadership Council will be made up of the Steering Committee Lead Organization, a representative of the BOD of the National Engineers Week Foundation, a member of the Diversity Council, and the business

members. The business members will provide \$100K+/yr. Current members are: Bechtel Foundation, Bentley, Boeing, ExxonMobil, Lockheed Martin, NCEES, Northrop Grumman, and Shell.

- The Steering Committee members will continue to pay annual dues (\$15,900) and provide \$100K during their leadership year. The \$100K would be a direct contribution. Previously it was less but it would also provide funding for a specific person hired by NSPE to work with DiscoverE. This makes it cleaner and provides continuity. The contribution could also be sponsoring kits rather than direct cash.
- Items for 2016-2017 which might have new emphasis or need for addition ASHRAE activity :
 - Global Marathon – There is a need to identify active leaders and/or affinity groups outside the US who can help promote Global Marathon. This would be a good activity for the ASHRAE ASA.
 - Girl Day – There is a need for women to be featured as Role Models. We can submit volunteers to be featured. This needs to be done by Oct 31, 2106.
 - New Faces – Applications will start to be accepted on Sept 6th and winners are due Nov 18th.
- A new focus will be on attempting to streamline the communication between DiscoverE and the partners. Thea Sahr will be contacting Katie Thomson to get program priorities. An action item for an initial ranking of programs is given to the Student Activities Committee.

ACTION ITEMS:

- AI1 - Katie Thomson: Need to complete the order forms for 2017 volunteer kits and the New Faces forms (needs to be return to Karen Kuhn by July 1)
- AI2 - Tom Watson (AASA): Get with Leslie Collins (DiscoverE staff) about inviting her to the AASA information about the Global Marathon to ASA and ask for their help. See: <http://www.discovere.org/our-programs/global-marathon> contact Leslie Collins (DiscoverE staff) about speaking to AASA at the Winter Conference.
- AI3 - Student Activities Committee: Submit women to be featured as role models for Girl Day. Send to taryn@discovere.org.
- AI4 - Student Activities Committee: Rank each of the following programs from 1-8 (1 is highest priority) as to how the program is used to support ASHRAE's goals and objectives and return to thea@discovere.org. Dream Big, Engineers Week, Future City, Girl Day, Global Day, Global Marathon, New Faces College, New Faces Pro.

**Report from DiscoverE to
Steering Committee and Diversity Council
Building Volunteer Collaboration and Impact 2015-2016
Program Outcomes**

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Report from DiscoverE

Program Impacts and Outcomes

1. Engineers Week

Dates:

February 21-27, 2016

Purpose:

Engineers Week® is the catalyst for volunteerism and public discussion about the future of engineering as well as public understanding and recognition of the contributions of engineers. It is the only event of its kind for the engineering and technology professional and college communities. It is a focal point for driving key messages internally and externally—from the President of the United States to university deans to corporate executives—about education, celebration, and work force development. For 64 years it has been a spark that ignites local, regional, national and even international engineering education and outreach events.

Starting objectives:

2016 marks the 65th anniversary of Engineers Week, and we are rolling out a new program—Global Day of the Engineer—and will reach new audiences with the message that *Engineers Make a World of Difference*. In 2016, we will also:




- Move the 2016 Kickoff Webcast to late September/early October to accommodate educators/volunteers
- Make Volunteer and Girl Day kits available in September to coincide with the higher web traffic during this period (through a Google analytics review we've identified September as having the second highest monthly traffic after February).
- Request Presidential message and Congressional resolution
- Request ITEEA insert 2016 Engineers Week poster in their February 2016 magazine
- Host a January 2016 webinar to engage volunteers in Engineers Week.
- October 2015 - Distribute Order Form for Volunteer and Girl Day kits
- We will create new Engineers Week Ads (available via download from discovere.org)

Significant Outcomes:

- Secured a message from President Obama recognizing Engineers Week and the importance of the profession.

