

## MINUTES

**GOVERNMENT AFFAIRS COMMITTEE  
WEDNESDAY, JANUARY 27, 2021  
9:00 AM – 1:30 PM EST  
~VIRTUAL MEETING ~**

Approved by the GAC March 17, 2021

### **ATTENDANCE**

#### **Members Present**

Terry Townsend, Chair  
Chad Smith, Vice Chair  
Larry Fisher  
Steven Emmerich  
Sheila Hayter  
Meghan McNulty  
Nanette Lockwood  
Thomas Reyes  
Robert Hoadley  
Kinga Porst Hydras  
Tim Ashby  
Nate Heffner  
Matthew Jesson  
Damon McClure  
Andrea Phillips  
Colin Laisure-Pool  
Daryl Collerman  
Eduardo Conghos  
Sam C.M. Hui  
George Pantelidis  
Gian Modgil  
Roger Jones  
Dunstan Macauley  
Farooq Mehboob

#### **Members Absent**

Lorey Flick  
Eileen Jensen

#### **Guests**

Marli Moise, Toronto Chapter  
Pat Graef  
Madison Schultz, YEA  
John Constantinide, Building EQ  
Jared Larson, Student Activities  
Rajan Rajendran, REF-CPCC  
Dr. Nick Clements, EHC  
Paula Seidel, AIA  
Samantha Slater, AHRI  
Paul Karrer, AIA Bldg Codes  
Mick Schwedler  
Doug Cochrane, Bldg EQ  
Brendan Hall  
David Underwood  
Darryl Boyce  
Patrick Villaume  
Jeremy Stockmans  
Badri Patel

#### **Staff**

Alice Yates  
Jeremy Pollack  
Emily Porcari  
Patricia Ryan  
Lilas Pratt  
Joyce Abrams

## **CALL TO ORDER, WELCOME AND ROLL CALL**

Mr. Townsend called the meeting to order at 9:00 a.m. EST and welcomed the members. Roll call was taken, and a quorum was present.

## **GUEST INTRODUCTIONS**

Mr. Townsend introduced guests participating in the meeting.

## **ASHRAE CODE OF ETHICS**

Mr. Townsend read the Code of Ethics commitment, and also reviewed the etiquette for the virtual meeting format.

### *ASHRAE Code of Ethics Commitment*

*In this and all other ASHRAE meetings, we will act with honesty, fairness, courtesy, competence, inclusiveness and respect for others, which exemplify our core values of excellence, commitment, integrity, collaboration, volunteerism and diversity, and we shall avoid all real or perceived conflicts of interests.*

(Code of Ethics: <https://www.ashrae.org/about/governance/code-of-ethics>)

(Core Values: <https://www.ashrae.org/about/ashrae-s-core-values>)

## **COMMITTEE MEMBER INTRODUCTIONS**

Accompanied by a photo presentation, each of the GAC members introduced himself or herself and shared a few words about themselves.

## **REVIEW OF AGENDA**

Mr. Townsend reviewed the agenda and asked if there were any items or modifications to refrigeration report. Mr. Smith asked to add a report about PAOE points before the Policy and Programs Subcommittee report. Mr. Hoadley asked that a motion on Position Documents be added to the agenda, and staff clarified that was included in the MBO status update report.

## **APPROVAL OF MINUTES FROM OCTOBER 21, 2020 MEETING**

Mr. Townsend asked to review the minutes from the last GAC meeting on October 21, 2020.

**MOTION:** To approve the minutes of October 21, 2020 as written.

Motion made by Colin Laisure-Pool and seconded by Rob Hoadley.

**MOTION PASSED: UNANIMOUSLY APPROVED BY VOICE VOTE (CNV).**

## **UPDATE ON ACTION ITEMS**

Ms. Yates reported that all action items are completed per the Attachment.

## **REPORT FROM ASHRAE GOVERNMENT AFFAIRS OFFICE**

The Government Affairs Staff provided a report that focused on advocacy and outreach opportunities ahead, and described the mission, activities, and role of the staff. The presentation provided by staff is included as an Attachment.

## **REPORT FROM THE ETF**

Mr. Townsend shared highlights from ASHRAE's Epidemic Task Force, of which he is a member. The Attachment provides details on those activities, including the significant outreach to government entities that has taken place due to the ETF guidance and incorporated into various government policies, regulations and statutes, which are also detailed in the Attachment.

Mr. Townsend also reported on breaking news that Dr. Bill Bahnfleth will be testifying before the U.S. House of Representatives, Committee on Transportation and Infrastructure, on February 4 at a hearing entitled "Protecting Transportation Workers and Passengers from COVID: Gaps in Safety, Lessons Learned, and Next Steps."

Mr. Townsend also reminded the committee that a presentation has been created that can be used for government outreach at the grassroots level (found on the Government Affairs website), as well as a list of guidance documents available that is found in the Attachment. Mr. Townsend thanked staff member Steve Hammerling for assembling this very helpful list.

## **STATUS OF DECARBONIZATION INITIATIVE**

Mr. Townsend reports that ExCom and the ASHRAE President have been engaged on the building decarbonization issues, and an announcement should be coming out soon concerning this Presidential initiative.

GAC members Mr. Laisure-Pool and Mr. Reyes offered their support and affirmed the need for ASHRAE to focus on this important topic.

## **SUBCOMMITTEE REPORTS AND MBO STATUS**

A summary of the status of each of the MBOs is found as an Attachment to the minutes.

### Executive Subcommittee

Mr. Townsend asked the MBO implementation leads to report on the status of the MBOs assigned to the subcommittee. Those summaries are included in the MBO Status Table Attachment.

### Members Council PAOE Subcommittee Report

Mr. Smith, a member of the Members Council PAOE Subcommittee, reported that this subcommittee is considering some changes to the PAOEs, including giving more points for meetings with more senior staff or elected officials.

### Policy and Programs Subcommittee

Mr. Hoadley reported that this subcommittee has been very active and have held several meetings over the first half of this society year.

#### *PPIBs*

The subcommittee focused on updating and revising the PPIBs. Mr. Hoadley asked that the PPIB on Utilizing Energy Metrics and Building Benchmarks be removed from consideration at this meeting. Mr. Hoadley also asked for any PPIBs approved at this Winter meeting to not go directly to DRSC and Technology Council because they want to hold off on approval so that the expiration date is extended.

**MOTION:** That the GAC approve the following Public Policy Issue Briefs (PPIBs), which are provided in the Attachments, to be forwarded to DRSC and Technology Council for subsequent consideration:

1. Resiliency in the Built Environment
2. Climate Change and the Built Environment
3. Environmental Tobacco Smoke

Motion made by Mr. Hoadley on behalf of the Policy and Programs Subcommittee.

**MOTION PASSED: APPROVED UNANIMOUSLY BY VOICE VOTE (CNV).**

**BACKGROUND:** ASHRAE members made significant changes last SY to the PPIBs on Resiliency in the Built Environment and Climate Change and the Built Environment. After further review in this SY, these PPIBs were deemed to still be relevant by the Policy and Programs Subcommittee and they determined that they **did not require updates**.

Significant changes were made to the PPIB on the Environmental Tobacco Smoke due to the publication of an updated Position Document on the topic.

This motion was approved unanimously by the Policy and Programs Subcommittee on January 11, 2021 via voice vote (CNV).

**FISCAL IMPACT:** NONE.

*Position Documents*

**MOTION:** That the GAC recommend to Technology Council to develop a Position Document on Decarbonization.

Motion made by Mr. Hoadley on behalf of the Policy and Programs Subcommittee.

**MOTION PASSED: APPROVED UNANIMOUSLY BY VOICE VOTE (CNV).**

**BACKGROUND:** Jurisdictions across the world have introduced legislation and regulations requiring buildings to comply with a variety of low carbon and net-zero goals in the next ten to thirty years. These policies will require designers and building owners to significantly modify existing design best practices. ASHRAE should be providing information to members about how best to comply with these new regulations and meet 2030 and 2050 carbon reduction goals based on their respected climate zone. Additionally, the President of ASHRAE has already approved the creation of a PPIB on the topic.

This motion was approved by the Policy and Programs Subcommittee on January 11, 2021 via voice vote (CNV) with one abstention.

**FISCAL IMPACT:** There will not be a direct fiscal cost, however, the development of ASHRAE Position Documents require staff support and time from volunteer members.

**MOTION:** That the GAC recommend to Technology Council that the ASHRAE Position Document on Environmental Tobacco Smoke shall be amended and expanded with regards to cannabis smoke and electronic nicotine delivery.

Motion made by Mr. Hoadley on behalf of the Policy and Programs Subcommittee.

**MOTION PASSED: APPROVED UNANIMOUSLY BY VOICE VOTE (CNV).**

**BACKGROUND:** The Environmental Tobacco Smoke Position Document has been a useful tool for ASHRAE GAC members. Information from the position document has been used to create a PPIB and write letters to government officials.

With nations such as Canada, as well as several U.S. states such as Washington, Colorado, and Oregon having legalized or decriminalized cannabis, ASHRAE would benefit by providing further information on this topic. However, ASHRAE literature on indoor environmental tobacco smoke does not provide specific guidance for cannabis or electronic nicotine delivery systems as it was considered “outside the scope of this position document.” The PD does call for further research to be conducted on these activities and an Emerging Issue Brief has already been written on electronic nicotine delivery systems.

This motion was approved unanimously by the Policy and Programs Subcommittee on January 11, 2021 via voice vote (CNV).

**FISCAL IMPACT:** There will not be a direct fiscal cost, however, modifying an ASHRAE Position Document will require staff support and time from volunteer members.

**MOTION:** That the GAC recommend to Technology Council that the ASHRAE Position Document on Indoor Air Quality shall be amended to make further reference to natural ventilation systems in emerging economies, and ASHRAE shall provide further guidance and design guides specific to natural and traditional ventilation systems.

Motion made by Mr. Hoadley on behalf of the Policy and Programs Subcommittee.

**MOTION PASSED: APPROVED UNANIMOUSLY BY VOICE VOTE (CNV).**

**BACKGROUND:** The Indoor Air Quality Position Document is widely used for highlighting the impact IAQ has on health, comfort, well-being, learning outcomes and work performance. ASHRAE's GAC members see this as an important issue in government affairs and have used this document extensively since it provides important information. A PPIB is also being created by the GAC based on the position document.

However, ASHRAE members in emerging economies have identified that mechanical ventilation systems are not the sole means of providing adequate ventilation, and both modern natural ventilation systems as well as traditional ventilation systems remain common in these regions. ASHRAE would benefit by providing further information to members about how best to comply with ASHRAE standards while utilizing these natural and traditional methods.

This motion was approved unanimously by the Policy and Programs Subcommittee on January 11, 2021 via voice vote (CNV).

**FISCAL IMPACT:** There will not be a direct fiscal cost, however, modifying an ASHRAE Position Document will require staff support and time from volunteer members.

Mr. Hoadley also reviewed the status of the two MBOs assigned to this subcommittee. Those updates are provided in the Attachment.

#### Member Mobilization Subcommittee

Ms. Phillips reported on the status of Government Outreach Events, a summary of which is provided in the Attachment. She reported that a total of 21 events have taken place. While it appears the gap is significant with a goal of holding 78 such events, Mr. Phillips reminded the members that some events have taken place, but have not been recorded, and the spring is

typically the time when more events are held. She also reminded the members to make sure the outreach events form is completed and submitted to staff.

Ms. Phillips also reported on the status of the two MBOs assigned to this subcommittee; those reports are provided in the MBO Table Attachment.

#### Global Affairs Subcommittee

Mr. Hui reported that the Global Affairs Subcommittee has focused on making progress with respect to the two MBOs to which this subcommittee was assigned; status reports for these MBOs are provided in the MBO Table Attachment.

#### Rules Subcommittee

Mr. Smith reported that the subcommittee focused on reviewing the MOP and in the next half of the Society Year the subcommittee will focus on the Resource Manual and the Rules of the Board. The subcommittee's review of the MOP resulted in a number of recommended changes shown in the Attachment. Mr. Smith reported that most of these changes are "housekeeping items," to reflect what is actually taking place in the committee. Mr. Smith also highlighted a change in the nominations process, and some changes in assigned tasks to the chair and vice chair of the committee with the goal of making the committee operate more efficiently and effectively.

**MOTION:** That the GAC recommend to Members Council to approve updates to the GAC Manual of Procedures (see Attachment).

Motion made by Mr. Smith on behalf of the Rules Subcommittee.

**MOTION PASSED: APPROVED UNANIMOUSLY BY VOICE VOTE (CNV).**

**BACKGROUND:** Changes to the GAC Manual of Procedures (MOP) shown in the Attachment are proposed by the Rules Subcommittee after a detailed review of the full MOP. These MOP changes were discussed at the November 16, 2020 Rules Subcommittee Meeting and approved unanimously by the Rules Subcommittee during its Virtual Winter Meeting on January 22, 2021.

Fiscal Impact: NONE

#### Nominating Subcommittee

Ms. Hayter reported that the subcommittee has considered all positions for the 2020-2021 year, and those recommended for leadership will be contacted to ask whether they are willing to serve. She is pleased that the subcommittee has come up with great recommendations and the recommendations will be completed by 2 weeks after the Winter Meeting ends.

## **STATEMENT FROM THE PRESIDENT ELECT**

The President-Elect, Mr. Mick Schwedler, visited the committee and thanked everyone for their hard work, especially during these difficult days of the pandemic.

## **MENTOR PROGRAM AND TRAININGS**

Mr. Smith reported that the GAC has held three training sessions for RVCs, which is a different approach from last year, with a greater number of trainings of shorter duration, as well as trainings provided for the Members at Large and the Council Representatives, which did not take place last year. The trainings have also be reshaped to be less formal with more interaction among committee members.

In addition, the mentorship program created last year was continued this year due to its success. Because the most success has been seen with small groups rather than one-on-one mentorship, the program will be further developed in the next year with small groups being used. Mr. Smith pointed to the very successful model of Sheila Hayter, who was paired with Meghan and Nanette. Thank you, Sheila!

## **REPORTS FROM REGIONAL VICE CHAIRS**

**(detailed reports are provided in the Attachment)**

- Region I – Mr. Reyes reported for Region I.
- Region II – Mr. Hoadley reported for Region II.
- Region III – Ms. Porst Hydras reported for Region III.
- Region IV – Mr. Ashby reported for Region IV.
- Region V – Mr. Heffner reported for Region V.
- Region VI – Mr. Jesson reported for Region VI.
- Region VII – Mr. Fisher reported that Ms. Flick had to resign due to work conflicts, and GAC Alum Mr. Ryan Williams will take on this position for the remainder of the Society Year.
- Region VIII – Mr. McClure reported for Region VIII.
- Region IX – Ms. Phillips reported for Region IX.
- Region X – Mr. Laisure-Pool reported for Region X.
- Region XI – Mr. Collerman reported for Region XI.
- Region XII – Mr. Conghos reported for Region XII.
- Region XIII – Mr. Hui reported for Region XIII.
- Region XIV – Mr. Pantelidis reported for Region XIV.

- Region at Large – Mr. Modgil reported for the Region-at-Large.

## **ExO REPORT**

Mr. Macauley provided a report on broader Society activities (see Attachment). Mr. Macauley also thanked the Chair and the GAC committee for all the work during a very challenging year.

## **COMMUNICATIONS COORDINATOR REPORT**

Mr. Roger Jones provided a written report (see Attachment).

## **TECHNOLOGY COUNCIL REPRESENTATIVE REPORT**

Mr. Emmerich provided a number of updates from the Technology Council of relevance to the GAC. These are provided in the Attachment. In addition, Mr. Emmerich noted that the Refrigeration Committee is developing a vaccine transport white paper, that may be of interest to policy makers.

He also highlighted the interim guidance, developed by Guideline Project Committee 44P, Protecting Building Occupants from Smoke During Wildfire and Prescribed Burn Events, which should be of interest to policy makers. This document is being reviewed by the Environmental Health Committee and the Epidemic Task Force, and should be available soon.

With respect to decarbonization efforts, Mr. Emmerich wanted the committee, as well as the Decarbonization group, to be aware that several activities are already underway by Society that should feed into the decarbonization initiative, including Standard 228P, which was recently revised to include a zero net carbon metric; the public review draft of 228P should be available this spring.

## **MEMBERS COUNCIL REPRESENTATIVE REPORT**

Ms. Jensen was not in attendance, however her report is available in the Attachment.

## **PUB-ED COUNCIL REPRESENTATIVE REPORT**

Mr. Fisher provided a report in the Attachment.

## **REPORTS FROM COMMITTEE LIAISONS**

Refrigeration Committee – Mr. Rajendran reported that the REF was meeting at the same time as the GAC, and as such he had to keep his report brief. They are focused on partnering with other organizations focused on the coronavirus, as well as creating a working group to draft an MOU between ASHRAE and IIAR which is being finalized. The REF is being reorganized, and will have 7 subcommittees, which will open things up to more participation.

The committee is also developing a vaccine transportation white paper. Mr. Rajendran

will provide an update on the timeline to Ms. Yates, per a request from Rob Hoadley. Mr. Rajendran subsequently reported via email that the REF **plans to have a first draft ready by March.**

Building EQ Committee – Mr. John Constantinide provided a written report (see Attachment) and also reiterated that the committee has prepared a standard operating procedure document for working on government outreach and universities. Ms. Porcari noted that feedback was provided to the Building EQ Committee, and the SOP is posted online and on basecamp.

A question was posed regarding whether the Building EQ tool can provide output using a carbon metric. Mr. Constantinide responded that the tool cannot currently do that, and due to funding constraints it unlikely will be improved to also provide output using a carbon metric.

Residential Building Committee – Ms. Pat Graef was not available to provide a report, but Ms. Lilas Pratt, staff liaison to the RBC gave a short update. The committee is working on several activities of interest to the GAC, including a Guideline concerning humidity for residential buildings, and the development of “issue briefs” similar to those developed by the EHC. The first issue brief that should be available will be focused on wildfire smoke (this is different from the work of Guideline Project Committee 44P, which is focusing on commercial buildings).

YEA Committee – Ms. Madison Schultz reported on the work of the YEA committee. There are no updates specific to the GAC. Their committee’s 3-day leadership weekend went well, and they have been conducting YEA webinars about every 6 weeks to help young members learn more about ASHRAE.

Student Activities – Mr. Jared Larson provided an update on the work of the Student Activities Committee: A Building EQ competition with students is in the works, and a design competition will be ready for next cycle.

Environmental Health Committee – Ms. Meghan McNulty reported with Mr. Nick Clements on the work of the EHC, which is engaged in a number of activities of relevance to the GAC. There are four PDs under revision/creation: Infectious Aerosols, Limiting Mold and Dampness in Buildings, Filtration and Air Cleaning, and Indoor Carbon Dioxide. The EHC has developed a number of Emerging Issue Briefs, and they would welcome input from the GAC, regarding both the content as well as the format/style.

**ACTION ITEM: GAC members are to provide recommendations on the EHC Emerging Issue briefs through EHC Liaison Meghan McNulty. Due Date: Spring 2021.**

## **GUEST REPORTS**

**AIA** – Mr. Karrer, Senior Manager of Building Codes at AIA, reported that AIA has been actively involved with decarbonization and has provided a number of materials to Ms. Yates, which she has posted on Basecamp. The AIA developed its “National Policy Platform” with a strong climate plank immediately before the general elections, and it will hold a grassroots Hill

Day in February. In 2020, the AIA also launched a campaign titled “Blueprint for Better” which is a call to action for architects, design professionals, civic leaders and the public to transform the built environment and achieve a “zero-carbon, equitable, resiliency and healthy built environment.”

**AHRI** – Ms. Samantha Slater, Senior Vice President for Government Affairs, spoke about their legislative priorities, including ratification of the White House Kigali Amendment, which was included in President Biden’s Executive Order that was issued January 27. AHRI also wants to include the use of VRF technology as part of the Defense Authorization bill, and support energy efficiency tax incentives as a part of a clean energy infrastructure bill likely to be taken up by Congress this spring or summer.

**ACTION ITEM:** Ms. Yates is to post on the GAC Basecamp the report from Ms. Samantha Slater of AHRI. Deadline: ASAP.

## **OTHER BUSINESS**

Timing for Decarbonization Initiative: Ms. Yates reported that she received an email from President Gulledge asking the committee to not share further about the decarbonization initiative until after the February 4 Board Meeting.

Mr. Townsend also reminded the committee members to send input on the decarbonization initiative to himself or Ms. Yates. A follow-up reminder will be sent out to all RVCs regarding information being needed by the Decarbonization Initiative for developing their program’s initial structure.

## **NEXT COMMITTEE MEETING**

After consultation with the committee, Mr. Townsend announced the next GAC meeting will take place:

**Wednesday, March 17, 2021  
9:00 a.m. – 11:00 a.m.**

A meeting appointment will be sent out to committee members.

## **ADJOURN**

Mr. Colin Laisure-Pool moved to adjourn the meeting, and Ms. Sheila Hayter seconded the motion. The motioned passed unanimously.

Mr. Townsend adjourned the meeting at 1: 21 p.m. EST.

Respectfully submitted,  
Alice M. Yates, Staff Liaison



**ACTION ITEMS**  
**GOVERNMENT AFFAIRS COMMITTEE**

**Last Updated: January 25, 2021**

#	Action	Assigned To	Due Date	Status	C/O
1	Follow-up with Ayah to get a list of government officials who received training at the Global Training Center.	Jeremy Pollack	ASAP	The Global Trainings Center sent over a list of government officials who attended webinars or trainings in 2020.  The GASC is now deliberating on the best method to engage with officials who attend these types of events going forward.	C
2	Send the revised MBO to Members Council.	Alice Yates	ASAP	Emailed.	C
3	Send PPIBs and policy positions of interest to the Building EQ Committee.	Emily Porcari	ASAP	Emailed.	C
4	Send email concerning GAC award nominations.	Emily Porcari	ASAP	Emailed.	C



# Staff Report: Outlook and Opportunities

Virtual Winter Meeting – January 2021

Alice Yates, Director of Government Affairs

Jeremy Pollack, Manager of Federal Government Affairs

Emily Porcari, Manager of State and Local Government Affairs

Patricia Ryan, Office Manager

# Government Affairs Staff: Who Are We?



*We have a team that is ready to support you!*

Contact any of us at [GovAffairs@ashrae.org](mailto:GovAffairs@ashrae.org)



**Alice Yates**

**Jeremy Pollack**



**Emily Porcari**



**Patricia Ryan**



# Where is the ASHRAE Government Affairs Office?



Our Office: 1255 23<sup>rd</sup> Street NW, Suite 825, Washington, DC  
You are welcome to visit **when it is safe**... not yet, sadly!

# What Staff Have Been Assigned To Do



## **ASHRAE Government Affairs Mission Statement:**

- *To establish ASHRAE as a leading source for expertise in the built environment and a resource for policy-makers in the development of legislation and regulations affecting the public, the HVAC&R community, and the engineering profession.*
- To this end the ASHRAE Washington D.C. office will:
  - Build relationships between the Society and all levels of government in the United States and with the appropriate international community representatives.
  - Facilitate the transfer of technical counsel and assistance on matters affecting the public, engineering profession and ASHRAE professional community.
  - Collect, digest and disseminate to members and staff relevant information regarding current or anticipated government actions.
  - Pursue technology transfer and government funding opportunities independently or jointly with other appropriate organizations.

# Key Areas of Focus for Government Affairs Staff



- Bi-Weekly Government Affairs Updates
- Support and planning for Government Outreach Events
- Tracking legislation and regulations, drafting letters and testimony, connecting members with agencies and elected officials, strengthening relationships with aligned organizations

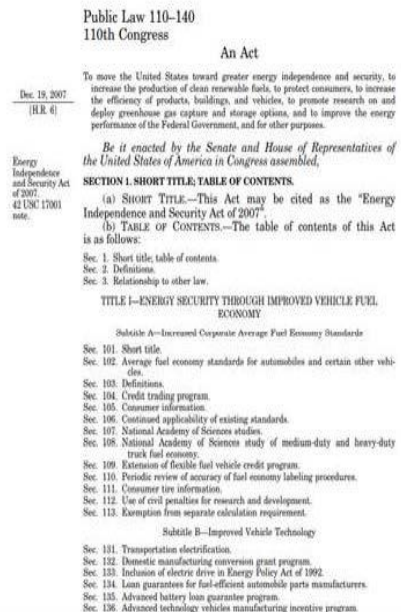


- Supporting webinars, briefings, and hearings for policy makers
- Supporting government grant applications and contracts (new)

## • GAC Staff Support

*Executive Subcommittee: Alice*  
*Policy & Programs: Jeremy*  
*Member Mobilization: Emily*

*Global Affairs: Jeremy*  
*Nominating: Alice*  
*Rules: Emily*





## OUTLOOK and OPPORTUNITIES

Buildings are increasingly a focus of policy makers:

- To meet climate and carbon goals
- To provide healthy and safe places to live, work and learn
- To bring resilience to communities

➔ **ASHRAE resources and technical expertise are in demand!**



- Climate Change

- 72% of countries have adopted a climate adaption strategy or policy at the national level, while another 9% are in the process of developing one. (UNEP Adaptation Gap Report 2020)
- 126 countries covering 51% of global greenhouse gas emissions had adopted, announced or were considering net-zero goals.

- COVID-19

- Green Recovery
- ASHRAE Resources
  - India, Sri Lanka, Pakistan, United Arab Emirates, Saudi Arabia, Egypt are using ASHRAE's Coronavirus Guidance in their regulations and guidelines directly or indirectly. Mexico is reviewing materials.
  - Requests can be sent to the ETF Developing Economies Team.

# New U.S. Administration: Implications for ASHRAE



- On January 20, 2021:
  - President Joe Biden and Vice President Kamala Harris were sworn into office
  - 17 Executive Orders issued, including one that rejoins the U.S. to the Paris Climate Agreement
- By 2030: Establish a new **net-zero emissions standard** for all new commercial buildings
- By 2035: **Cut in half** the carbon footprint of the national building stock

*Will be accomplished in part by “repairing the building code process with the goal of **establishing building performance standards for existing buildings nationwide** . . And “modernizing schools and early learning facilities”*
- By 2035: **Carbon-free power** sector
- By 2050: U.S. achieves **net-zero emissions**

# New U.S. Administration – More Implications for Buildings



- Upgrade **4 million buildings** and weatherize **2 million homes** over 4 years
- Building investments should also improve **indoor air quality** and **environmental health** and make buildings **safer** in the face of future pandemics
- Build **zero net energy buildings** at zero net cost, including through breakthroughs in **smart** materials, appliances, and **systems** management
- Get to zero emissions through **refrigeration** and **air conditioning using refrigerants** with no global warming potential
- Upgrade and **electrify** home appliances, install more efficient windows, and cut residential energy bills
- Manufacture, install, service and maintain high-efficiency LED lighting, **electric appliances**, and advanced heating and cooling systems
- Other infrastructure policies of relevance: 500,000 new electric vehicle charging stations; all American-built buses to be zero-emission by 2030

- End of Year Omnibus/COVID-19/Energy Package
  - DOE & EPA Budget Increase.
  - Requires a phasedown of the production and consumption of hydrofluorocarbons (HFCs).
  - Energy Provisions: building energy and water efficiency measures for schools, federal buildings and data centers; smart building accelerator program; and reauthorization of the weatherization assistance program.
- 117<sup>th</sup> Congress
  - The House has the Democratic majority, and the Senate is split with 50 Republicans and 50 Democrats (including 2 Independents that caucus with Democrats). However, Vice-President elect Kamala Harris will serve as tiebreaker for votes.
- 2021 Priorities:
  - COVID-19 Relief
  - Infrastructure
  - Climate Change

# State and Local Outlook and Targeting Outreach



- The 2021 legislative session began in most U.S. states in early January.
- States and cities are still working to respond to the COVID-19 pandemic and address the public health and economic effects.
- States face major budget shortfalls and will likely need to make budget cuts.
- Despite these challenges, many states and cities are still focusing on their climate goals, including specific goals for buildings.
- These climate goals are an opportunity for ASHRAE to provide technical expertise and build working relationships with state and local officials.
- As more jurisdictions establish or update their climate goals, look for articles in the biweekly Government Affairs Update about these new opportunities for outreach.



[GovAffairs@ashrae.org](mailto:GovAffairs@ashrae.org)

**Epidemic Task Force Report to the Government Affairs Committee**  
**Winter GAC Meeting - January 27, 2021**  
**Terry Townsend, GAC Chair**

- Since the ETF formed, it has met 19 times and produced a large volume of resources to help reduce the spread of the coronavirus. Attachment A provides a list of key resources to GAC members. One of the newest documents is the “Core Recommendations for Reducing Airborne Infectious Aerosol Exposure,” which provides guidance that cuts across all types of buildings.
- The work of the ETF has been of great interest, relevance and use to policy makers and elected officials.
  - 23 U.S. States and Localities have referenced ETF Guidance in their policies, regulations and statutes, including (see additional attachment for more details):
    - Virginia Labor Standards
    - California Schools Program (AB 841)
    - Minnesota Preparedness Plans
    - Wisconsin Guidance for Businesses
    - Connecticut Sector Rules and Schools Guidance
    - South Carolina – Schools
    - Kentucky – Reopening Schools
    - New Jersey Dept. of Education
    - New York Guidelines
    - Ohio Construction Commission – HVAC and Plumbing Industry Guidelines
    - Vermont – School Indoor Air Quality Grant Program
    - Multnomah County, Oregon – HVAC Systems
    - Gwinnett County Board of Education, Georgia
    - San Antonio, Texas-Schools
  - Multiple U.S. Federal Agencies Referencing ASHRAE ETF Guidance:
    - EPA – references ASHRAE standards and guidance
    - CDC – multiple references to ASHRAE guidance
    - DHS Science and Technology Directorate – seeking technical assistance from ASHRAE
    - U.S. Army Corps of Engineers – joint development of “Alternate Care Site HVAC Guidebook”
    - OSHA –some references
  - Several countries outside the U.S. are using ASHRAE’s Coronavirus Guidance in their regulations and guidelines
    - Canada
    - India
    - Sri Lanka
    - Pakistan
    - Saudi Arabia
    - UAE
    - Egypt

- In large part due to the work of the ETF, more meetings and policy briefings with government officials were held this year than any other:
  - Over 30 briefings and meetings, including legislative testimony
  - 10 Government Outreach Events
  - 14 ASHRAE Letters
- Looking Ahead
  - More Covid Relief Funding will likely be provided by Congress: Should attach ASHRAE guidance and standards to any funds that improve building systems
  - Drafting letter to the Dept. of Education to advise use of ASHRAE Schools guidance when distributing funding to improve facility HVAC systems; letter will also be sent to NGA
  - President-Elect Biden's COVID-19 Advisory Board
    - Need to keep pressing them to add a building scientist/engineer to provide that perspective
    - Forward and share the letter sent by ASHRAE President Gullledge
    - Thank you to Bill Bahnfleth for informally advising the incoming Biden Administration!
  - Agency Outreach: Follow-up meetings with the ETF are being arranged with several Federal agencies, including with DHS to kick-off work on the MOU.
  - Presentation is available and ready-to use by GAC members and Chapters, and can be found on basecamp and the ASHRAE Government Affairs Member Resources Webpage [here](#).
- Overall Lessons Learned
  - ASHRAE's technical guidance produced by the ETF filled a crucial void in government policy and regulations
  - Government at all levels – and across the globe – is in need of solid, unbiased technical guidance to minimize the spread of the coronavirus in buildings
  - Guidance produced by the ETF was made available at the “speed of need” with the caveat that it was continually being refined and updated as new data and scientific understanding became available
  - Indoor environmental quality generally remains a lesser policy focus: ASHRAE should continue to share its technical information with policy makers on this subject, even as the coronavirus subsides

## ATTACHMENT A: GUIDANCE FROM THE ASHRAE ETF

Technical Guidance:	Authors	Latest Publication Date	Notes	Link
Building Readiness (Reopening)	Epidemic Task Force	10/20/2020	Previous versions 9/30/2020 & 8/7/2020	<a href="http://www.ashrae.org/file%20library/technical%20resources/covid-19/ashrae-building-readiness.pdf">www.ashrae.org/file%20library/technical%20resources/covid-19/ashrae-building-readiness.pdf</a>
Schools and Universities (Reopening)	Epidemic Task Force	10/7/2020	No previous versions. Update in the works	<a href="http://www.ashrae.org/file%20library/technical%20resources/covid-19/ashrae-reopening-schools-and-universities-c19-guidance.pdf">www.ashrae.org/file%20library/technical%20resources/covid-19/ashrae-reopening-schools-and-universities-c19-guidance.pdf</a>
Energy Recovery (Reopening)	TC 5.5/ETF	6/11/2020	No previous versions	<a href="http://www.ashrae.org/file%20library/technical%20resources/covid-19/practical-guidance-for-epidemic-operation-of-ervs.pdf">www.ashrae.org/file%20library/technical%20resources/covid-19/practical-guidance-for-epidemic-operation-of-ervs.pdf</a>
Exhaust Re-Entrainment Guide (Reopening)	Epidemic Task Force	6/11/2020	No previous versions	<a href="http://www.ashrae.org/file%20library/technical%20resources/covid-19/exhaust-re-entrainment-guide.pdf">www.ashrae.org/file%20library/technical%20resources/covid-19/exhaust-re-entrainment-guide.pdf</a>
Guidance from Others (Reopening)	Epidemic Task Force	6/2/2020	No previous versions	<a href="http://www.ashrae.org/file%20library/technical%20resources/covid-19/guidance-from-others.pdf">www.ashrae.org/file%20library/technical%20resources/covid-19/guidance-from-others.pdf</a>
Healthcare	Epidemic Task Force	12/7/2020	Previous versions 8/20/2020, 6/22/2020, 5/7/2020	<a href="http://www.ashrae.org/file%20library/technical%20resources/covid-19/ashrae-healthcare-c19-guidance.pdf">www.ashrae.org/file%20library/technical%20resources/covid-19/ashrae-healthcare-c19-guidance.pdf</a>
Residential	Epidemic Task Force	4/16/2020	No previous versions	<a href="http://www.ashrae.org/file%20library/technical%20resources/covid-19/ashrae-residential-c19-guidance.pdf">www.ashrae.org/file%20library/technical%20resources/covid-19/ashrae-residential-c19-guidance.pdf</a>

Residential Healthcare	Epidemic Task Force	11/17/2020	No previous versions	<a href="http://www.ashrae.org/file%20library/technical%20resources/covid-19/ashrae-residential-healthcare-c19-guidance.pdf">www.ashrae.org/file%20library/technical%20resources/covid-19/ashrae-residential-healthcare-c19-guidance.pdf</a>
Multifamily Building Owners/Managers	Epidemic Task Force	7/24/2020	No previous versions	<a href="http://www.ashrae.org/file%20library/technical%20resources/covid-19/covid-19-guidance-for-multifamily-building-owners_managers.pdf">www.ashrae.org/file%20library/technical%20resources/covid-19/covid-19-guidance-for-multifamily-building-owners_managers.pdf</a>
Commercial	Epidemic Task Force	8/17/2020	Previous versions 4/30/2020	<a href="http://www.ashrae.org/file%20library/technical%20resources/covid-19/ashrae-commercial-c19-guidance--08-17-20-.pdf">www.ashrae.org/file%20library/technical%20resources/covid-19/ashrae-commercial-c19-guidance--08-17-20-.pdf</a>
Communities of Faith	Epidemic Task Force	12/15/2020	No previous versions	<a href="http://www.ashrae.org/file%20library/technical%20resources/covid-19/ashrae-communities-of-faith-c19-guidance.pdf">www.ashrae.org/file%20library/technical%20resources/covid-19/ashrae-communities-of-faith-c19-guidance.pdf</a>
Schools and Universities	Epidemic Task Force	7/15/2020	No previous versions	<a href="http://www.ashrae.org/file%20library/technical%20resources/covid-19/ashrae-schools-c19-guidance.pdf">www.ashrae.org/file%20library/technical%20resources/covid-19/ashrae-schools-c19-guidance.pdf</a>
Laboratory	Epidemic Task Force	11/12/2020	No previous versions	<a href="http://www.ashrae.org/file%20library/technical%20resources/covid-19/ashrae-etf---lab-guidance.pdf">www.ashrae.org/file%20library/technical%20resources/covid-19/ashrae-etf---lab-guidance.pdf</a>
Filtration/Disinfection	Epidemic Task Force	10/20/2020	Previous versions 8/11/2020, 7/15/2020, 4/30/2020	<a href="http://www.ashrae.org/file%20library/technical%20resources/covid-19/ashrae-filtration_disinfection-c19-guidance.pdf">www.ashrae.org/file%20library/technical%20resources/covid-19/ashrae-filtration_disinfection-c19-guidance.pdf</a>
Transportation	Epidemic Task Force	11/20/2020	Previous versions 4/22/2020	<a href="http://www.ashrae.org/file%20library/technical%20resources/covid-19/ashrae-transportation-c19-guidance.pdf">www.ashrae.org/file%20library/technical%20resources/covid-19/ashrae-transportation-c19-guidance.pdf</a>