- Hosted our annual free Discover Engineering Family Day at the National Building Museum in Washington, DC for over 8,200 kids and their families.
- Received message from the International Space Station. It was viewed 1,320 times on YouTube and over 9K times on Facebook.
- Over 3,100 Volunteer Kits were distributed free of charge. In 2015, 6,500 kits were distributed (2,000 by ASABE).
- Engineers Week logo was downloaded over 1,455 times.
- Engineers Week Ads were downloaded over 935 times.
- Engineers Week Poster was downloaded over 1,049 times.
- Engineers Week 65th Anniversary ad was downloaded over 398 times.
- Engineers Week 65th Anniversary logo was downloaded over 536 times.
- Social Media:
 - **Twitter:** During Engineers Week 2016, the hashtag “#eweeek2016” was used in **more than 24,000 tweets** by **more than 6500** contributors (vs. 8500 tweets by more than 4500 contributors for #eweeek2015). Since last year, that’s almost triple the number of tweets and a 44% increase in contributors.
 - Funny or Die (Producer of NAE’s “What if we covered engineers like celebs” video) was #eweeek2016’s **#1 contributor with 1 tweet** which had 12.7 million impressions.
 - **Facebook:** Second highest performing post on DiscoverE FB page in 2016 was the ISS EWeek video with **860** reactions/comments/shares (LaTisha’s Girl Day video was #1).
 - **#4** post was the announcement of the 65th anniversary on Sunday, 2/21 (**393** reactions/comments/shares). Compare to last year’s top EWeek post of #Inspired2Engineer campaign with **219** likes/shares on 2/22.
- Top Tweets:

tweets	TIME	RETWEETS ▼
GE Aviation @GEAviation What fuels you? We have an idea ... #eweeek2016 #engineersweek #avgeek	Feb 23, 2016, 7:02 AM	46
GE Aviation @GEAviation Happy #EngineersWeek! Tell us, what catches your attention? #avgeek #aviation #eweeek2016	Feb 22, 2016, 9:31 PM	45

1 - 18 of 18 tweets	TIME	RETWEETS ▼
 Boeing Defense @BoeingDefense For #eWeek2016, we asked #Boeing engineers about their work + passion. Here's an F-15 system designer. #STEM Feb 25, 2016, 12:05 PM		42
 Boeing Defense @BoeingDefense "I love working on these jets." For #eWeek2016, we asked a #Boeing F-15 engineer why he loves being one. #STEM Feb 26, 2016, 12:05 PM		32
 Boeing Defense @BoeingDefense #Mars: "most challenging journey ever." The engineer helping #NASA go: boeing.com/principles/edu... #Boeing100 #eweek2016 Feb 25, 2016, 11:01 AM		22

TOP TWEETS



		IMPRESSIONS
 Funny Or Die @funnyordie	Feb 23, 2016	
What If We Covered Engineers Like Celebs? #EWeek2016 amp.twimg.com/v/4bbec10e-b29...		13M
12.7M	154	0

- Five Easy Ways to Make a Difference During Engineers Week Webinar
 - Registrants – 470 (34% increase over 2015)
 - Live participants – 239 (34% increase over 2015)
 - Posted to website (viewed 2,490) (89% increase over 2015)
- Webcast kickoff at CalTech
 - Registrants – 1,471 (70% increase over 2015)
 - Total views – 602 (34% increase over 2015)
 - Unique views – 439
 - Peak concurrent views – 321
 - Total viewing hours - 164
 - Posted to website (viewed 1,578) (41% increase over 2015)

- Top 10 countries by viewership
 - USA – 569
 - Columbia – 8
 - UK – 3
 - India – 3
 - Italy – 1
 - Germany – 1
 - Brazil – 1
 - Spain – 1
 - Thailand – 1
 - Israel - 1

Other:

2016 DiscoverE Survey Results

***754 responses**

Program Participation

- 83% of Educators and 81% of Engineers participated in Engineers Week
- 33% of Educators and 32% of Engineers participated in Girl Day
- 17% of Educators and 14% of Engineers participated in Girl Day

What are you:

- 45% of respondents are engineers
- 30% of respondents are teachers
- 12% of respondents are STEM professionals
- 6% of respondents are college students

How did you get involved with DiscoverE? (Engineers only):

- 33% - Through my employers program
- 29% - On my own
- 17% - Through my engineering society
- 10% - Through my college/university
- 8% - Other
- 2% - Through a local coalition

Sample of Please share how you are inspiring kids to explore engineering:

During Engineer's Week, we had many engaging, inspiring activities going on at Gold Hill Elementary School in Tega Cay, SC. It was an amazing experience for all involved. We had 13 people in STEM related fields come in from an Electrical Engineer with NASA to a chemist who makes beauty products. All grade levels had a chance to see at least 2 presentations. We purchased DiscoverE t-shirts for all of our presenters. We also had a plethora of STEM activities going on around our building as students were engaged in the Engineering Design Process. Our kids were inspired as they truly became innovators with their builds! We

obtained DiscoverE Engineer's Week certificates for each and every student in our building. This was a truly memorable experience for all involved!
-Matt Rohring, Gold Hill Elementary, Tega Cay, SC

Boys & Girls Clubs of Greater Washington hosted engineers from the National Society of Black Engineers. They spoke to our teens about engineer careers, types of engineering and coordinated an engineering project with them. -Paul Posas, B&GCA Greater Washington, DC

Kids weren't aware of the careers and how fun engineering is. Students love the activities and the videos.
-Lisa Marquez, AUHSD, Anaheim, CA

Every year the most awaited event is the Eweek Friendly Competition. All employees, engineers and non-engineers are very excited to join the contest. -Aileen Junio, Fluor MidEast Ltm, Abu Dhabi

2. Introduce a Girl to Engineering Day

2016 Report

Dates:

February 25, 2016

Purpose:

More than just one day, Girl Day is a national movement to show girls how creative and collaborative engineering is and how engineers are changing our world. It gives thousands of women engineers, with support from their male counterparts, the chance to volunteer and directly mentor more than 500,000 girls and young women in grades K through 12.

Begun over a decade ago when the engineering and education communities were just starting to discuss the issue, DiscoverE was actively engaged in addressing the challenges of engaging girls in engineering. Today, Girl Day takes many forms: bringing girls into the engineering workplace; sending volunteers into schools to talk to girls about engineering; and hosting large-scale events that feature engineering activities.

Starting objectives:

The 2015-2016 goals were to:

- Build on the success of the 2015 *Bring it Out* campaign with a 2016 *Role Models: Bring It Out* campaign.
- Run the campaign from October 2015 to February 2016.
- Encourage volunteers to become role models and seek out single-visit interactions.
- Develop the following resources:

- 3 videos of engineering role models
- Several infographics
- Artwork containing quotes for posting on social media
- Create 2016 Girl Day ads that are tied to both 2015 and 2016 campaigns.
- Reach out to Techbridge to discuss featuring their *Role Models Matter Training Toolkit* in the campaign and making it available on the DiscoverE website.

We achieved everything we set out to do, except for creating several infographics and partnering with Techbridge. Due to the overwhelming response to the shareable graphics we decided not to create separate infographics. As for the Techbridge partnership, after we found out they charged for the training we realized they won't allow us to provide it free on our website.