<b>One-pager documents:</b>				
In-Room Air Cleaner Guidance for Reducing Covid-19 In Air In Your Space/Room	Epidemic Task Force	1/21/2021		<a href="http://www.ashrae.org/file%20library/technical%20resources/covid-19/in-room-air-cleaner-guidance-for-reducing-covid-19-in-air-in-your-space-or-room.pdf">www.ashrae.org/file%20library/technical%20resources/covid-19/in-room-air-cleaner-guidance-for-reducing-covid-19-in-air-in-your-space-or-room.pdf</a>
Core Recommendations for Reducing Airborne Infectious Aerosol Exposure	Epidemic Task Force	1/6/2021		<a href="http://www.ashrae.org/file%20library/technical%20resources/covid-19/core-recommendations-for-reducing-airborne-infectious-aerosol-exposure.pdf">www.ashrae.org/file%20library/technical%20resources/covid-19/core-recommendations-for-reducing-airborne-infectious-aerosol-exposure.pdf</a>
Laboratory Subcommittee Guidance Document	Epidemic Task Force	11/12/2020		<a href="http://www.ashrae.org/file%20library/technical%20resources/covid-19/ashrae-etf---lab-guidance.pdf">www.ashrae.org/file%20library/technical%20resources/covid-19/ashrae-etf---lab-guidance.pdf</a>
Re-Opening Buildings	Epidemic Task Force	10/5/2020		<a href="http://www.ashrae.org/file%20library/technical%20resources/covid-19/guidance-for-re-opening-buildings.pdf">www.ashrae.org/file%20library/technical%20resources/covid-19/guidance-for-re-opening-buildings.pdf</a>
Residential Buildings	Epidemic Task Force	10/5/2020		<a href="http://www.ashrae.org/file%20library/technical%20resources/covid-19/guidance-for-residential-buildings.pdf">www.ashrae.org/file%20library/technical%20resources/covid-19/guidance-for-residential-buildings.pdf</a>
Guidance for Polling Place HVAC Systems	Epidemic Task Force	8/19/2020		<a href="http://www.ashrae.org/file%20library/technical%20resources/covid-19/guidance-for-polling-place-hvac-systems.pdf">www.ashrae.org/file%20library/technical%20resources/covid-19/guidance-for-polling-place-hvac-systems.pdf</a>
Guidance for Reopening Schools	Epidemic Task Force	8/20/2020		<a href="http://www.ashrae.org/file%20library/technical%20resources/covid-19/guidance-for-the-re-opening-of-schools.pdf">www.ashrae.org/file%20library/technical%20resources/covid-19/guidance-for-the-re-opening-of-schools.pdf</a>

Outdoor Dining	Epidemic Task Force	t.b.d.	Will be posted to website shortly	See attached
<b>OTHER:</b>				
ASHRAE position document on Infectious Aerosols	PD committee	4/4/2020	A revision has been initiated. Expected to be available mid-2021	<a href="http://www.ashrae.org/file%20library/about/position%20documents/pd_infectiousaerosols_2020.pdf">www.ashrae.org/file%20library/about/position%20documents/pd_infectiousaerosols_2020.pdf</a>
Pandemic COVID-19 and Airborne Transmission Emerging Issue Brief	Environmental Health Committee	4/17/2020		<a href="http://www.ashrae.org/file%20library/technical%20resources/covid-19/eiband-airbornetransmission.pdf">www.ashrae.org/file%20library/technical%20resources/covid-19/eiband-airbornetransmission.pdf</a>
Does ASHRAE's guidance agree with guidance from WHO and CDC?	Epidemic Task Force	5/28/2020	No updates anticipated	<a href="http://www.ashrae.org/file%20library/technical%20resources/covid-19/does-ashrae-s-guidance-agree-with-guidance-from-who-and-cdc.pdf">www.ashrae.org/file%20library/technical%20resources/covid-19/does-ashrae-s-guidance-agree-with-guidance-from-who-and-cdc.pdf</a>
Alternate Care Site HVAC Guidebook	US Army Core of Engineers/ETF	11/8/2020	Joint publication	<a href="http://www.ashrae.org/file%20library/technical%20resources/covid-19/usace-acsguidebook---final-2020-11-08.pdf">www.ashrae.org/file%20library/technical%20resources/covid-19/usace-acsguidebook---final-2020-11-08.pdf</a>
<b>FAQs</b>				
Filtration and Disinfection FAQ	Epidemic Task Force		7 questions and answers	<a href="http://www.ashrae.org/file%20library/technical%20resources/covid-19/filtration-and-disinfection-faq.pdf">www.ashrae.org/file%20library/technical%20resources/covid-19/filtration-and-disinfection-faq.pdf</a>

Healthcare FAQ	Epidemic Task Force		15 questions and answers	<a href="http://www.ashrae.org/file%20library/technical%20resources/covid-19/healthcare-faq.pdf">www.ashrae.org/file%20library/technical%20resources/covid-19/healthcare-faq.pdf</a>
HVAC System Operation During Building Shutdown FAQ	Epidemic Task Force		1 question and answer. Refers to full guidance.	<a href="http://www.ashrae.org/file%20library/technical%20resources/covid-19/hvac-system-operation-during-building-shutdown-faq.pdf">www.ashrae.org/file%20library/technical%20resources/covid-19/hvac-system-operation-during-building-shutdown-faq.pdf</a>
How to Return the HVAC System to Normal Operation FAQ	Epidemic Task Force		1 question and answer. Refers to full guidance.	<a href="http://www.ashrae.org/file%20library/technical%20resources/covid-19/how-to-return-the-hvac-system-to-normal-operation-faq.pdf">www.ashrae.org/file%20library/technical%20resources/covid-19/how-to-return-the-hvac-system-to-normal-operation-faq.pdf</a>
Laboratory Systems FAQ	Epidemic Task Force		16 questions and answers Posted 1/21/2021	<a href="http://www.ashrae.org/file%20library/technical%20resources/covid-19/laboratory-systems-faq.pdf">www.ashrae.org/file%20library/technical%20resources/covid-19/laboratory-systems-faq.pdf</a>
Residences FAQ	Epidemic Task Force		29 questions and answers. New FAQs continually developed by team	<a href="http://www.ashrae.org/file%20library/technical%20resources/covid-19/residences-faq.pdf">www.ashrae.org/file%20library/technical%20resources/covid-19/residences-faq.pdf</a>
Transportation FAQ	Epidemic Task Force		4 questions and answers	<a href="http://www.ashrae.org/file%20library/technical%20resources/covid-19/transportation-faq.pdf">www.ashrae.org/file%20library/technical%20resources/covid-19/transportation-faq.pdf</a>

## **SUMMARY OF STATE RE-OPENING GUIDELINES, REGULATIONS, AND LEGISLATION Where ASHRAE is Mentioned**

### **Summary:**

To date, we have found two states with mandatory requirements regarding reopening that mention ASHRAE: Virginia has issued temporary emergency regulations with specific requirements for workplace standards that are relevant to ASHRAE, and that include ASHRAE standards. The other state-level mandatory requirement we found that references ASHRAE COVID-19 guidance was in California, with AB 841, which has been signed into law. States have also issued Executive Orders regarding the reopening of businesses, and state agencies have issued *guidance* that provides parameters for reopening.

The information below was compiled primarily from information posted on state government websites, as well as from FiscalNote, a tracking service that covers state legislation, regulations, and Executive Orders from state governors. Additional sources include the National Governors Association COVID-19 tracker [here](#), as well as the National Conference of State Legislatures tracker [here](#).

### **Requirements in Legislation (both pending and enacted):**

**New Jersey:** Senate Bill 3033 and Assembly Bill 4819- establishes the “School and Small Business Energy Efficiency Stimulus Program” in the state Board of Public Utilities, which will award grants to boards of education and small businesses to ensure they have functional HVAC systems. Includes references to ASHRAE Standard 62.1, as well as the Schools, Reopening Buildings, and Building Readiness guidance. *Introduced on 10/19/20 and referred to Senate Appropriations and Budget Committee on 1/14/21.* Full text [here](#). **ASHRAE sent a letter supporting the inclusion of ASHRAE in this legislation to the Senate Committee on November 20, 2020, which can be found on the ASHRAE website [here](#).**

**New Jersey:** Assembly Bill 4855 (S. 3032)- would require the Department of Health to conduct a statewide nursing home infection control and prevention infrastructure assessment and, based on that assessment, develop an infrastructure improvement plan. The assessment would include a survey of the maintenance status of heating, ventilating, air conditioning, and refrigeration (HVAC&R) systems in nursing homes; a study of the utilization of negative pressure rooms and other physical plant features; and any other infrastructure-related infection control or prevention considerations. *Introduced on 10/19/20 and assigned to Assembly Appropriations Committee on 12/7/20.* Full text [here](#). **ASHRAE sent a letter supporting the inclusion of ASHRAE in this legislation to the Assembly Committee on November 24, 2020, which can be found on the ASHRAE website [here](#).**

**California:** CA AB 841- Requires the Public Utilities Commission to require each electrical corporation and gas corporation to establish the School and State Building Energy Efficiency

Stimulus Program. Includes ASHRAE's Guidance for Reopening and Operating Schools and Buildings and the Building Readiness document (starting on page 15). This is the first time ASHRAE guidance is specifically named in state legislation (as opposed to a recommendation or included in a guide issued by a state). Text [here](#). **ASHRAE sent a letter supporting the inclusion of ASHRAE in this legislation to the Senate Committee on July 27, 2020, which can be found on the ASHRAE website [here](#). *The bill was passed and signed into law by Gov. Newsom on 9/30.***

**State-specific guidance and requirements referencing ASHRAE<sup>1</sup>:**

**Minnesota:** The full text of the "State of Minnesota Industry Guidance" can be found [here](#) for the general guidance, and [here](#) for the industry-specific guidance. The "General Guidance (5/20/20)" includes: "Consult an HVAC professional or the American Society of Heating, Refrigerating and Air-Conditioning Engineers to ensure proper ventilation is provided, and ventilation-systems are properly maintained. See ASHRAE's COVID-19 Preparedness Resources ([www.ashrae.org/technical-resources/resources](http://www.ashrae.org/technical-resources/resources))."

**Wisconsin:** ASHRAE is specifically mentioned in the "Gyms and Fitness Facilities Guidelines" [here](#), under HVAC. ASHRAE is also specifically mentioned in the "Manufacturing Guidelines" [here](#), under Engineering Controls. The "Retail Services Guidelines" [here](#) include the same guidance as Professional Services, along with the specific mention of ASHRAE included in Gyms and Fitness Facilities. The "Warehouse and Wholesale Trades Guidelines" [here](#) include the same guidance as Professional Services and Retail Services, along with the specific mention of ASHRAE included in Gyms and Fitness Facilities and Manufacturing Guidelines.

**Connecticut:** The Department of Public Health mentions ASHRAE on p. 5 of its "Guidance for School Systems (6/22/20)": "Once fans are running continuously, provide increased particle capture by increasing air filtering capacity through repair/upgrades to current system, where needed. This includes filter frames, filter configuration, and filter rating (ASHRAE recommends striving for filters with a MERV-13 rating where possible). The Guidance for School Systems document can be found [here](#) (guidance is organized by date).

**South Carolina:** The state of South Carolina has established an Accelerated Task Force to give guidance and recommendations regarding COVID-19 to school officials and school employees for the 2020-2021 school year. The draft guidance, issued in late June, includes the entire 110-page Building Readiness document developed by ASHRAE's Epidemic Task Force in May. Various sections of the state's guidance are focused on Summer Planning and Preparation, Pre-Opening, and Reopening and Continuity of Operations, and each of these aspects is addressed in ASHRAE's Building Readiness recommendations. The full Accelerated Task Force draft guidance can be found [here](#).

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<sup>1</sup> This is not a comprehensive list; this list comes primarily from web searches, as the legislative and regulatory tracking software that ASHRAE's Government Affairs Department has does not track *guidance* or *policies*.

South Carolina also mentions ASHRAE's Guideline 12 for Legionella in its general water guidance and links to ASHRAE's website through the U.S. EPA's "Maintaining Water Quality in Buildings with Low or No Use" guidance document, provided on the South Carolina Department of Health and Environmental Control website. Issued July 2020, found [here](#).

**Kentucky:** The Kentucky Department of Education issued "COVID-19 Considerations for Reopening Schools: Facilities and Logistics (June 29, 2020)" that includes ASHRAE's COVID-19 recommendations under Building Systems on page 3. It also provides a link to ASHRAE's white paper on Infectious Aerosols. Additionally, it mentions that "Window fans and other fans are not addressed in ASHRAE guidance" and goes on to give the following guidance: "In a room with no windows, as a practical matter, fans should only be used when other options are not available, be located to avoid directing the air flow across occupants and not facilitate the possible transmission of airborne pathogens between occupants." Link to document [here](#).

**Multnomah County, Oregon:** The Multnomah County website includes ASHRAE guidance on a page titled "HVAC Systems and the Spread of COVID-19". It includes a link to ASHRAE's COVID-19 Resources page, along with a link to the "Standard Practice for Inspection and Maintenance of Commercial Building HVAC Systems (Standard 180 - 2018)", which is mentioned as a reference in ASHRAE's Building Readiness document. The County page can be found [here](#).

**New Jersey:** The New Jersey Department of Education referenced ASHRAE in its document "The Road Back: Restart and Recovery Plan for Education" dated June 2020. It included a link to ASHRAE's COVID-19 Building Reopening Guidance. The document can be found [here](#).

**New York:** The New York State document "Reopening New York: Mall Guidelines for Employers and Employees (updated July 8, 2020)" requires that shopping malls must have filters with a MERV-13 rating, or the highest compatible rating with the system, but no less than MERV-11. The mandatory guidelines also required the system filtration requirements are certified and documented by a certified HVAC technician, professional, or company, ASHRAE-certified professional, certified retro-commissioning professional, or New York-licensed professional building engineer. The Mall Guidelines can be found [here](#).

**Vermont:** The School Indoor Air Quality Grant Program (page dated 7/9/2020) has been created by the Vermont Legislature and funded through the Coronavirus Relief Fund, to help improve indoor air quality and health in schools as they reopen in the fall. It will provide funding to assist Vermont schools with indoor air quality projects such as repairing, maintaining, and upgrading heating, ventilation, and air conditioning (HVAC) systems in response to COVID-19 specific guidelines from the U.S. Centers for Disease Control and Prevention (CDC) and the American Society of Heating, Refrigeration, and Air Conditioning Engineers (ASHRAE). HVAC projects meeting ASHRAE/CDC COVID-19-specific guidelines for indoor air quality (IAQ) improvement are anticipated to be eligible for funding. More on the program can be found [here](#).

**Virginia:** The Department of Labor and Industry has adopted temporary emergency standards, effective as of July 15, for employees returning to work amid the COVID-19 pandemic. The Health and Safety Board voted to create the temporary workplace safety rules. The rules reference ANSI/ASHRAE Standards 62.1 and 62.2, as well as ANSI/ASHRAE/ASHE Standard 170. The full text of the temporary emergency regulation can be found [here](#).

**Gwinnett County Board of Education, Georgia:** Gwinnett County Public Schools has posted a back-to-school [flyer](#) that includes ventilation and filtration as key measures and mentions airborne transmission. The page regarding water and ventilation systems mentions ASHRAE and can be found [here](#).

**Ohio:** The Ohio Facilities Construction Commission's Summary of HVAC and Plumbing Industry Guidelines (dated August 2020) mentions ASHRAE Standards 62.1 and 62.2, as well as the guidance for reopening of schools and universities, the building readiness guidance, and the schools and HVAC checklists. The summary can be found [here](#).

**San Antonio, Texas:** The City of San Antonio schools have been testing school HVAC systems for viability to operate using MERV-13, and have purchased these filters to be used where the system allows. Also, the filter replacement schedule has been updated to increase filter replacements throughout schools and supporting facilities. They have also extended the operation schedule for the air conditioning system to start earlier in the morning prior to school start and later in the evening after dismissal to allow for additional air exchanges. Article [here](#) (which also provides a link to ASHRAE's COVID-19 Schools guidance) and San Antonio Independent School District guidance [here](#) (mentions ASHRAE at the top of its Operations section).

**Shelby County Schools, Tennessee:** The Memphis district has completed 3,350 repairs on heating, ventilation, and air conditioning (HVAC) systems in their nearly 150 buildings. They've also modified the systems to bring more fresh air into buildings more often, in accordance with [recommendations](#) (links to ASHRAE's Schools guidance) from national organizations for reopening schools. Shelby County Schools is tentatively [reopening buildings](#) in January. Article [here](#).

**Oregon:** Oregon OSHA Rules Addressing the COVID-19 Public Health Emergency in All Oregon Workplaces, effective November 6, mentions ASHRAE standards: "Existing ventilation systems in hospitals, ambulatory surgical centers, and long-term care facilities providing skilled and/or intermediate level nursing care must be operated, if possible, in accordance with the provisions of the American National Standards Institute (ANSI)/American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) Standards 62.1 and 62.2 (ASHRAE 2019a, 2019b), which include requirements for outdoor air ventilation in most residential and nonresidential spaces, and ANSI/ASHRAE/ASHE Standard 170 (ASHRAE 2017a) covers both outdoor and total air ventilation in healthcare facilities." Text of rule [here](#) (see page 11 for *recommendation* of ASHRAE standards for "all workplaces" and page 22 for *requirement* of ASHRAE standards for

“workplaces at exceptional risk”). The text also includes as a reference ASHRAE’s COVID-19 Guidance for Building Operations (see page 87).

**Gloucester County, Virginia:** In an article posted December 18, Newport News, Chesapeake, and Virginia Beach City Public School Districts all referenced ASHRAE guidance for HVAC systems in their COVID-19 policies for school buildings. Newport News Public Schools has purchased portable air purifiers for each classroom in all buildings where the HVAC system does not meet the ASHRAE standard [recommended five air changes per hour]. Chesapeake Public Schools requires that all HVAC systems receive filter changes (with the highest-possible MERV-rated filter) every 90 days. The change out schedule is based on manufacturer specifications and ASHRAE guidelines. Virginia Beach City Public Schools has focused heavily on maintaining proper HVAC system operation while executing multiple, focused preventative maintenance (PM) initiatives throughout the school district. PM initiatives include emergency response for HVAC systems, filter replacement, dilution/flush through extended building operation, indoor environment assessment through data logging, HVAC equipment preventative maintenance, and HVAC equipment coil cleaning. More [here](#).

## Status Update on GAC MBOs SY2020- 2021

**Last Updated: January 25, 2021**

MBO	Subcommittee Assigned	Status
1. Develop a 2030 vision statement for the GAC, accompanied with goals and objectives.	Executive Subcommittee	<p>An Ad-Hoc subcommittee for this MBO has been formed, and held a kick-off meeting in December. Members are listed below:</p> <p style="padding-left: 40px;">Chad Smith (Team Lead)  Meghan McNulty  Colin-Laisure Pool  Nannette Lockwood  Gian Modgil  Terry Townsend</p> <p>The goal is to finalize the vision statement, goals and objectives by the Annual Meeting (Summer 2021).</p>
2. Establish a GAC Advisory Board made up of senior staff from various government bodies; this group would advise ASHRAE on what technical resources they need.	Executive Subcommittee	<p>Chair Terry Townsend appointed 3 members to serve on a team to address this MBO, and has appointed Tim Ashby to lead:</p> <ul style="list-style-type: none"> <li>• Tim Ashby (Lead)</li> <li>• Colin Laisure-Pool</li> <li>• Thomas Reyes</li> </ul> <p>Two meetings have been held, and a draft of the objectives of the Advisory Board, characteristics of members to participate and a proposed name change have been discussed.</p>
3. Develop a Government Affairs Training webinar and/or event for members outside the committee to increase participation. Develop chapter-to-chapter training to learn from exemplary chapters who have been successful in their government outreach, including sharing why it is beneficial for the ASHRAE members involved.	Member Mobilization	<p>The Member Mobilization Subcommittee has established an Ad-Hoc of 5 members to address this MBO, led by Colin Laisure-Pool.</p> <p>The Ad-Hoc has met to discuss a training tool that would be a summary of all existing resources. The Ad-Hoc is also considering region-to-region training for regions to learn from each other, not only chapter-to-chapter or CRCs.</p>

MBO	Subcommittee Assigned	Status
4. Develop a general training for code officials, which could be used by chapters globally.	Executive Subcommittee	Chair Terry Townsend formed an implementation team, to be led by Roger Jones on this MBO. Team members include George Pantelidis (RVC, Region XIV). Roger is working to recruit others, but those asked are either too busy or non-responsive; <b>any recommendations for members to assist with this MBO would be welcome!</b>
5. Identify events attended by government officials at which ASHRAE members can attend for the purpose of outreach and advocacy.	Global Affairs	<ul style="list-style-type: none"> <li>• Subcommittee members will work with the GTC to identify government officials that attend training and webinars.</li> <li>• The Subcommittee received the list from the GTC and is now deciding on an outreach plan.</li> <li>• Members have identified international organizations that host events of interest to ASHRAE members.</li> </ul>
6. Identify ASHRAE resources and develop advocacy materials that can help state, provincial, federal, and global governmental entities reach their 2030/2050 goals	Policy & Programs	<ul style="list-style-type: none"> <li>• Subcommittee members have identified at least one goal for their region. Goals need to be reviewed before materials or positions are developed.</li> <li>• A list of goals has been compiled by ASHRAE staff in a spreadsheet. Subcommittee members will add to the list by end of October, focusing on elements where ASHRAE resources can help.</li> <li>• Based on a review of goals, it was decided, ASHRAE should provide more information and materials on Decarbonization.</li> <li>• ASHRAE is creating a PPIB on Decarbonization and the subcommittee has recommended the development of a PD.</li> </ul>
7. Further develop communication tools using FiscalNote software to improve information between Society and Chapters.	Member Mobilization	<ul style="list-style-type: none"> <li>• The Member Mobilization Subcommittee has established an Ad-Hoc of 3 members to address this MBO.</li> <li>• Staff has developed two draft reports from FiscalNote for review and discussion by the Ad-Hoc: a bio of state legislator, and a summary of pertinent state legislation.</li> <li>• Staff has created a 1-page summary of FiscalNote's resources that has been sent out to the full GAC and is available on</li> </ul>

MBO	Subcommittee Assigned	Status
		Basecamp, to be shared with Chapter Chairs for reference in their preparation for government outreach events.
<p>8. Identify in which countries outside the U.S. ASHRAE Standards have been adopted or used as guidance; document 2-3 examples of how ASHRAE standards have been used globally and what types of advocacy were used which could help with such efforts in other locations.</p>	Global Affairs	<ul style="list-style-type: none"> <li>• The subcommittee is exploring if a webpage should be created that list what standards are adopted in each country.</li> <li>• The Subcommittee has voted to expand the MBO to include “Standards, guidelines, and resources.”</li> <li>• ASHRAE’s GA staff reached out to Tech and Pub Ed staff to see if they had a list of countries that use or reference ASHRAE standards, guidelines, and resources. There is no formal list at this time.</li> <li>• ASHRAE 90.1 might be adopted in the UAE. It was reported that Hong Kong has adopted 90.1 and Sri Lanka is looking at it with the World Bank. 90.1 is mostly adopted in India while Kuwait and Saudi Arabia have adopted 90.2.</li> </ul>
<p>9. Identify any issue for which a Position Document should be developed or for which an existing ASHRAE PD should be revised per the ROB (1.300.002) in order to be responsive to government inquiries and needs for which ASHRAE currently doesn’t have the relevant information. Before any issue or addition is recommended, work with pertinent ASHRAE GAC Council representative(s) and/or liaison(s) to confirm the information isn’t already being developed, potentially as a different type of resource such as a guidance document.</p>	Policy & Programs	<ul style="list-style-type: none"> <li>• Subcommittee members have identified several areas for new PDs and updated PDs. Subcommittee is also looking at this from an international perspective</li> <li>• Recommends a PD on Decarbonization.</li> <li>• Recommends the PD on Environmental Tobacco Smoke should be amended and expanded with regards to cannabis smoke and electronic nicotine delivery.</li> <li>• Recommends the PD on Indoor Air Quality should be amended to make further reference to natural ventilation systems in emerging economies, and provide further guidance and design guides specific to natural and traditional ventilation systems.</li> <li>• Discussing wildfires, although EHC may be addressing that issue.</li> </ul>

## PPIBs

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**MOTION:** To approve the following Public Policy Issue Briefs (PPIBs), which are provided as Attachments:

- [Resiliency in the Built Environment](#)
- [Climate Change and the Built Environment](#)
- [Utilizing Energy Metrics and Building Benchmarking to Improve Whole Building Energy Performance](#)
- [Environmental Tobacco Smoke](#)

Motion made by Rob Hoadley.

**BACKGROUND:** ASHRAE members made significant changes last SY to the PPIBs on Resiliency in the Built Environment, Climate Change and the Built Environment, and Utilizing Energy Metrics and Building Benchmarking to Improve Whole Building Energy Performance. After further review, these PPIBs were deemed to still be relevant by the Policy and Programs Subcommittee and they determined that they **did not require updates**.

Significant changes were made to the PPIB on the Environmental Tobacco Smoke due to the publication of an updated Position Document on the topic.

This motion was approved unanimously by the Policy and Programs Subcommittee on January 11, 2021 via voice vote (CNV).

**FISCAL IMPACT:** NONE.



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## RESILIENCY IN THE BUILT ENVIRONMENT

### THE ISSUE

Resiliency in the built environment is a complex subject that involves many disciplines. The National Institute of Building Sciences (NIBS) Coalition on Resiliency, which includes ASHRAE and 38 other organizations, has defined resiliency as “the ability to prepare and plan for, absorb, recover from and more successfully adapt to adverse events or threats.” These events or threats may be financial, political, environmental, as well as disaster, conflict, cyber, climate, or health-related. Its recent prominence is in part due to increasing concerns over the adequacy of responses to natural or climate-related events around the world, as well as recognition that many such events are likely to increase in frequency and severity.<sup>1</sup> According to the National Oceanic and Atmospheric Administration (NOAA), weather and climate disasters in the United States alone have caused more than \$456 billion in damages in the last 3 years and over 3,500 deaths.<sup>2</sup>

Strengthening the built environment is vital to protecting the public when natural and human-induced events occur. Buildings often serve as the first line of defense and as a result, the built environment and engineered systems in buildings must become more resilient in how they are designed and operated in order to protect the public. A building's ability to recover and be available to occupants following such an event, can have widespread economic and health implications. Additionally, as the built environment becomes more interconnected and operations shift towards automation, building systems will see increased vulnerability to cyber threats.

### ASHRAE's ROLE

It is ASHRAE's position that building design and operation must consider resiliency as part of an overall risk assessment and planning approach, and that major new efforts in research, education, standards and guidelines, and guidance documents are required to increase building resiliency. Building resiliency is of such importance that it has been identified as one of four key initiatives in the 2019-2024 ASHRAE Strategic Plan.

ASHRAE also has partnered with CIBSE to release a Joint Position Document on Resiliency in the Built Environment.<sup>3</sup> The two societies are committed to taking a leadership role with respect to building

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<sup>1</sup> IPCC. 2014. Fifth Assessment Report of the Intergovernmental Panel on Climate Change. Geneva, Switzerland: Intergovernmental Panel on Climate Change. [www.ipcc.ch/report/ar5/](http://www.ipcc.ch/report/ar5/).

<sup>2</sup> “Billion-Dollar Weather and Climate Disasters: Overview.” National Climatic Data Center, National Oceanic and Atmospheric Administration, [www.ncdc.noaa.gov/billions/overview](http://www.ncdc.noaa.gov/billions/overview).

<sup>3</sup> For more information, see

[https://www.ashrae.org/file%20library/about/position%20documents/ashrae\\_cibse\\_resiliencyinthebuiltenvironment\\_2019.pdf](https://www.ashrae.org/file%20library/about/position%20documents/ashrae_cibse_resiliencyinthebuiltenvironment_2019.pdf)



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resiliency. ASHRAE will be developing and adopting designs, materials, components, systems, and processes that minimize the adverse impacts of extreme events and environmental changes over time.

### **ASHRAE's VIEW**

Investing in building resiliency is crucial to saving lives, protecting public property, and reducing the financial strain of post-disaster recovery. For these reasons, ASHRAE sees the need for policy setting entities world-wide to encourage sound, balanced, and innovative actions to address long-range resiliency issues and the specific technical concerns associated with them.

When it comes to strengthening the built environment, building codes and standards, such as those developed by ASHRAE, make our communities more sustainable, more efficient and more resilient. According to a 2018 study released by NIBS, by adopting the most recent building codes, there is an impressive cost-benefit ratio ranging from \$4—12 for every \$1 invested towards hazard mitigation. Unfortunately, most jurisdictions have not yet adopted the most recent standards and codes that are based on the latest research and technological innovation. Legislators and other government officials should examine the best ways to assist these jurisdictions with the adoption, implementation and enforcement of the most recent building energy efficiency codes and standards. This will help prevent future destruction and improve the resilience of the built environment. ASHRAE is committed to being a resource for government with respect to building codes and standards, and will continue to publish and maintain consensus-based building standards, guidelines, and Design Guides.

ASHRAE also holds the following positions with respect to resiliency in the built environment:

- Resiliency is an important societal, economical and technical issue that has a major impact on the built environment as well as how engineered building systems are designed and operated.
- Technical solutions to these challenges are needed. These solutions will include research, standard and guideline development, and the production of educational material.
- Policy setting entities need to encourage sound, balanced, and innovative actions to address the broad issues of resiliency and the specific technical concerns associated with them.
- Built environments need to be developed which are both resilient and sustainable.

Additionally, ASHRAE recommends that additional and continuing research be conducted with the intent to guide resilient infrastructure, building systems and community designs. ASHRAE aims to continue collaborating on building resiliency research opportunities with external organizations, national and international government agencies, and foundations. This is in addition to the over \$10 million in ongoing research projects currently funded by ASHRAE.



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## CLIMATE CHANGE AND THE BUILT ENVIRONMENT

### THE ISSUE

Worldwide concern for changes in the global climate has escalated as scientific evidence has become more definitive, linking increased concentrations of atmospheric greenhouse gases (GHGs) with global warming. As a result, ASHRAE's policy focus on global climate change has significantly increased.

When developing policy to combat climate change, it is important to consider that buildings and their heating, ventilating, air conditioning and refrigeration (HVAC&R) systems directly and indirectly contribute to GHG emissions. Buildings are responsible for more than 35% of global final energy use and nearly 40% of energy-related CO<sub>2</sub> emissions worldwide.<sup>1</sup> These emissions are associated with construction and the energy needed to operate buildings and building systems, and to a lesser extent indirectly through the release of refrigerants, if not properly contained. According to the United Nations Intergovernmental Panel on Climate Change (IPCC), "buildings offer immediately available, highly cost-effective opportunities to reduce energy demand, while contributing to meeting other key sustainable development goals including poverty alleviation, energy security and improved employment."<sup>2</sup> Improving the energy efficiency, and the ongoing efficient performance of building systems provide a significant opportunity for climate change mitigation.

### ASHRAE's ROLE

ASHRAE is the leading source of information and research for HVAC&R systems and building performance making this issue a key area for our members. ASHRAE's members use their expertise to help policymakers promote the implementation of energy efficient design practices and sustainable technologies that can help reduce GHG emissions. This is done most notably through ASHRAE's Energy Conservation Standard 90.1, existing building energy efficiency Standard 100, and the International Green Construction Code Powered by ASHRAE Standard 189.1, which addresses sustainability in buildings and building sites. ASHRAE has also published Standard 105, which provides a method for determining, expressing and comparing building energy performance and greenhouse gas emissions.

ASHRAE and its partners have published several Advanced Energy Design Guides (including Zero Energy Building Guides for K-12 Schools and Offices), which are available for free download and provide educational guidance to reduce energy consumption while achieving proper IEQ conditions.<sup>3</sup>

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<sup>1</sup> 2018 Global Status Report Towards a Zero-Emission, Efficient and Resilient Buildings and Construction Sector. United Nations Environment Programme, International Energy Agency (IEA), and Global Alliance for Buildings and Construction (GlobalABC), [https://wedocs.unep.org/bitstream/handle/20.500.11822/27140/Global\\_Status\\_2018.pdf?sequence=1&isAllowed=y](https://wedocs.unep.org/bitstream/handle/20.500.11822/27140/Global_Status_2018.pdf?sequence=1&isAllowed=y).

<sup>2</sup> Lucon, Oswaldo, and Diana Ürge-Vorsatz. "AR5 Synthesis Report: Climate Change 2014." *Chapter 9: Buildings*, United Nations Intergovernmental Panel on Climate Change, 2014, [https://www.ipcc.ch/site/assets/uploads/2018/02/ipcc\\_wg3\\_ar5\\_chapter9.pdf](https://www.ipcc.ch/site/assets/uploads/2018/02/ipcc_wg3_ar5_chapter9.pdf).

<sup>3</sup> For more information, see [www.ashrae.org/technical-resources/aedgs](http://www.ashrae.org/technical-resources/aedgs).



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ASHRAE is also in the process of developing BSR/ASHRAE Standard 228P which will set requirements for evaluating whether a building or group of buildings meets a definition of “zero energy.”

With respect to refrigerants, ASHRAE also advances the HVAC&R field by performing research on low GWP refrigerants and developing safety and classification standards on refrigerants.<sup>4</sup>, developing guides and a standard for designing systems that minimize energy consumption and reduce emissions of high global warming potential (GWP) refrigerants. As part of this effort, ASHRAE supports the global phasedown of the production and consumption of refrigerants that are high-GWP HFCs, including through legislation, regulations, and policy.

### **ASHRAE's VIEW**

ASHRAE is committed to a leadership role in reducing climate change contributed to by building systems and responding to climate change experienced in the built environment. ASHRAE recommends:

- States adopt the most recent version of ANSI/ASHRAE/IES 100 for existing buildings and ANSI/ASHRAE/IES 90.1, which has been a benchmark for new commercial building energy performance in the United States and a key basis for codes and standards around the world for more than 40 years. The 2016 version of the standard is about 34% more energy efficient than the 2004 version.
- A full evaluation of new and existing buildings' climate impacts and energy performance.
- Funding for research that improves energy efficiency/utilization in HVAC&R technology to minimize GHG emissions.
- Funding for building science research leading to advanced equipment and systems, grid-interactive designs and ability to load-shift, integration of the Internet of Things (IoT), net metering, and building based energy storage systems capable of providing dispatchable energy systems.
- Promotion of life-cycle-cost analysis to building owners to encourage sustainable building construction, operation and renewal.

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<sup>4</sup> For more information, see: <https://www.ashrae.org/technical-resources/bookstore/standards-15-34>



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## UTILIZING ENERGY METRICS AND BUILDING BENCHMARKING TO IMPROVE WHOLE BUILDING ENERGY PERFORMANCE

### THE ISSUE

Heating, ventilation, air conditioning, and refrigerating (HVAC&R) account for about 61% of commercial building site energy use.<sup>1</sup> While new buildings have realized improved energy performance, existing buildings represent the greatest opportunity for energy use performance improvement within the sector. Improving the energy performance of existing buildings requires the availability of a robust database of building energy data. Without understanding how a building is performing, it is impossible to improve the building's energy footprint.

To address this concern, building benchmarking has become a critical tool for quantifying and evaluating building energy use patterns in order to develop the most effective ways to reduce energy use in a city or state's building stock. In addition, better understanding of true energy performance is needed; a building may be designed as energy efficient, but its operations may prove otherwise.