Significant Outcomes:

- We asked volunteers to sign up as Girl Day Role Models via an online pledge form. Our goal was 500 sign-ups. We had 791, exceeding our goal by 58%.
 - 88% were from the US
 - 22% were international
- To engage the signed-up role models, we sent out a monthly email (Nov, Dec, Jan, & Feb) offering tips, advice, and resources they could use.
- We developed three new videos featuring the following engineers or engineering students:
 - Sarah Mihm (3,015 views on Facebook)
 - LaTisha Durham (37,801 views on Facebook)
 - Victoria Ibarra (5,000+ views on Facebook)
- This year five Congressional Representative participated in Girl Day. Three spoke at the House briefing, one participated in a Girl Day twitter chat and one tweeted about Girl Day. (Details about each of these events are below.)
- For the second year, DiscoverE teamed up with Representative Daniel Lipinski (D-IL 3rd District) to host a second Capitol Hill Briefing on Girl Day. Representative Paul Tonko (D-NY) and Representative Donna Edwards (D-MD) and staff from 28 Congressional and Senate offices, as well as Department of Commerce, NSF, and engineering societies were in attendance. The event featured speakers from AIAA, Boeing, Lockheed Martin, NSBE, UT-Austin, Bechtel and the US Navy.
- Promotion—Girl Day had significant press coverage surrounding The Capitol Hill Briefing:
 - US News & World Report (UVM: 17,292,886) covered the event and wrote this feature.
 - An NBC News crew also covered the Capitol Hill event and fed it to the network's O&O's, resulting in major market coverage later that day.
- Downloaded Ads, Poster, and Logos
 - We created three Girl Day ads. Option 1 was downloaded 241 times, Option 2 was downloaded 125 times and Option 3 was downloaded 140 times.
 - The 2016 Girl Day logo was downloaded 610 times.
 - The Girl Day poster was downloaded 396 times.
- Social Media:

- Lockheed Martin and Girls Inc. hosted a #GirlDayChat on Girl Day. Led by Judy Vredenburg, President & CEO of Girls Inc. and featuring Michele Evans, Lockheed Martin; US Rep E.B. Johnson; and Dana Lorberg, Mastercard, the twitter chat had 1300 tweets by 549 contributors during Engineers Week (including promotion and chat tweets).
- Shareable Quote Graphics
 - 14 society partners, Girl Day Corporate partners and Leadership Council members participated resulting in 19 graphics.
 - DiscoverE customized the graphics with the partners' logo, a quote and photo of a female engineer provided by the partner. These customized graphics resulted in a diverse and widespread representation of Girl Day on social media.
- During Engineers Week 2016, the hashtag #GirlDay2016 was used in 3,820 tweets by 2,056 contributors (compared to 2,284 tweets by 1,189 contributors in 2015). That's a 67% increase in tweets and 73% increase in contributors.

Sample Tweets from Girl Day:



Boys & Girls Clubs @BGCA_Clubs

We're ready to teach young women about engineering.
 @Raytheon, girls from BGC LA love #STEM! #girlday2016
 #eweek2016 ow.ly/i/h2Rvi
 Feb 25, 2016, 12:00 PM



Isabel Neff @Isaneff96

These ladies from West Liberty just built a hand for the
 #HelpingHands cause! #GirlDay2016 #RockwellCollins
 #eweek
 Feb 25, 2016, 12:46 PM



US Rep E.B. Johnson @RepEBJ

Im loving this Twitter #GirlDayChat abt getting more women
 in engineering.
 Feb 25, 2016, 5:47 PM



Rep. Suzan DelBene @RepDelBene

As co-chair of @WomensHighTech, I'm fighting so girls today are key contributors when the products of tomorrow are developed. #GirlDay2016

Feb 25, 2016, 12:42 PM

3. Global Marathon For, By and About Women in Engineering & Technology

2016 Report

Dates:

March 8-10, 2016

Purpose:

Women in engineering and technology play a critical role in defining how we live and thrive on our shared planet. However, in most countries women are under-represented in E&T professions and, unfortunately, many female engineers leave the field to pursue non-engineering careers.

Over a decade ago DiscoverE and partners decided to address these issues on a grand scale—by coming together and forming a global community of women in engineering and technology. The Global Marathon is a free online platform that is a combination of a virtual webcasts and webinars, as well as local, in-person ‘ambassador’ events such as a brownbag discussion at work, coffee meet-ups, meetings at universities, etc. Aimed at women between 18 and 45 years of age, the Marathon is the only E&T profession-wide event linked to International Women’s Day.