### ASHRAE's ROLE

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 tools and resources include:

- ASHRAE's **Building EQ<sup>2</sup>** program, a building performance tool, calculates a building's energy performance in relation to other similar buildings, identifies the gap between a building's as designed potential and its actual performance in operation and provides recommendations to improve the building's energy use. Building EQ can be used to display a building's energy use and comply with energy use disclosure requirements. Most importantly, it helps building owners and managers identify opportunities for improvement.
- **ASHRAE Standard 211** establishes consistent practices for conducting and reporting energy audits for commercial buildings.
- **ASHRAE Standard 214** provides uniformity in the building energy labeling and disclosure process and can be used in international, national, and regional legislation, policy making and regulation activities.

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<sup>1</sup> Includes water heating; *2012 Commercial Building Energy Consumption Survey: Energy Usage Summary*. U.S. Energy Information Administration, 18 March 2016, [www.eia.gov/consumption/commercial/reports/2012/energyusage/index.php](http://www.eia.gov/consumption/commercial/reports/2012/energyusage/index.php).

<sup>2</sup> For more information, see <https://www.ashrae.org/technical-resources/building-eq>



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- **ASHRAE Standard 100** sets energy use intensity (EUI) benchmarks for existing buildings in the commercial and residential sector and establishes methods for determining opportunities for improvement in EUI leading to compliance with the standard benchmarks.
- **ASHRAE Standard 105** provides a method for determining and comparing building energy performance and greenhouse gas emissions.

ASHRAE also has certification programs that were developed to meet the industry needs of today and provide value to thousands of built-environment professionals, employers and building owners. This includes the Building Commissioning Professional (BCxP) and Building Energy Assessment Professional (BEAP) certifications which have been recognized by the U.S. Department of Energy (DOE) as meeting the Better Buildings Workforce Guidelines (BBWG).

### **ASHRAE's VIEW**

Energy metrics that are widely accepted, robust and validated, are critical to achieving desired policy objectives including benchmarking, code compliance and investment decisions. Building owners and operators cannot manage what is not measured and they, along with policymakers, cannot effectively communicate goals, evaluate potential investments, and measure success if they don't all speak the same language. Therefore, ASHRAE remains dedicated to working with policymakers to find cost-effective legislative and regulatory solutions that can make building systems more energy efficient.



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## ENVIRONMENTAL TOBACCO SMOKE

### THE ISSUE

While indoor smoking has become less common in recent years in many countries, exposure to Environmental Tobacco Smoke (ETS) continues to have significant health and cost impacts. Researchers have investigated the health and irritant effects among non-smokers exposed to tobacco smoke in indoor environments. Such exposure is also known as passive smoking and as involuntary exposure to secondhand smoke. A number of national and global health research groups and agencies have concluded, based on the preponderance of evidence, that exposure of non-smokers to tobacco smoke causes specific diseases and other adverse effects to human health, most significantly cardiovascular disease and lung cancer. No cognizant authorities have identified an acceptable level of ETS exposure to non-smokers, nor is there any expectation that further research will identify such a level.

Despite extensive evidence of such harm and the well-documented benefits of smoking bans, many locations worldwide still lack laws and policies that provide sufficient protection. In many locations, laws and policies are only partially protective, permitting smoking in certain areas of buildings or specific building types including casino, entertainment and multifamily housing.

### ASHRAE's ROLE

Providing healthy and comfortable indoor environments through the management of indoor air quality is a fundamental goal of building and HVAC design and operation. ASHRAE has long been active in providing engineering technology, standards and design guidance in support of this goal. For example, ANSI/ASHRAE Standards 62.1 and 62.2 are standards that specify minimum ventilation rates and other measures in order to minimize adverse health effects for occupants. Therefore, the health effects of indoor exposure to emissions from cigarettes, cigars, pipes and other tobacco products are relevant to ASHRAE.

### ASHRAE's VIEW

Exposure to ETS can be reduced through a variety of strategies, but they do not completely eliminate exposure to ETS. Only an indoor smoking ban, leading to near zero exposure, provides effective control, and only such bans have been recognized as effective by health authorities. While there are no engineering design issues related to this approach, the existence of outdoor smoking areas near the building and their potential impacts on entryway exposure and outdoor air intake need to be considered.

There are three general cases of space-use and smoking activity in sequence from most to least



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effective in controlling ETS exposure: 1) allowing smoking only in isolated rooms; 2) allowing smoking in separate, but not isolated spaces; and 3) totally mixing occupancy of smokers and nonsmokers. These approaches do not necessarily account for all circumstances.

Because of ASHRAE's mission to act for the benefit of the public, it encourages lawmakers, policymakers and others who exercise control over buildings, to eliminate smoking inside and near buildings. ASHRAE also recommends:

- That building design practitioners work with their clients to define their intent, where smoking is still permitted, for addressing ETS exposure in their building and educate and inform their clients of the limits of engineering controls in regard to ETS.
- That multifamily buildings have complete smoking bans inside and near them in order to protect nonsmoking adults and children.
- That further research be conducted by cognizant health authorities on the health effects of involuntary exposure in the indoor environment from smoking cannabis, using hookahs, using Electronic Nicotine Delivery Systems (ENDS), and engaging in other activities commonly referred to as vaping or using e-cigarettes.

# MOTIONS FROM THE POLICY AND PROGRAMS SUBCOMMITTEE

## Position Document Recommendations (MBO #9)

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*Any recommendation by the GAC will be sent to ASHRAE's Technology Council.*

**MOTION:** Motion that the GAC recommends to Technology Council to develop a Position Document on Decarbonization.

Motion made by Rob Hoadley.

**BACKGROUND:** Jurisdictions across the world have introduced legislation and regulations requiring buildings to comply with a variety of low carbon and net-zero goals in the next ten to thirty years. These policies will require designers and building owners to significantly modify existing design best practices. ASHRAE should be providing information to members about how best to comply with these new regulations and meet 2030 and 2050 carbon reduction goals based on their respected climate zone. Additionally, the President of ASHRAE has already approved the creation of a PPIB on the topic.

This motion was approved by the Policy and Programs Subcommittee on January 11, 2021 via voice vote (CNV) with one abstention.

**FISCAL IMPACT:** There will not be a direct fiscal cost, however, the development of ASHRAE Position Documents require staff support and time from volunteer members.

**MOTION:** Motion that the GAC recommends to Technology Council that the ASHRAE Position Document on Environmental Tobacco Smoke shall be amended and expanded with regards to cannabis smoke and electronic nicotine delivery.

Motion made by Rob Hoadley.

**BACKGROUND:** The Environmental Tobacco Smoke Position Document has been a useful tool for ASHRAE GAC members. Information from the position document has been used to create a PPIB and write letters to government officials.

With nations such as Canada, as well as several U.S. states such as Washington, Colorado, and Oregon having legalized or decriminalized cannabis, ASHRAE would benefit by providing further information on this topic. However, ASHRAE literature on indoor environmental tobacco smoke does not provide specific guidance for cannabis or electronic nicotine delivery systems as it was considered “outside the scope of this

position document.” The PD does call for further research to be conducted on these activities and an Emerging Issue Brief has already been written on electronic nicotine delivery systems.

This motion was approved unanimously by the Policy and Programs Subcommittee on January 11, 2021 via voice vote (CNV).

**FISCAL IMPACT:** There will not be a direct fiscal cost, however, modifying an ASHRAE Position Document will require staff support and time from volunteer members.

**MOTION:** Motion that the GAC recommends to Technology Council that the ASHRAE Position Document on Indoor Air Quality shall be amended to make further reference to natural ventilation systems in emerging economies, and ASHRAE shall provide further guidance and design guides specific to natural and traditional ventilation systems.

Motion made by Rob Hoadley.

**BACKGROUND:** The Indoor Air Quality Position Document is widely used for highlighting the impact IAQ has on health, comfort, well-being, learning outcomes and work performance. ASHRAE’s GAC members see this as an important issue in government affairs and have used this document extensively since it provides important information. A PPIB is also being created by the GAC based on the position document.

However, ASHRAE members in emerging economies have identified that mechanical ventilation systems are not the sole means of providing adequate ventilation, and both modern natural ventilation systems as well as traditional ventilation systems remain common in these regions. ASHRAE would benefit by providing further information to members about how best to comply with ASHRAE standards while utilizing these natural and traditional methods.

This motion was approved unanimously by the Policy and Programs Subcommittee on January 11, 2021 via voice vote (CNV).

**FISCAL IMPACT:** There will not be a direct fiscal cost, however, modifying an ASHRAE Position Document will require staff support and time from volunteer members.

**Member Mobilization Subcommittee Report to Full Government Affairs Committee**  
**January 27, 2021**

1. Government Outreach Days Status Report (See Attachment)

*21 total Government Outreach Events have been held in the 2020-2021 Society Year to date. This includes 11 Global events, 4 U.S. Congressional events, 2 state events, and 4 City/Local events. 15 of these events have been held virtually, and 6 in-person. **These 21 events amount to just over a quarter (26%) of the goal for this Society Year of 78 total events.***

2. MBO Status Update:

**MBO #3:** Develop a Government Affairs Training webinar and/or event for members outside the committee to increase participation. Develop chapter-to-chapter training to learn from exemplary chapters who have been successful in their government outreach, including sharing why it is beneficial for the ASHRAE members involved.

*This MBO is currently about 40-50% complete. The MBO #3 Ad-Hoc group has discussed the training needs and is currently working on consolidating existing training resources (such as Powerpoint presentations and other GAC materials), for easier reference and use by ASHRAE members.*

**MBO #7:** Further develop communication tools using FiscalNote software to improve information between Society and Chapters.

- *This MBO is essentially complete. Government Affairs staff have been in communication with FiscalNote staff and have developed two types of reports available for use and reference by ASHRAE members when planning Government Outreach Events. These two reports are:*
  - *a summary of legislation regarding topics relevant to ASHRAE in a specific state (the sample report is from California, and can be found in the attachments).*
  - *a profile of an individual legislator with a biography, committee membership, bills sponsored by the legislator, and any previous interaction ASHRAE members may have had with the legislator (the sample profile is of Rep. Phil Ting from California, and can be found in the attachments).*
- *Government Affairs staff has also created a 1-page summary of the resources available from FiscalNote that can be used as a reference for ASHRAE members in planning government outreach. This 1-page summary can be disseminated by RVCs to their Chapter GAC Chairs and other interested ASHRAE members for their information.*

# TRACKING GOVERNMENT OUTREACH DAYS SY2020-2021

## PROGRESS CHART

	Target	Held	Scheduled	Planned	Delta
City/Local	22	4	0	0	-18
State	25	2	1	4	-18
U.S. Congressional	16	4	0	13	1
Global	15	11	0	1	-3
In-Person	33	6	0	9	-18
Virtual	45	15	1	9	-20
Total	78	21	1	18	-38

Note: Delta assumes that **ALL** planned and scheduled events are held (negative indicates that we are behind the goal).

SY20-21 SUMMARY TOTALS (as reported to date):	Number of Attendees (ASHRAE Members)	Number of Meetings	Number of Events
Local	53	4	4
State	3	2	2
Federal	7	4	4
Global	76	11	11
TOTAL:	139	21	21

## In Comparison

PREVIOUS YEAR (SY 2019-2020)	Number of Attendees (ASHRAE Members)	Number of Meetings	Number of Events
State and Local	191	138	27
Federal	32	10	10
Global	48	17	13
TOTAL:	271	165	50

SUMMARY OF GOVERNMENT OUTREACH EVENTS SY2020-2021								
LOCAL	Location	Date	Region	Number of Attendees (ASHRAE Members)	Number of Meetings	Govt Outreach Form Submitted?	Note if Virtual	Comments
Held	Gwinnett County Board of Education, Georgia	8/20/2020	4	1	1	yes	virtual	Testimony before the School Board
	Houston	9/10/2020	8	50	1	yes	virtual	meeting with Houston Building officials and AIA re: energy code enforcement
	St. Paul	October	6	1	1	no	virtual	meeting with City of St. Paul's Chief Resilience Officer
	Atlanta Regional Commission	9/29/2020	4	1	1	yes	virtual	meeting with the Atlanta Regional Commission
	Total Local Held:	4		53	4		4	
Scheduled								
	Total Local Scheduled:	0		0	0		0	
Planned								
	Total Local Planned:	0		0	0		0	
STATE								
Held								
	Virginia Del. Dawn Adams, District 68	1/7/2021	3	2	1	no	virtual	Richmond Chapter member met with Del. Adams to introduce ASHRAE and share our COVID-19 resources.
	Virginia Sen. Hashmi, District 10	1/11/2021	3	1	1	no	virtual	Richmond Chapter member will meet with Sen. Hashmi to introduce ASHRAE and share our COVID-19 resources.
	Total State Held:	2		3	2		2	
Scheduled	Arkansas	TBD	8 (possibly 7)				virtual	meetings with State Engineer and Code Inspectors re: COVID guidance
	Total State Scheduled:	1		0	0		1	
Planned	Wisconsin (may be state and/or local)	early 2021					virtual	
	Saskatchewan Provincial Government	early 2021						
	West Virginia	early 2021					virtual	
	Arkansas	TBD	8 (maybe 7)				virtual	meetings with code officials
	Total State Planned:	4		0	0		3	
FEDERAL								
Held	Sen. Martin Heinrich, New Mexico	8/11/2020	9	4	1	no	virtual	
	MP Jenica Atwin, Fredericton (CAN)	9/21/2020	2	1	1	no	virtual	
	Sen. Joe Manchin, West Virginia	10/30/2020		1	1	no	virtual	Held with other orgs
	Sen. Tina Smith, Minnesota	12/4/2020		1	1	no	virtual	
	Total Federal Held:	4		7	4		4	
Scheduled								
	Total Federal Scheduled:	0		0	0		0	
Planned	Rep. Ilhan Omar	February		1	1		1	
	Senator Mark Kelly	March		1	1		1	
	Senator Richard Burr	April		1	1		1	
	Rep. John Katko	February		1	1		1	
	Senator James Lankford	February		4	1		1	
	Rep. Kurt Schrader	February			1			
	Senator John Hickenlooper	April			1			
	Senator Raphael Warnock	March			1			
	Rep. Carolyn Bourdeaux	March			1			
	Senator Alex Padilla	February			1			
	Rep. Sam Graves	April			1			
	Sen. Shelley Capito	February			1			
	Rep. Rosa DeLauro	April						
	Total Federal Planned:	13		8	12		5	
GLOBAL								

<b>Held</b>	Halton District School Board, Toronto, Canada	8/13/2020	2	5	1	yes	Virtual	answered questions from school board about Filtration, Ventilation, CO2 levels
	India (Chandigarh Chapter) - Panel Discussion on "Energy Efficiency in Commercial & Residential Buildings"	8/14/2020	RAL	3	1	No	Virtual	Panelists represented several government agencies and municipalities. The event was attended by more than 250 professionals.
	York Catholic District School Board, Toronto, Canada	8/26/2020	2	1	1	yes	Virtual	Discussion about ASHRAE reopening guidelines, filtration, Humidity, Temp, CO2, Air Changes
	Ontario School Boards, Canada	9/2/2020	2	6	1	yes	Virtual	130 total participants; a follow up document was sent with Chapter's responses to 55 questions
	New Brunswick/PEI	9/21/2020	2	1	1	yes	Virtual	Member of Parliament Atwin was very interested to discuss building energy efficiency.
	Government of Goa, India	9/26/2020	RAL	1	1	no		received thank you note from government
	Windsor and London	10/20/2020	14	46	1	yes	virtual	officials from Windsor-Essex as well as London and its surrounding areas
	Toronto Chapter	10/27/2020	2	4	1	yes	Virtual	Met with Greening Health Care Climate Challenge Network re: Operating rooms, anterooms, other adjacent rooms, with respect to differential pressures.
	Toronto Chapter	11/6/2020	2	2	1	yes	Virtual	Met with Toronto District School Board UHN, University Health Network, Toronto Community Housing, 3 Universities.
	Ecuador	11/6/2020	12	6	1	no?		Met with Ministry of Production and UNIDO
	Vancouver, Canada	11/10/2020	11	1	1	yes	virtual	Met with Member of Parliament Paul Manly. Meeting was an introduction to ASHRAE and the ETF.
	<b>Total Global Held:</b>	<b>11</b>		<b>76</b>	<b>11</b>		<b>9</b>	
<b>Scheduled</b>								
	<b>Total Global Scheduled:</b>	<b>0</b>		<b>0</b>	<b>0</b>		<b>0</b>	
							<b>1</b>	
<b>Planned</b>	Chief Minister( Head of State ), Govt. of Goa	November?	RAL	1	1		1	
	<b>Total Global Planned:</b>	<b>1</b>		<b>1</b>	<b>1</b>		<b>1</b>	

FiscalNote is a service that provides legislative information, including analysis and updates on proposed bills and regulations, for every U.S. state. This information is available to ASHRAE members through their Government Affairs Chapter Chair and Regional Vice Chair (RVC) and is compiled and updated regularly by ASHRAE Government Affairs staff. If you have scheduled a Government Outreach Event or meeting with a government official, you can contact your RVC to request any of the resources below. Please provide 1-2 weeks of advance notice so that staff can accommodate your request.

## State Legislation

- State bills relating to subject areas of interest to ASHRAE, including: ASHRAE Codes and Standards, Building Codes, COVID-19, Indoor Air Quality, Energy Efficiency, Resiliency, etc.
- Analysis of individual bills, including the current status, bill sponsors, upcoming hearings, and likelihood of the bill passing the legislature
- Up-to-date information on state legislative sessions, including deadlines and special or emergency sessions
- Executive Orders issued by governors on relevant subjects
- State Regulations, including proposals open for public comment and hearings

## Government Contacts

- Contact information for all federal and state legislators across the U.S. (including state House and Senate)
- Profiles of individual state legislators:
  - Contact information for legislator and staff
  - Bills the legislator has sponsored throughout their term
  - Committee membership
  - Analysis of their effectiveness in sponsoring bills that are signed into law
  - Background on any previous contact that ASHRAE members or staff have had with the legislator's office, including meetings, letters, and other correspondence
- Contact information for code officials and other local/municipal officials throughout the U.S.