Starting objectives:

The 2015-2016 goals were to:

- Engage our audience year round;
- Use existing content to draw people back to the Marathon environment;
- Increase registrations and attendance; and
- Explore with the Thought Leaders the idea of expanding their portfolio to include strategy development for Girl Day. Individually and collectively this group is an ongoing force in advocating for women and girls in STEM.

We achieved all of these goals except the last one – details included under Significant Outcomes. As for the goal we did not achieve, the TL discussed the idea of including strategy development for Girl Day but felt their portfolio was full and choose not to pursue it this year.

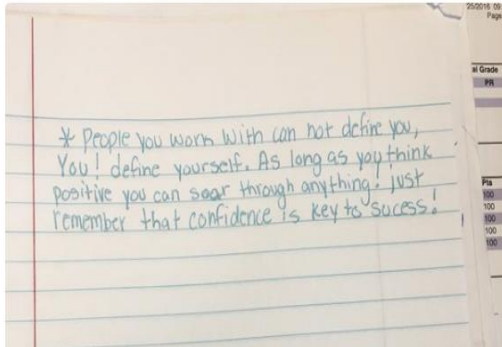
Significant Outcomes:

- To engage our audience year round we hosted three social media campaigns:
 - In June we partnered with SWE to host a twitter chat about being a female millennial in the E&T workforce. (320 tweets.) We also produced two html postcards and four shareable graphics.
 - In Sept we partnered with Engineers Ireland and hosted a twitter chat on overcoming shyness in the workplace (520 tweets). We also produced two html postcards and four shareable graphics.
 - In January we elected to not host a twitter chat and instead created three shareable graphics about being a team player.
- Thought Leaders
 - We hosted the first ever face-to-face meeting of the Thought Leaders in June. The all day meeting resulted in setting the overall and daily program themes.
 - This year we launched our first ever Millennial advisory group. This group was charged with helping us attract a younger audience and helping to create a program that would appeal to millennials.
- This year's chair, Diane Melly, of IBM, opened doors to organizations outside the engineering community, include Points of Light and the UN Foundation.
- Event Highlights
 - We pre-taped an interview between Meighan Stone, Executive Director of the Malala Fund and Diane Melley, IBM. This proved to be the most attended session with over 405 participants.
 - This year's Marathon featured 18 sessions with 50 presenters from 9 countries.
 - The event offered 10 hours of programming
 - 70% of participants spent 60+ minutes at the Marathon
 - We met our goal of increasing both our registrations and attendance numbers for 2016.
 - 2,373 people registered and 1,107 attended the Global Marathon (this is an all-time attendance record)
 - women from 55 countries participated in the event – a 34% increase over last year.
 - The Thought Leaders identified millennials as the target audience for this year's Marathon. 41% of the audience was between the age of 18 to 34 and 44% was between the age of 35 and 54.
- Promotion
 - Diane Melley, IBM, wrote a bylined article that appeared in the [Huffington Post](#)
 - We tried a new promotional tactic this year by writing five blogs featuring five different Thought Leaders and why they were involved in the Marathon. While all performed well Marvi Matos' blog (Boeing) received nearly 700 like/shares on the Global Marathon

- Facebook page and a total of 1,500 beyond the page via shares.
- We created four shareable graphics promoting registration. One featured GM globe artwork and three featuring "Did you know" stats provided by Kelly Services, Engineers Canada and Engineers Australia.
 - Social Media
 - Compared to last year, we more than **doubled the number of tweets and contributors** to the #GlobalMarathon conversation on Twitter.
 - 1506 tweets by 442 contributors in 2016 vs. 741 tweets by 202 contributors in 2015
 - The main reasons for this large increase in tweets were strong partners like IBM and Bechtel who live tweeted throughout the event and influential organizations like Malala Fund, Points of Light and Engineering 4 Change who joined the conversation.
 - Sample Tweets during the Global Marathon:



@DiscoverEorg @meighanstone
#GlobalMarathon initial reflections from a 9th
grade student



Aditi Rajagopal @Aditi_Rajagopal · 3h
"Leave the marathon, and take charge" @DianeMelley #GlobalMarathon
@DiscoverEorg



4. Future City National Competition

2016 Report

Dates:

2015-2016 Program Cycle (March 1, 2015-February 29, 2016)

Purpose:

Future City is a project-based learning program where middle school students imagine, research, design, and build cities of the future. Students work with an educator and STEM mentor to create cities that incorporate the team's solution to a citywide sustainability issues.

Future City is flexible and cross-curricular, giving students an opportunity to do the things that engineers do: identify problems; brainstorm ideas; design solutions; test, retest, and build; and share their results. This year's sustainability challenge asked students to design a citywide solid waste management system that was safe, environmentally friendly, and energy efficient.

2016 Objectives:

- Last year's objectives:
 - o As the result of a generous grant from PMIEF, we created a new program structure that uses both Project Management and the Engineering Design Process as a guiding framework and then piloted the program in 11 schools nationwide and evaluated results.
 - o Support formation of international regions in China and the UK
- What we achieved
 - o Future City rolled out the new program framework, incorporating Project Management and the EDP, nationwide to much success.
 - o We completed a summative evaluation of the new framework.
 - o China successfully completed its first full Future City Competition cycle.
- What we didn't achieve and why (if known)
 - o The UK region didn't come to fruition as hoped due to a change in staffing (maternity leave.)
- Add any new objectives that weren't listed on last year's plans.
 - o We challenged the coordinators to register 1,500 educators for the 2015-2016 competition cycle, representing 11% growth. We did not achieve this target and regions cited venue capacities, technical issues with SimCity in many schools, and stonewalling from school districts as barriers to growth.

Significant Outcomes:

- New resources that were created
 - o Revamped program handbook
 - o Online training for educators re: new framework and program updates (1,120 views)
 - o Waste Not, Want Not webinar in October (2,208 views)
 - o "How to Start a Future City Region" overview document for potential coordinators
- Number of people engaged:
 - o 1,165 educators in US.
 - o 2,265 judges in US.
 - o 175 judges for the Finals competition including 51 Model and Presentation judges in DC.
- Future City China organized its own Finals competition and sent two teams to compete in DC for the first time
 - o China implemented the program in eight regions, engaging 90 schools and 559 students on 142 teams.
- New sponsor, Cisco at \$25,000
- Engineers Canada attended Finals and is piloting a Canadian program in 2016-2017
- A new sub-region formed in Eastern Washington
- Future City was awarded the inaugural Innovative Education Award from Underwriters Laboratories and NAAEE, totaling \$100,000.
- Nevada team attended 6th White House Science Fair in April 2016

- Media coverage for the 2016 National Finals included Voice of America, Infrastructure USA, Muse Magazine, and the Washington Post.
 - In addition, nearly every regional Future City competition received press coverage.
- Social Media:
 - This was the second year we promoted a unique hashtag (#futurecity2016) for Future City.
 - Total posts about Future City during National Finals: 267
 - 35 on Facebook
 - 232 on Twitter
 - Total engagement of DiscoverE’s posts (retweet, shares, likes) during National Finals:
 - 36 actions on Twitter with @DiscoverEorg
 - 225 actions on Facebook with Future City Competition’s Page
 - Total posts using #FutureCity2016: 216 posts
 - 191 on Twitter
 - 25 on Facebook
 - Total social impressions during National Finals 2,868,071
- 16,562 downloads from futurecity.org/resources

Other:





5. Global Day of the Engineer

2016 Report

Date:

Wednesday, February 24, 2016

Purpose:

This year, we celebrated the first ever Global Day of the Engineer. With the theme “*Engineers Make a World of Difference*” engineers everywhere unite in celebration and volunteerism. Global Day is THE movement to ensure people everywhere know that engineers make the world a better place and to inspire future generations of innovators.

Various countries celebrate their own Engineer Days or Weeks, but Global Day brings together **all** engineers everywhere to underscore the profession’s universal impact. Global Day is based on the successful collaboration model and widely adopted programs of DiscoverE in the United States.

To participate, individuals and organizations can pledge online to:

- Celebrate engineering.

- Engage students in simple, hands-on engineering experiences.
- Share a photo local engineering innovation.

2016 Objectives:

The 2015-2016 goals were to:

- Launch the first ever Global Day of the Engineer
- Run the campaign from October 2015 to February 2016.
- Encourage volunteers and organizations to take the Global Day pledge (1, 2 or all 3)
- Encourage organizations to become official Global Day partner
- Develop the following resources:
 - Global Day microsite on DiscoverE.org
 - 1 video launching Global Day (Boeing)
 - 3 hands-on activities (developed by content partner Design Squad Global)
 - Global Day ad
 - Artwork containing global hands and map of pledges worldwide
 - Webinars
- Develop “thunderclap” for social media, an online flash mob that helps people be heard by posting the same message at the same time.

Significant Outcomes:

- We asked volunteers/organizations to take Global Day pledge via an online pledge form. Our goal was 500 pledges. We had 1197 total pledges. Exceeding our goal by 140%. The pledges broke down as follows:
 - 440 to engage kids
 - 570 to celebrate
 - 187 to share innovation photo
 - 84% of individuals were from the US
 - 16% were international
 - Pledges from 45 countries. Top non-US countries were Canada, India, Australia, Ireland, UK
- To engage the pledge-takers, we sent out 4 emails (Dec, Jan, Feb, and Global Day) offering tips, advice, and resources they could use.
- We had a total of 23 official partners including: Joy Global, Engineers Australia, Engineers Ireland, Engineers Canada, Japan Society of Professional Engineers and Scientifilles (Republic of the Congo)
- As of 4/20/2016, Boeing’s video has had **1182 views** on YouTube
- As of 5/4/2016, 3 Design Squad activities were downloaded a total **5675** times (including translated versions)
 - Seismic Shake-up: 2337 (701 non-English)
 - Emergency Shelter: 1714 (778 non-English)
 - Helping Hand: 1624 (705 non-English)
- The Global Day ad was downloaded 270 times as of 5/4/2016.
- We offered two webinars: an introductory one for partners and one led by Design Squad Global.

- Press: The first annual Global Day of the Engineer received press coverage, both as standalone stories and in broader stories looking at the overall EWeek programming menu. Some Global Day coverage highlights include:
 - Feature in ASME's Mechanical Engineering: (<https://www.asme.org/about-asme/news/asme-news/celebrate-profession-pledge-take-part-global-day>)
 - American Nuclear Society's ANS Nuclear Café: (<http://ansnuclearcafe.org/2016/02/21/national-engineers-week-nuclear-energy-for-the-next-generation/>)
 - Electronic Component News: (<http://www.ecnmag.com/news/2016/02/how-robots-are-getting-kids-excited-about-stem>)
- Social Media:
 - During Engineers Week 2016, the hashtag **#GlobalEngineer** was used in **2303** tweets by **1405** contributors (1665 tweets on 2/24). Compare to #GirlDay2016, another one day event with 3820 tweets by 2056 contributors (2139 tweets on 2/25).
 - On February 17, DiscoverE partnered with Design Squad Global and FHI360 for the #GlobalEngineer Twitter chat: "Inspiring the Next Generation of Global Engineers." Participants included PBS Kids, National Girls Collaborative Project, Engineers Ireland, and Bridge 2 Employment, a global initiative for high school students. The chat had 442 tweets by 103 contributors on 2/17 (318 tweets during noon hour). FHI360 created this storify, a snapshot of the engaging conversation that took place: <http://crowd360.org/globalengineer/>
 - We surpassed our goal of 100 Thunderclap supporters with 106 supporters and a social reach of 223,245.
 - Facebook: Our pledge map post on 2/24 was a top performer in 2016 at #6 with 216 reactions/comments/shares.