## Updates for ASHRAE Members

- Regular updates on the status of bills and regulations in a specific state, or for all the states in a region.
- Resources from the FiscalNote Codes Database:
  - Weekly code updates for all states across the U.S. (*GAC Regional Vice Chairs receive these updates and can disseminate to chapters in their region*)
  - Overview of the adoption status of 10 different ASHRAE codes and standards by states across the U.S.
  - Details on the most recent building codes adopted by states and certain localities

For more information, please contact ASHRAE Government Affairs staff at [GovAffairs@ashrae.org](mailto:GovAffairs@ashrae.org).

# Hon. Philip Y. Ting (D)

CA Assembly | *Active* | 2 ⚡ | 2 🗳️

- Overview
- Contact and Staff
- Sponsored Bills
- Actions
- Notes

## Basic Information

NAME

Philip Y. Ting

PRONUNCIATION

PARTY

Democratic Party

CHAMBER

CA Assembly

DISTRICT

California Assembly District 19

YEARS IN OFFICE

2012 - 2022

REELECTION YEAR

2022

EMAIL

assemblymember.ting@assembly.ca.gov

PHONE

(916) 319-2019

ADDRESS

1303 Tenth Street  
State Capitol, Room 6026  
Sacramento, CA 95814

BIOGRAPHY

Phil Ting was elected to the State Assembly in 2012, representing the 19th Assembly District, which spans the Westside of San Francisco, as well as the communities of Broadmoor, Colma, Daly City, and South San Francisco. As California navigates new challenges from the federal government, Ting is focused on protecting and persisting onward with progressive policies that expand opportunity for all, equal rights, and protections for our environment. Because of his experience in the financial sector and as the San Francisco Assessor-Recorder, Ting has become a leading voice on California's finances. He now serves as Chair of the Assembly Budget Committee after having served as Chair of the Assembly Committee on Revenue and Taxation. Ting has authored legislation that- Directs emergency aid to California cities and counties to address the state's homeless crisis; Simplifies the Cal Grants applications process so that thousands more students can attend college; Bolsters healthy eating by helping corner stores purchase refrigeration units and maximizing food stamp redemption at farmers' markets; Ensures safe and equal restroom access and tax fairness for the LGBT community; Rebuilds trust between police officers and the communities they serve by requiring disclosure of body camera footage; Creates the first statewide drug and medical needles take-back program funded by the pharmaceutical industry; Assess current and future electric vehicle charging station needs, as we move toward clean cars; and, Streamlines the process for the design of safe bike pathways. Ting is a graduate of U.C. Berkeley and Harvard University's John F. Kennedy School of Government. He began his career in public service as the Executive Director of the Asian Law Caucus, an organization founded in 1972 to advance and promote the legal and civil rights of the Asian Pacific Islander community, and once served as Community Relations Director at San Francisco State University. In 2005, Ting was appointed Assessor-Recorder of San Francisco by then-Mayor Gavin Newsom, where he closed a five-year assessment backlog and brought in \$290 million in unpaid property taxes to the city, created a program to increase rooftop solar installations, and spearheaded efforts to assist homeowners and tenants facing foreclosure. Ting lives in San Francisco's Sunset District with his wife, Susan, and their two children. collapse



Active



Committees

Member of 4 Committees

2021-2022 

Assembly Committee on Budget

Position: Chair

Subcommittee No. 6 on Budget Process Oversight and Program Evaluation

Position: Chair

Assembly Committee on Business and Professions

Position: Member

Assembly Committee on Utilities and Energy

Position: Member





Legislators similar to Hon. Ting ⓘ

Overall ▼

≡ Sort by: Voting ▼ ⌵ Desc ▼				
Name	Chamber ⌵	District	Voting	Cosponsorship
Buffy Wicks (D)	Assembly	CA015	100%	56%
Luz Rivas (D)	Assembly	CA039	99%	53%
Jesse Gabriel (D)	Assembly	CA045	99%	53%
Eloise Reyes (D)	Assembly	CA047	99%	56%
Robert Rivas (D)	Assembly	CA030	99%	48%
David Chiu (D)	Assembly	CA017	99%	61%
Ash Kalra (D)	Assembly	CA027	99%	59%
Laura Friedman (D)	Assembly	CA043	99%	57%
Wendy Carrillo (D)	Assembly	CA051	99%	55%
Expand				

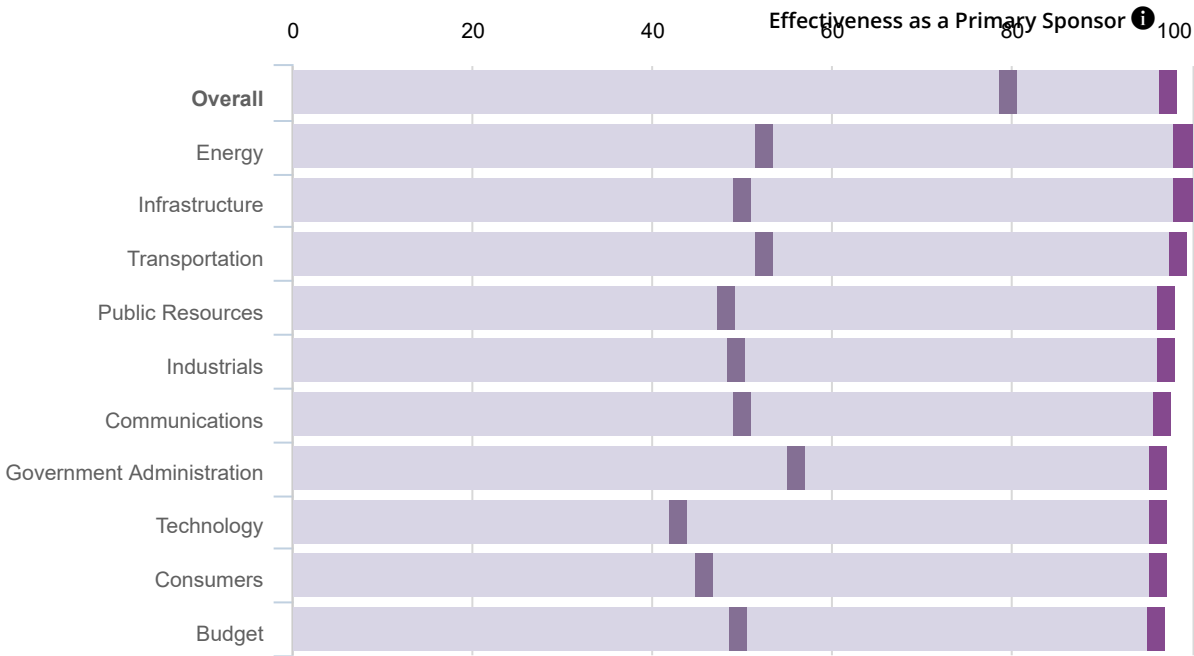


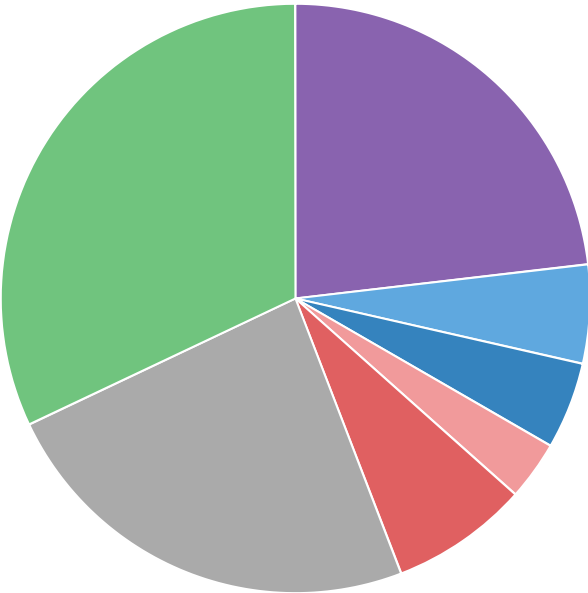
## Top Policy Issues

Hon. Ting is in the **top 1%** of legislators in the CA Assembly, so they are **very effective as a primary sponsor**, particularly on legislation related to energy, infrastructure, and transportation.

All Sessions

Current Session





- Introduced
- Passed First Chamber
- Passed Second Chamber
- Vetoed
- Failed
- Sine Die - Failed
- Enacted

# Hon. Philip Y. Ting (D)

CA Assembly | *Active* | 2 ⚡ | 2 🗨️

Overview

Contact and Staff

Sponsored Bills

Actions

Notes

Capitol Contacts



🔍 Search...

Irene Ho

Chief of Staff

✉ Irene.Ho@asm.ca.gov  
📍 State Capitol  
1303 Tenth Street  
Room 6026  
Sacramento, CA 95814

ISSUE AREAS

None

Tara Gamboa-Eastman

Legislative Aide

✉ tara.gamboa-eastman@asm.ca.gov  
📍 State Capitol  
1303 Tenth Street  
Room 6026  
Sacramento, CA 95814

ISSUE AREAS

None

Jessica Duong

Legislative Director

✉ jessica.duong@asm.ca.gov  
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ISSUE AREAS

Commerce  
Labor  
Veterans

Michele Gundros

Scheduler

✉ michele.gundros@asm.ca.gov  
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1303 Tenth Street  
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ISSUE AREAS

None

Shy Forbes

Senior Legislative Aide

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Room 6026  
Sacramento, CA 95814

ISSUE AREAS


None

Hon. Philip Y. Ting (D)

CA Assembly | Active | 2 ⚡ | 2 🗳️

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Sponsored Bills 462 Total Bills

 Search Bills



CA AB 79 2021-2022 Regular Sessions  
Budget Act of 2021.

AB 79, as introduced, Ting. Budget Act of 2021. This bill would express the intent of the Legislature to enact statutory chan...

In Senate | Last Action: Jan 15, 2021 ⬤  
⚡ 0 | 🗳️ 0

Senate Outlook	
22.6%	--



CA AB 86 2021-2022 Regular Sessions  
Budget Act of 2021.

AB 86, as introduced, Ting. Budget Act of 2021. This bill would express the intent of the Legislature to enact statutory chan...

In Senate | Last Action: Jan 15, 2021 ⬤  
⚡ 0 | 🗳️ 0

Senate Outlook	
29.1%	85.5%



CA AB 87 2021-2022 Regular Sessions  
Budget Act of 2021.

AB 87, as introduced, Ting. Budget Act of 2021. This bill would express the intent of the Legislature to enact statutory chan...

In Senate | Last Action: Jan 15, 2021 ⬤  
⚡ 0 | 🗳️ 0



Senate Outlook	
26.7%	--





Bills in Issues

	Bill Number	Session	Priority	Position	Vote	Alignment With Me
	CA SB 1474	19-20 RS	—	—	YES	
	CA SB 1371	19-20 RS	—	—	YES	
	CA AB 2954	19-20 RS	—	—	YES	
	CA SB 1189	19-20 RS	—	—	YES	
	CA AB 2621	19-20 RS	—	—	YES	
	CA AB 2323	19-20 RS	—	—	YES	

Actions (2)

Search

Showing:    Start    End    Type    Creator    Attendees    Linked Items    Title

Start	End	Type	Attendees	Linked Items	Title
Past Actions					
Sep 30, 2020 12:00 AM	Sep 30, 2020 1:00 AM	Other	ASHRAE Success	Phil Ting	Assembly Bill 841 was signed into law by Gov. Newsom on September 30, 2020. It includes ASHRAE CO...
Jul 27, 2020 12:00 AM	Jul 27, 2020 1:00 AM	Letter	ASHRAE Volunteer	Phil Ting	Sent letter signed by ASHRAE President Gullledge to Assembly Member Ting on July 27, 2020, regarding...

# Hon. Philip Y. Ting (D)

CA Assembly | *Active* | 2 ⚡ | 2 🗳️

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## Notes (2)

**Emily Porcari**

*created* 3 months ago

Assembly Member Ting is the Chair of the Assembly Committee on Budget.

*Last edited 3 months ago by* **Emily Porcari**

**Emily Porcari**

*created* 3 months ago

Assembly Member Ting sponsored AB 841, the School and State Building Energy Efficiency Program. (see "Actions" tab for details on ASHRAE's letter regarding this bill).

*Last edited 3 months ago by* **Emily Porcari**



# State Legislative Report: California

Last Updated: October 17, 2020

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## Introduction

This report contains all bills currently pending in the California legislature in the 2020 Session that have been flagged as relevant to one of ASHRAE's issue areas (e.g. codes and standards, energy efficiency, indoor air quality, and other subjects). Bills that failed to pass, were vetoed by the Governor, or have already been enacted into law are not included.

The bills below are organized by issue, and then chronologically within each issue, with the bills that have had the most recent action taken in the legislature listed first. While we attempt to include all relevant bills to ASHRAE, due to the dynamic nature of legislation, new bills could have been introduced since when the report was generated, as well as bills introduced that weren't flagged (e.g., if only a small portion of the bill had some ASHRAE-related content).

The "FN Outlook" label included at the top of each bill shows, in the number on the left, that bill's chance of passing the body in which it was introduced, and in the number on the right, its chance of passing the other body in the state legislature (House or Senate). This probability is calculated by FiscalNote software based on whether the bill sponsor holds a leadership position in their party or in the committee to which the bill has been assigned, whether the bill sponsor is in the majority party, and the overall effectiveness of the sponsor in passing legislation.

The 2020 California Legislative Session began on December 3, 2019 and is expected to end on November 30, 2020.

This report is for internal ASHRAE member use only, and is not for further distribution.

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## Bills by Issue

### ASHRAE Codes and Standards (1)

Title	Introduction Date: 2019-02-21
Energy efficiency programs: workforce requirements.	

Description

SB 524, as amended, Stern. Energy efficiency programs: workforce requirements. Under existing law, the Public Utilities Commission has regulatory authority over public utilities, including electrical corporations. Existing law provides for the commission to administer and oversee the implementation of various energy efficiency programs. Existing law requires the commission to identify all potentially achievable cost-effective electricity efficiency savings, to establish efficiency targets for an electrical corporation to achieve, to ensure that there are sufficient moneys available to electrical corporations to meet those efficiency targets, and to undertake a comprehensive review of the feasibility, costs, barriers, and benefits of achieving a cumulative doubling of energy efficiency savings and demand reduction by 2030, as specified. This bill would require the commission, if an energy efficiency program, other than a project to install, modify, repair, replace, or maintain a solar thermal system or solar energy system, contributes \$50,000 or more in ratepayer-funded incentives for energy efficiency projects within the same building, facility, or building complex, to require the energy efficiency program administrator or program implementer, as applicable, to ensure that the work is performed by a skilled and trained workforce. The bill would exclude any additional labor costs resulting from the use of a skilled and trained workforce for those energy efficiency programs from the project costs of the commission's cost-effectiveness tests. The Public Utilities Act makes any public utility that violates the Public Utilities Act, or that fails to comply with any part of any order, decision, rule, direction, demand, or requirement of the commission guilty of a crime. Because the provisions of this bill would be a part of the act and because a violation of a commission action implementing its requirements would be a crime, the bill would impose a state-mandated local program. The California Constitution requires the state to reimburse local agencies and school districts for certain costs mandated by the state. Statutory provisions establish procedures for making that reimbursement. This bill would provide that no reimbursement is required by this act for a specified reason.

Primary Sponsors

Henry Stern

**Title****Introduction Date:** 2020-02-21

Fire prevention: vegetation management: public education: grants: defensible space: fire hazard severity zones: forest management.

**Description**

SB 1348, as amended, Stern. Fire prevention: vegetation management: public education: grants: defensible space: fire hazard severity zones: forest management. (1) Existing law requires the Director of Forestry and Fire Protection to identify areas of the state as very high fire hazard severity zones based on specified criteria. Existing law requires a local agency, within 30 days after receiving a transmittal from the director that identifies very high fire hazard severity zones, to make the information available for public review, as provided. This bill, among other things, would also require the director to identify areas of the state as moderate and high fire hazard severity zones and would require a local agency to make this information available for public review and comment, as provided. By expanding the responsibility of a local agency, the bill would impose a state-mandated local program. (2) Existing law requires a person who owns, leases, controls, operates, or maintains an occupied dwelling or structure in, upon, or adjoining a mountainous area, forest-covered land, brush-covered land, grass-covered land, or land that is covered with flammable material that is within a very high fire hazard severity zone, as designated by a local agency, or a building or structure in, upon, or adjoining those areas or lands within a state responsibility area, to maintain a defensible space of 100 feet from each side and from the front and rear of the structure, as specified. Existing law authorizes a greater distance than specified above on the specified land in a very high fire hazard severity zone. Existing law specifies that clearance beyond the property line may only be required if state law, local ordinance, rule, or regulation includes certain findings and specifies that clearance on adjacent property shall only be conducted following written consent by the adjacent landowner. This bill, among other things, would instead provide that fuel modification beyond the property line may only be required by state law, local ordinance, rule, or regulation in order to maintain the 100 feet of defensible space. This bill would also require the Director of Forestry and Fire Protection to establish a statewide program to allow qualified entities, as defined, to support and augment the Department of Forestry and Fire Protection in its defensible space and home hardening assessment and education efforts and to establish a common reporting platform for participating qualified entities to report defensible space and home hardening assessment data to the department. The bill would repeal this provision on January 1, 2025. Existing law requires the Office of the State Fire Marshal to develop a model defensible space program that is required to... (click bill link to see more).

**Primary Sponsors**

Henry Stern

**Title**

Introduction Date: 2020-02-14

California Environmental Quality Act: exemptions.

**Description**

AB 2323, as amended, Friedman. California Environmental Quality Act: exemptions. (1) The California Environmental Quality Act (CEQA) requires a lead agency, as defined, to prepare, or cause to be prepared, and certify the completion of an environmental impact report (EIR) on a project that it proposes to carry out or approve that may have a significant effect on the environment or to adopt a negative declaration if it finds that the project will not have that effect. CEQA also requires a lead agency to prepare a mitigated negative declaration for a project that may have a significant effect on the environment if revisions in the project would avoid or mitigate that effect and there is no substantial evidence that the project, as revised, would have a significant effect on the environment. CEQA exempts from its requirements certain residential, employment center, and mixed-use development projects meeting specified criteria, including that the project is located in a transit priority area and that the project is undertaken and is consistent with a specific plan for which an environmental impact report has been certified. This bill would additionally exempt those projects located in a very low vehicle travel area, as defined. The bill would require that the project is undertaken and is consistent with either a specific plan prepared pursuant to specific provisions of law or a community plan, as defined, for which an EIR has been certified within the preceding 15 years in order to be exempt. The bill would additionally require the project site to have been previously developed or to be a vacant site meeting certain requirements. Because a lead agency would be required to determine the applicability of this exemption, this bill would impose a state-mandated local program. (2) CEQA exempts from its requirements agricultural employee housing projects, affordable housing projects, and housing projects on infill sites that meet certain requirements, including, among others, the site is not located within the boundaries of a state conservancy. CEQA prohibits those exempt projects from being located in certain areas. This bill would allow the location of agricultural employee housing projects, affordable housing projects, and housing projects on infill sites to be located within the boundaries of a state conservancy in order to be exempt. The bill would revise and recast the areas in which those exempt projects cannot be located, as provided. (3) CEQA exempts from its requirements residential projects on infill sites that meet certain requirements, including, among others, that the location of the residential project on an infill site is no more than 4 acres and that the project is located within 1/2 mile of a major transit stop. Th... (click bill link to see more).

**Primary Sponsors**

Laura Friedman, David Chiu

State

CA

Bill Number

SB 1199

Last Action

From Committee With Authors Amendments  
Read Second Time And Amended Re Referred  
To Com On G O 2020 07 27

Status

In Assembly

FN Outlook

92.3%

70.0%

**Title**

Introduction Date: 2020-02-20

Commission on Home Hardening.

**Description**

SB 1199, as amended, McGuire. Commission on Home Hardening. Existing law establishes in state government the Business, Consumer Services, and Housing Agency, comprised of the Department of Consumer Affairs, the Department of Housing and Community Development, the Department of Fair Employment and Housing, the Department of Business Oversight, the Department of Alcoholic Beverage Control, the Alcoholic Beverage Control Appeals Board, the California Horse Racing Board, and the Alfred E. Alquist Seismic Safety Commission. This bill would establish the Commission on Home Hardening within the Business, Consumer Services, and Housing Agency. The commission would be a 6-member body composed of, among others, the Insurance Commissioner, the State Fire Marshal, the Director of Housing and Community Development, and the Director of the Office of Emergency Services, or any of their respective designees. The bill would require the commission to develop a 3-tiered system of fire prevention levels for structures in a Wildland Urban Interface environment, as specified. The bill would require the commission to develop guidelines for certifying structures within the 3-tiered system by third-party inspectors and best practices for home hardening and wildfire mitigation for homeowners seeking certification. The bill would require the commission to work with stakeholders from fire protection districts, the insurance industry, building trades industry, planning associations, and cities and counties in developing the 3-tiered system and would require the system to comply with certain standards. This bill would also require the commission to develop new wildfire community hardening standards, as specified, and provide for a certification process for communities that meet these standards. The bill would require the commission to serve as a clearinghouse for information and studies relative to mitigation effectiveness in order to make recommendations on mitigation standards, and to consult with the Insurance Institute for Business and Home Safety to develop recommended residential property insurance discounts for insurers to consider for residential properties meeting the structure type certifications and the certified wildfire community hardening standards. Existing law provides that a residential property insurance policy shall not be issued or renewed in this state unless it complies with certain requirements. This bill would authorize admitted insurers offering residential property insurance in this state to take into consideration the certifications and certified wildfire community hardening standards developed pursuant to these provisions for purposes of developing or revising underwriting guidelines or insurance rates.

**Primary Sponsors**

Mike McGuire

**Title****Introduction Date:** 2019-02-21

Planning and Zoning Law: housing elements: accessory dwelling units: adequate site substitutes.

**Description**

AB 1063, as amended, Petrie-Norris. Planning and Zoning Law: housing elements: accessory dwelling units: adequate site substitutes. (1) The Planning and Zoning Law requires that the housing element of a city's or county's general plan consist of an identification and analysis of existing and projected housing needs and a statement of goals, policies, quantified objectives, financial resources, and scheduled programs for the preservation, improvement, and development of housing. The law requires the Department of Housing and Community Development to determine the existing and projected need for housing for each region, as specified. The law also requires that the housing element include an inventory of land suitable for residential development and requires that inventory to be used to identify sites that can be developed for housing within the planning period and that are sufficient to provide for the city's or county's share of the regional housing need. Existing law requires the planning agency of a city or county to submit a draft element or draft amendment to the department prior to adoption, as specified. Existing law requires the department to determine whether the draft element or draft amendment substantially complies with the provisions of the Planning and Zoning Law relating to housing elements. Existing law authorizes the department, in evaluating a proposed or adopted housing element for substantial compliance with the provisions of the Planning and Zoning Law relating to housing elements, to allow a city or county to identify adequate sites by a variety of methods, as specified. Existing law authorizes the department to allow a city or county to identify sites for accessory dwelling units based on the number of accessory dwelling units developed in the prior housing element planning period whether or not the units are permitted by right, the need for these units in the community, those units in the community, the resources or incentives available for their development, and any other relevant factors, as determined by the department. This bill would, instead, require the department, in making that evaluation, to allow a city or county to identify adequate sites by a variety of methods, as specified. The bill would require the department to allow a city or county to identify sites for potential accessory dwelling units based on existing zoning standards and the demonstrated potential capacity to accommodate accessory dwelling units and junior accessory dwelling units, as determined by the city or county. If the combination of potential accessory dwelling units and junior accessory dwelling units constitutes greater than 50% of the units identified to meet the city's or county's share of the regional need for... (click bill link to see more).

**Primary Sponsors**

Cottie Petrie-Norris

## Title

Introduction Date: 2020-01-27

Building codes: earthquake safety: functional recovery standard.

## Description

AB 1997, as amended, Nazarian. Building codes: earthquake safety: functional recovery standard. The California Building Standards Law provides for the adoption of building standards by state agencies by requiring all state agencies that adopt or propose adoption of any building standard to submit the building standard to the California Building Standards Commission (commission) for approval and adoption. This bill would require the commission, by June 30, 2021, to assemble a functional recovery working group comprised of certain state entities and members of the construction and insurance industries, as specified. The bill would require the working group, by June 30, 2023, to consider whether a “functional recovery” standard is warranted for all or some building occupancy classifications, using specified criteria, and to investigate the practical means of implementing that standard, as specified. The bill would require the working group to advise the appropriate state agencies to propose the building standards, as specified. The bill would authorize the commission to adopt regulations based upon the recommendations from the working group for nonresidential occupancies. The bill would define “functional recovery” for purposes of these provisions, as specified. The bill would provide legislative findings in support of these provisions.

## Primary Sponsors

Adrin Nazarian

**Title****Introduction Date:** 2020-02-19

Coastal erosion: installation of shoreline protective devices: application process.

**Description**

SB 1090, as amended, Bates. Coastal erosion: installation of shoreline protective devices: application process. The California Coastal Act of 1976 provides for the planning and regulation of development within the coastal zone, as defined. The act requires construction that alters natural shoreline processes to be permitted by the California Coastal Commission or a local government with an approved local coastal program when required to serve coastal-dependent uses or to protect existing structures or public beaches in danger from erosion and when designed to eliminate or mitigate adverse impacts on local shoreline sand supply. The act further provides that certain marine structures should be phased out or upgraded, where feasible. This bill would, except as provided, require the commission or a local government with an approved local coastal program to approve the repair, maintenance, or construction of retaining walls, return walls, seawalls, revetments, or similar shoreline protective devices for beaches or adjacent existing residential properties in the coastal zone in the Counties of Orange and San Diego that are designed to mitigate or protect against coastal erosion. If a local government denies the application for a shoreline protective device, the bill would require the local government to inform the commission, in writing, of its decision with supporting evidence. The bill would require the commission, if it denies an application or if it receives notice of a local government's denial, to submit a report to the Legislature of its denial or the report from the local government. By imposing additional duties on a local government, this bill would impose a state-mandated local program. The bill would authorize the commission or a local government to charge a fee for the processing of an application for a shoreline protective device, as provided. The bill would specify the procedure for seeking judicial review for action taken by the commission or a local government for applications for shoreline protective devices and would provide that a decision denying the application is subject to de novo review by a court. The bill would require the commission to identify native plant species for areas in the coastal zone of the Counties of Orange and San Diego, as specified, and would specify that a property owner would not be required to obtain approval from the commission or a local government for the planting of those identified species. The California Environmental Quality Act (CEQA) requires a lead agency, as defined, to prepare, or cause to be prepared, and certify the completion of an environmental impact report on a project that it proposes to carry out or approve that may have a significant effect on the environme... (click bill link to see more).

**Primary Sponsors**

Pat Bates

State

CA

Bill Number

SB 1183

Last Action

Referral To Com On Trans Rescinded Due To  
The Shortened 2020 Legislative Calendar 2020  
05 12

Status

In Senate

FN Outlook

26.9%

88.6%

**Title**

Electric vehicle charging master plan.

Introduction Date: 2020-02-20

**Description**

SB 1183, as amended, Hertzberg. Electric vehicle charging master plan. Existing law requires the State Energy Resources Conservation and Development Commission (Energy Commission), working with the State Air Resources Board and the Public Utilities Commission (PUC), to prepare a statewide assessment of the electric vehicle charging infrastructure needed to support the levels of electric vehicle adoption required for the state to meet its goals of putting at least 5 million zero-emission vehicles on California roads by 2030, and of reducing emissions of greenhouse gases to 40% below 1990 levels by 2030. Existing law require the Energy Commission to update the assessment at least once every 2 years. This bill would require the Energy Commission, as a part of each update to the assessment, to conduct an assessment of certain factors and how those factors will affect the market for and technological development of electric vehicles and infrastructure. The bill would require the Energy Commission to convene the EV Infrastructure Council, which the bill would establish, to develop, by January 1, 2022, an Electric Vehicle Charging Master Plan, as specified. The bill would require the Energy Commission to update the plan at least once every 2 years. The bill would establish a goal of the state to deploy no less than 250,000 publicly available electric vehicle charging station plugs by 2025 and would require the commission to develop an electric vehicle charging station deployment goal to support 5 million zero-emission vehicles by 2030. Existing law requires the Energy Commission to administer the Alternative and Renewable Fuel and Vehicle Technology Program to provide financial assistance to various entities for those entities to develop and deploy innovative technologies that transform California's fuel and vehicle types to help attain the state's climate change policies. Existing law requires the PUC, in consultation with the state board and the Energy Commission, to direct electrical corporations to file applications for programs and investments to accelerate widespread transportation electrification. Existing law requires the PUC to approve, or modify and approve, those programs and investments if they meet certain requirements. This bill would require the Alternative and Renewable Fuel and Vehicle Technology Program and those programs and investments required by the PUC to accelerate widespread transportation electrification to be consistent with the Electric Vehicle Charging Master Plan that would be developed by the council.

**Primary Sponsors**

Bob Hertzberg

Title	Introduction Date: 2019-02-21
Energy efficiency programs: workforce requirements.	

Description

SB 524, as amended, Stern. Energy efficiency programs: workforce requirements. Under existing law, the Public Utilities Commission has regulatory authority over public utilities, including electrical corporations. Existing law provides for the commission to administer and oversee the implementation of various energy efficiency programs. Existing law requires the commission to identify all potentially achievable cost-effective electricity efficiency savings, to establish efficiency targets for an electrical corporation to achieve, to ensure that there are sufficient moneys available to electrical corporations to meet those efficiency targets, and to undertake a comprehensive review of the feasibility, costs, barriers, and benefits of achieving a cumulative doubling of energy efficiency savings and demand reduction by 2030, as specified. This bill would require the commission, if an energy efficiency program, other than a project to install, modify, repair, replace, or maintain a solar thermal system or solar energy system, contributes \$50,000 or more in ratepayer-funded incentives for energy efficiency projects within the same building, facility, or building complex, to require the energy efficiency program administrator or program implementer, as applicable, to ensure that the work is performed by a skilled and trained workforce. The bill would exclude any additional labor costs resulting from the use of a skilled and trained workforce for those energy efficiency programs from the project costs of the commission's cost-effectiveness tests. The Public Utilities Act makes any public utility that violates the Public Utilities Act, or that fails to comply with any part of any order, decision, rule, direction, demand, or requirement of the commission guilty of a crime. Because the provisions of this bill would be a part of the act and because a violation of a commission action implementing its requirements would be a crime, the bill would impose a state-mandated local program. The California Constitution requires the state to reimburse local agencies and school districts for certain costs mandated by the state. Statutory provisions establish procedures for making that reimbursement. This bill would provide that no reimbursement is required by this act for a specified reason.

Primary Sponsors

Henry Stern

Title

Introduction Date: 2020-02-21

Professional Land Surveyors' Act and Professional Engineers Act.

Description

AB 3334, as amended, Chen. Professional Land Surveyors' Act and Professional Engineers Act. (1) The Professional Engineers Act and the Professional Land Surveyors' Act provide for the licensure and regulation of professional engineers and land surveyors by the Board for Professional Engineers, Land Surveyors, and Geologists. Under those acts, a land surveyor includes a person who engages in specified practices, and civil engineering is defined to include a person who locates, relocates, establishes, reestablishes, or retraces the alignment or elevation for any of the fixed works embraced within the practice of civil engineering, as defined, determines the configuration or contour of the earth's surface, or the position of fixed objects above, on, or below the surface of the earth by applying the principles of mathematics or photogrammetry, or engages in geodetic or cadastral surveying, as defined. This bill would include within the practices that subject a person to those acts, with regard to the practice of identifying the location, alignment, or elevation for any of the fixed works embraced within the practice of civil engineering, laying out the reference points or lines through the use of mathematical or physical measurements. The bill would expand the practice of land surveying and civil engineering to include determining the benthic surface below water bodies and the measuring for volumetric calculations of earthwork. The bill, with respect to the practice of making determinations regarding the position of objects, would expand that practice to include such a determination made by applying the principles of mathematics or the use of photogrammetric methods or remote sensing, as defined. The bill would further revise that practice so that the determination regarding the position of objects is made regarding either manmade or natural fixed objects, instead of fixed objects. The bill would modify the definition of geodetic surveying for purposes of the Professional Land Surveyors' Act to mean performing surveys by using techniques or methods of 3-dimensional geospatial data acquisitions, and make conforming changes to that effect. (2) The Professional Land Surveyors' Act provides that it does not prevent an individual or business engaged in any line of endeavor, other than the practice of land surveying, from employing or contracting with a licensed land surveyor or a licensed civil engineer to perform the respective land surveying services incidental to the conduct of business. The Professional Engineers Act provides that it does not prevent an individual or business engaged in any line of endeavor other than the practice of civil, electrical, or mechanical engineering from employing or contracting with a l... (click bill link to see more).

Primary Sponsors

Phillip Chen

State

CA

Bill Number

AB 2954

Last Action

In Committee Held Under Submission 2020 08  
20

Status

In Senate

FN Outlook

96.7%

49.8%

**Title****Introduction Date:** 2020-02-21

California Global Warming Solutions Act of 2006: climate goal: natural and working lands.

**Description**

AB 2954, as amended, Robert Rivas. California Global Warming Solutions Act of 2006: climate goal: natural and working lands. The California Global Warming Solutions Act of 2006 establishes the State Air Resources Board as the state agency responsible for monitoring and regulating sources emitting greenhouse gases. The act requires the state board to approve a statewide greenhouse gas emissions limit equivalent to the statewide greenhouse gas emissions level in 1990 to be achieved by 2020 and to ensure that statewide greenhouse gas emissions are reduced to at least 40 percent below the 1990 level by 2030. The act requires the state board to prepare and approve a scoping plan for achieving the maximum technologically feasible and cost-effective reductions in greenhouse gas emissions and to update the scoping plan at least once every 5 years. This bill would require the state board, when updating the scoping plan and in collaboration with relevant state agencies and departments, to take specified actions, including, among others, to identify by January 1, 2023, an overall climate goal for the state's natural and working lands, as defined, to sequester carbon and reduce atmospheric greenhouse gas emissions and identify practices, policy incentives, and potential reductions in barriers that would help achieve the climate goal.

**Primary Sponsors**

Robert Rivas

**Title**

Introduction Date: 2019-02-22

Energy: long-duration energy storage: procurement.

**Description**

AB 1720, as amended, Carrillo. Energy: long-duration energy storage: procurement. Under existing law, the Public Utilities Commission (PUC) has regulatory authority over public utilities, including electrical corporations. Existing law requires the PUC to open a proceeding to determine appropriate targets, if any, for each load-serving entity, as defined, to procure viable and cost-effective energy storage systems to be achieved by December 31, 2015, and December 31, 2020. If determined to be appropriate, the PUC is required to adopt the procurement targets by October 1, 2013, and to reevaluate the determinations not less than once every 3 years. Pursuant to these provisions, the PUC has adopted decisions establishing energy storage system procurement targets. Existing law requires each load-serving entity, by January 1, 2016, and again by January 1, 2021, to submit a report to the PUC demonstrating that it has complied with the energy storage system procurement targets and policies adopted by the PUC. Existing law requires the PUC to adopt a process for each load-serving entity to file an integrated resource plan and a schedule for periodic updates to the plan to ensure that load-serving entities accomplish specified objectives. Existing law requires each load-serving entity to prepare and file an integrated resource plan consistent with those objectives on a time schedule directed by the PUC and subject to PUC review. Pursuant to these authorities, the PUC has adopted a decision establishing 2 thresholds for the emissions of greenhouse gases, to meet by 2030, as the target ranges for the electric sector as part of the PUC's 2019–20 integrated resource planning process. That decision also establishes the amount of long-duration energy storage, and the in-service date of the storage, that are required to be included in the load-serving entity's integrated resource plans. This bill would require the PUC, by January 4, 2021, to report to the Governor, the Independent System Operator, the Department of Water Resources, and the State Energy Resources Conservation and Development Commission (Energy Commission) on the specific types and amount of long-duration energy storage and in-service dates of that storage included in the integrated resource plans submitted by load-serving entities. The bill would require the PUC, in the report, to state whether it will issue an order on or before March 1, 2021, requiring load-serving entities, in the aggregate, to procure, at a minimum, the amount of long-duration energy storage capacity identified in the commission's decision referenced above for a specific threshold of emissions of greenhouse gases. The bill would require the Department of Water Resources, if the PUC does not is... (click bill link to see more).

**Primary Sponsors**

Wendy Carrillo

**Title**

Introduction Date: 2019-02-22

Energy: transportation sector: hydrogen.