Sample Tweets:



Mónica Feliú-Mójer and 2 others follow

Luis Pagan-Quinones @LuisArmandoPQ · Feb 24
It's #GlobalEngineer Day! A big shout out to my colleagues making #CleanEnergy all over the world. 🌍🌍🌍



🔄 1 ❤️ ...

Kristina O'Regan @ThoughtMorsels · Feb 24
@IBMResearch @ibm_in_ireland celebrate @DiscoverEorg Global Day of the Engineer #globalengineer Thanks @m_stephenson



🔄 2 ❤️ 5 ...



6. New Faces of Engineering Pro and College Edition

2016 Report

Dates:

August 2015 to May 2016

Purpose:

The New Faces of Engineering recognition programs highlight the exciting and often unique work of young engineers and engineering students—and the resulting impact on society. Today’s engineers are working to solve issues on a global scale, and these young professional engineers and engineering students have shown outstanding abilities in projects that significantly impact public welfare or further professional development and growth, as well as dedication to volunteering and/or mentoring on a local, national, or global scale.

Starting objectives:

- Continue to streamline the New Faces Pro and College Edition timelines.
- Gather similar data on both Pro and CE applications.
- Turn over promotion of nominees to the societies
- Explore additional ways of effectively recognize and celebrate New Faces winners.

Significant Outcomes:

- We hosted a webinar “Volunteerism = Professional Development” on April 4th. Our panelists Dale Jans, VP of Jans Corporation; Danielle Couger, Senior Research Engineer at Lockheed Martin and Conrad Ball, Chief Engineer for Engineering Central Initiative at Boeing shared their experiences volunteering and how it helped their careers.

- The content from this webinar was turned into a blog and posted on LinkedIn.
- We recognized the College Edition winners by placing congratulatory ads in their school newspapers. Combined, all ads reached a total circulation of 209,300.
- We recognized the Pro winners with ads in AIAA and ENR News and reached a total circulation of 92,000. We also offered these turnkey ads to societies to post. No societies took advantage of this offer.
- Boeing produced plaques for all of the New Faces Pro winners.
- The 2015-2016 New Faces College Edition application pool was smaller than previous years (80 in 2016; 101 in 2015; and 191 in 2014). Demographics include:
 - Gender = 45 females and 35 males
 - The four largest race/ethnicity categories were:
 - White: 46
 - Hispanic: 14
 - African American: 8
 - Asian: 7
- The 2015-2016 Pro Edition application pool was much larger than previous years (186 in 2016; 138 in 2015, and 35 in 2014). Demographics include:
 - Gender = 111 females and 75 males
 - The four largest race/ethnicity categories were:
 - White: 116
 - Hispanic: 11
 - African American: 16
 - Indian: 12
- Social Media:
 - In April we spotlighted each winner on Facebook and Twitter over the course of two weeks. The student winners were posted on the College Edition FB page and the Pro winners were posted on DiscoverE's page. We boosted each FB post for \$20, spending a total of \$500 on both programs.
 - The College Edition winner posts had a total reach of 61K with 289 clicks to profiles on website while the New Faces Pro posts had a total reach of 43K with 362 clicks to profiles.
 - For College Edition, the society winner with the most engagement was ASABE's Sarah McIntyre with 1100 reactions on the post. IEEE-USA's Brooke Neufeld was second and SHPE's Yazeli Cruz Rivera was third.
 - For New Faces Pro, the top society winner was ASME's Bryony DuPont with 407 reactions on the post. ASABE's Anne Dare was second and ACEC's Bridget Osborn was third.