**Description**

SB 662, as amended, Archuleta. Energy: transportation sector: hydrogen. Under existing law, the Public Utilities Commission (PUC) has regulatory authority over public utilities, including electrical corporations, while local publicly owned electric utilities are under the direction of their governing boards. Existing law requires the PUC and the State Energy Resources Conservation and Development Commission (Energy Commission) to undertake specified actions to advance the state's clean energy and pollution reduction objectives, including, where feasible, cost effective, and consistent with other state policy objectives, to increase the use of large- and small-scale energy storage with a variety of technologies, including green electrolytic hydrogen, targeted energy efficiency, demand response, eligible renewable energy resources or other renewable and nonrenewable technologies with zero or lowest feasible emissions of greenhouse gases, criteria pollutants, and toxic air contaminants onsite to protect system reliability. For these purposes, "green electrolytic hydrogen" is defined as hydrogen gas produced through electrolysis and not from fossil fuel. Existing law requires the PUC, State Air Resources Board (state board), and Energy Commission to consider green electrolytic hydrogen as an eligible form of energy storage, and to consider other potential uses of green electrolytic hydrogen. This bill would include use of green electrolytic hydrogen as an alternative transportation fuel as another potential use for these purposes. The Charge Ahead California Initiative, administered by the State Air Resources Board (state board), among other things, requires the state board to identify and adopt appropriate policies, rules, or regulations to remove regulatory disincentives preventing certain retail sellers of electricity from facilitating the achievement of greenhouse gas emission reductions in nonelectrical industry sectors through increased investments in transportation electrification. Existing law, enacted as part of the Clean Energy and Pollution Reduction Act of 2015, requires the PUC, in consultation with the Energy Commission and state board, to direct electrical corporations to file applications for programs and investments to accelerate widespread transportation electrification, as defined, to achieve specified results. The PUC is required to approve, or modify and approve, programs and investments in transportation electrification, including those that deploy charging infrastructure, through a reasonable cost recovery mechanism, if they meet specified requirements. This bill would revise the definition of "transportation electrification" for this purpose to include the use of renewable hydrogen when used direct... (click bill link to see more).

**Primary Sponsors**

Bob Archuleta

State

CA

Bill Number

SB 1258

Last Action

June 18 Hearing Held In Committee And Under  
Submission 2020 06 18

Status

In Senate

FN Outlook

21.6%

74.6%

Title

California Climate Technology and Infrastructure Financing Act.

Introduction Date: 2020-02-21

Description

SB 1258, as introduced, Stern. California Climate Technology and Infrastructure Financing Act. Existing law, the Bergeson-Peace Infrastructure and Economic Development Bank Act, authorizes the California Infrastructure and Economic Development Bank, governed by a board of directors, to make loans, issue bonds, and provide other assistance for various types of economic development projects, among other things. The activities of the bank under these provisions are funded from the California Infrastructure and Economic Development Bank Fund, which is continuously appropriated for these purposes. This bill would enact the California Climate Technology and Infrastructure Financing Act to require the bank, in consultation with specified agencies to administer the Climate Catalyst Revolving Fund, which the bill would establish to provide financial assistance to eligible climate catalyst projects, as defined. The bill would require the bank to administer the climate catalyst loan program, would establish the Climate Catalyst Revolving Fund for these purposes, and would continuously appropriate the fund for these purposes, with specified restriction.

Primary Sponsors

Henry Stern

State

CA

Bill Number

SB 1314

Last Action

Referral To Com On E U C Rescinded Due To  
The Shortened 2020 Legislative Calendar 2020  
05 12

Status

In Senate

FN Outlook

24.9%

74.7%

**Title**

Community Energy Resilience Act of 2020.

**Introduction Date:** 2020-02-21**Description**

SB 1314, as introduced, Dodd. Community Energy Resilience Act of 2020. Existing law establishes the Strategic Growth Council in state government consisting of various state agency heads and 3 public members. Existing law assigns to the council various duties, including managing and awarding grants and loans to support the planning and development of sustainable communities, as provided. This bill, the Community Energy Resilience Act of 2020, would require the council to develop and implement a grant program for local governments to develop community energy resilience plans. The bill would set forth guiding principles for plan development, including equitable access to reliable energy, as provided, and integration with other existing local planning documents. The bill would require a plan to, among other things, ensure a reliable electricity supply is maintained at critical facilities and identify areas most likely to experience a loss of electrical service. The bill would require the council to establish a stakeholder review board to provide statewide oversight for purposes of the grant program. The bill would require a local government, as a condition of receiving grant funding, to submit its plan and a report of project expenditures to the stakeholder review board within 6 months of completing the plan. The bill would require the stakeholder review board to annually report specified information about the grant program to the Legislature.

**Primary Sponsors**

Bill Dodd

**Title**

Introduction Date: 2020-02-13

Long-duration energy storage systems.

**Description**

AB 2255, as amended, Eggman. Long-duration energy storage systems. Under existing law, the Public Utilities Commission (PUC) has regulatory authority over public utilities, including electrical corporations. Existing law requires the PUC to open a proceeding to determine appropriate targets, if any, for each load-serving entity, as defined, to procure viable and cost-effective energy storage systems to be achieved by December 31, 2015, and December 31, 2020. If determined to be appropriate, the PUC is required to adopt the procurement targets, by October 1, 2013, and to reevaluate the determinations not less than once every 3 years. Pursuant to these provisions, the PUC has adopted decisions establishing energy storage system procurement targets. Existing law requires each load-serving entity, by January 1, 2016, and again by January 1, 2021, to submit a report to the PUC demonstrating that it has complied with the energy storage system procurement targets and policies adopted by the PUC. This bill would require the PUC and the State Energy Resources Conservation and Development Commission (Energy Commission) to timely incorporate consideration of long-duration energy storage systems, as defined, into their energy and resource planning. The bill would require the PUC and the Energy Commission to consider measures to advance described objectives for long-duration energy storage, including support through research and development, demonstration, procurement, and incentives. Existing law requires the PUC to adopt a process for each load-serving entity to file an integrated resource plan and a schedule for periodic updates to the plan to ensure that load-serving entities accomplish specified objectives. Existing law requires each load-serving entity to prepare and file an integrated resource plan consistent with those objectives on a time schedule directed by the PUC and subject to PUC review. This bill would require the PUC, as part of the integrated resource planning process, to undertake specified activities to support eligible renewable energy resource goals, to support operational flexibility and reliability, and to enhance resiliency on the local and distribution level. Existing law provides for the establishment of an Independent System Operator (ISO) as nonprofit public benefit corporations and requires the ISO to ensure efficient use and reliable operation of the electrical transmission grid consistent with achieving planning and operating reserve criteria no less stringent than those established by the Western Electricity Coordinating Council and the North American Electric Reliability Council. Pursuant to existing law, the PUC sought and received authority for the ISO from the Federal Energy Regulatory Commis... (click bill link to see more).

**Primary Sponsors**

Susan Eggman

State

CA

Bill Number

AB 3239

Last Action

Referred To Com On Nat Res 2020 04 24

Status

In Assembly

FN Outlook

18.7%

67.7%

#### Title

Introduction Date: 2020-02-21

State Energy Resources Conservation and Development Commission.

#### Description

AB 3239, as introduced, Ting. State Energy Resources Conservation and Development Commission. Existing law establishes the State Energy Resources Conservation and Development Commission and sets forth its powers and duties. This bill would rename the commission as the Energy Commission, and would make related changes. The bill would prohibit existing supplies, forms, insignias, signs, logos, uniforms, or emblems from being destroyed or changed as a result of changing the name of the commission, and would require their continued use until exhausted or unserviceable.

#### Primary Sponsors

Phil Ting

Title	Introduction Date: 2019-02-21
Energy efficiency programs: workforce requirements.	

Description

SB 524, as amended, Stern. Energy efficiency programs: workforce requirements. Under existing law, the Public Utilities Commission has regulatory authority over public utilities, including electrical corporations. Existing law provides for the commission to administer and oversee the implementation of various energy efficiency programs. Existing law requires the commission to identify all potentially achievable cost-effective electricity efficiency savings, to establish efficiency targets for an electrical corporation to achieve, to ensure that there are sufficient moneys available to electrical corporations to meet those efficiency targets, and to undertake a comprehensive review of the feasibility, costs, barriers, and benefits of achieving a cumulative doubling of energy efficiency savings and demand reduction by 2030, as specified. This bill would require the commission, if an energy efficiency program, other than a project to install, modify, repair, replace, or maintain a solar thermal system or solar energy system, contributes \$50,000 or more in ratepayer-funded incentives for energy efficiency projects within the same building, facility, or building complex, to require the energy efficiency program administrator or program implementer, as applicable, to ensure that the work is performed by a skilled and trained workforce. The bill would exclude any additional labor costs resulting from the use of a skilled and trained workforce for those energy efficiency programs from the project costs of the commission's cost-effectiveness tests. The Public Utilities Act makes any public utility that violates the Public Utilities Act, or that fails to comply with any part of any order, decision, rule, direction, demand, or requirement of the commission guilty of a crime. Because the provisions of this bill would be a part of the act and because a violation of a commission action implementing its requirements would be a crime, the bill would impose a state-mandated local program. The California Constitution requires the state to reimburse local agencies and school districts for certain costs mandated by the state. Statutory provisions establish procedures for making that reimbursement. This bill would provide that no reimbursement is required by this act for a specified reason.

Primary Sponsors

Henry Stern

State

CA

Bill Number

SB 1183

Last Action

Referral To Com On Trans Rescinded Due To  
The Shortened 2020 Legislative Calendar 2020  
05 12

Status

In Senate

FN Outlook

26.9%

88.6%

**Title**

Electric vehicle charging master plan.

Introduction Date: 2020-02-20

**Description**

SB 1183, as amended, Hertzberg. Electric vehicle charging master plan. Existing law requires the State Energy Resources Conservation and Development Commission (Energy Commission), working with the State Air Resources Board and the Public Utilities Commission (PUC), to prepare a statewide assessment of the electric vehicle charging infrastructure needed to support the levels of electric vehicle adoption required for the state to meet its goals of putting at least 5 million zero-emission vehicles on California roads by 2030, and of reducing emissions of greenhouse gases to 40% below 1990 levels by 2030. Existing law require the Energy Commission to update the assessment at least once every 2 years. This bill would require the Energy Commission, as a part of each update to the assessment, to conduct an assessment of certain factors and how those factors will affect the market for and technological development of electric vehicles and infrastructure. The bill would require the Energy Commission to convene the EV Infrastructure Council, which the bill would establish, to develop, by January 1, 2022, an Electric Vehicle Charging Master Plan, as specified. The bill would require the Energy Commission to update the plan at least once every 2 years. The bill would establish a goal of the state to deploy no less than 250,000 publicly available electric vehicle charging station plugs by 2025 and would require the commission to develop an electric vehicle charging station deployment goal to support 5 million zero-emission vehicles by 2030. Existing law requires the Energy Commission to administer the Alternative and Renewable Fuel and Vehicle Technology Program to provide financial assistance to various entities for those entities to develop and deploy innovative technologies that transform California's fuel and vehicle types to help attain the state's climate change policies. Existing law requires the PUC, in consultation with the state board and the Energy Commission, to direct electrical corporations to file applications for programs and investments to accelerate widespread transportation electrification. Existing law requires the PUC to approve, or modify and approve, those programs and investments if they meet certain requirements. This bill would require the Alternative and Renewable Fuel and Vehicle Technology Program and those programs and investments required by the PUC to accelerate widespread transportation electrification to be consistent with the Electric Vehicle Charging Master Plan that would be developed by the council.

**Primary Sponsors**

Bob Hertzberg

<b>Title</b> Clean Energy Job Creation Program.	<b>Introduction Date:</b> 2019-02-21
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**Description**

AB 1028, as amended, Gonzalez. Clean Energy Job Creation Program. The California Clean Energy Jobs Act, an initiative approved by the voters as Proposition 39 at the November 6, 2012, statewide general election, made changes to corporate income taxes and, except as specified, provided for the transfer of \$550,000,000 annually from the General Fund to the Clean Energy Job Creation Fund for 5 fiscal years beginning with the 2013–14 fiscal year. Moneys in the fund are available, upon appropriation by the Legislature, for purposes of funding eligible projects that create jobs in California improving energy efficiency and expanding clean energy generation. Existing law provides for the allocation of moneys remaining in the fund after the 2017–18 fiscal year and, commencing with the 2018–19 fiscal year, establishes the Clean Energy Job Creation Program to fund projects that create jobs in California improving energy efficiency and expanding clean energy generation, and provides for the allocation of moneys appropriated by the Legislature to community college districts and local educational agencies for purposes of the program. Existing law requires the State Energy Resources Conservation and Development Commission, in allocating grants to local educational agencies as part of the program, to give priority based on specified criteria. This bill would require the commission, in allocating grants to local educational agencies as part of the program, to also give priority based on a local educational agency's utilization of apprentices from state-approved apprenticeship and preapprenticeship programs, as specified. The bill would explicitly authorize program expenditures associated with employee training and energy managers.

**Primary Sponsors**

Lorena Gonzalez Fletcher

**Title****Introduction Date:** 2020-02-20

Office of Planning and Research: regional climate networks: climate adaptation action plans.

**Description**

AB 2621, as amended, Mullin. Office of Planning and Research: regional climate networks: climate adaptation action plans. Existing law requires, by July 1, 2017, and every 3 years thereafter, the Natural Resources Agency to update, as prescribed, the state's climate adaptation strategy, known as the Safeguarding California Plan. Existing law establishes the Office of Planning and Research in state government in the Governor's office. Existing law establishes the Integrated Climate Adaptation and Resiliency Program to be administered by the office to coordinate regional and local efforts with state climate adaptation strategies to adapt to the impacts of climate change, as prescribed. This bill would authorize eligible agencies, as defined, to establish and participate in a regional climate network, as defined, to prepare a regional climate adaptation action plan for certain regions, as described. The bill would authorize eligible agencies to voluntarily determine whether to establish membership in a regional climate network. The bill would not limit the number of regional climate networks that may be established within each region. The bill would require the office to encourage the inclusion of agencies with land use planning authority into regional climate networks. This bill would also require, by January 1, 2022, the office to develop guidelines, as prescribed, establishing how a regional climate network may develop a regional climate adaptation action plan, including certain information, analyses, and contents to be included in a plan and certain considerations and procedures for a regional climate network when preparing a plan. The bill would require the office to provide technical assistance to eligible agencies developing regional climate networks and plans. The bill would require, by January 1, 2022, the office to make recommendations to certain policy committees of the Legislature on improving state support for the creation and work of regional climate networks, as prescribed, and the potential sources of financial assistance and options for distributing state funds to support the creation and implementation of plans.

**Primary Sponsors**

Kevin Mullin

Title

Introduction Date: 2020-02-19

Climate change: Safeguarding California Plan: Extreme Heat and Community Resilience Program.

Description

AB 2441, as amended, Luz Rivas. Climate change: Safeguarding California Plan: Extreme Heat and Community Resilience Program. Existing law requires the Natural Resources Agency every 3 years to update the Safeguarding California Plan, the state's climate adaptation strategy. As part of the update, existing law requires the agency to coordinate with other state agencies to identify a lead agency or group of agencies to lead adaptation efforts in each sector. Existing law requires state agencies to work to maximize specified objectives. Existing law requires the Office of Emergency Services, within one year of an update to the Safeguarding California Plan and in coordination with certain state agencies, to review and update, as necessary, the Adaptation Planning Guide. This bill would include, as objectives to be maximized, building resilient communities by developing projects that incorporate, to the maximum extent feasible, cool surface materials and investing in communities to develop community-specific climate resilience plans and to establish community resilience centers to mitigate impacts of local climate risks. The bill would additionally require the Office of Emergency Services to coordinate with the State Department of Public Health in the review and update of the Adaption Planning Guide.This bill would establish the Extreme Heat and Community Resilience Program to coordinate the state's efforts to address extreme heat and to facilitate the implementation of regional and state climate change planning into effective projects through the awarding of competitive grants to eligible entities for implementation of those projects. The bill would require the Strategic Growth Council to administer the program. The bill would establish the Extreme Heat and Community Resilience Fund in the State Treasury and would require the council, upon appropriation by the Legislature, to expend moneys in the fund for the implementation of the program.

Primary Sponsors

Luz Rivas

Title	Introduction Date: 2019-01-28
Climate change: Chief Climate Resilience Officer.	

Description

SB 168, as amended, Wieckowski. Climate change: Chief Climate Resilience Officer. Existing law establishes the Integrated Climate Adaptation and Resiliency Program to be administered by the Office of Planning and Research to coordinate regional and local efforts with state climate adaptation strategies to adapt to the impacts of climate change, as specified. Existing law establishes an advisory council, as specified, to support the goals of the Office of Planning and Research related to climate change. This bill would establish the Chief Climate Resilience Officer, appointed by the Governor and subject to confirmation by the Senate, in the Office of Planning and Research to serve as the statewide lead for planning and coordination of climate adaptation policy and implementation in California, and would specify the duties of the chief officer. The bill would make the chief officer, or the chief officer's designee, a member of the advisory council and would designate the chief officer, or the chief officer's designee, as the chair of the advisory council. The bill would include additional expertise members of the advisory council are to have. The bill would specify that members of the advisory council serve staggered 4-year terms, except as provided.

Primary Sponsors

Bob Wieckowski

**Motion (Revisions to GAC Manual of Procedures): That GAC recommend to Members Council to approve updates to the GAC Manual of Procedures (see Attachment).**

Background: Changes to the GAC Manual of Procedures (MOP) shown in the Attachment are proposed by the Rules Subcommittee after a detailed review of the full MOP. These MOP changes were discussed at the November 16, 2020 Rules Subcommittee Meeting and approved unanimously by the Rules Subcommittee during its Virtual Winter Meeting on January 22, 2021.

Fiscal Impact: NONE



Shaping Tomorrow's  
Built Environment Today

## Government Affairs Committee

### Manual of Procedures

PROPOSED by the Rules Subcommittee;

Approved by Rules Subcommittee Jan. 22, 2021

Approved, as amended by Government Affairs Committee on June 9, 2020 and accepted by Members Council on June 25, 2020.

## Approved by Government Affairs Committee on June 25, 2020

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## 1. INTRODUCTION

The Rules of the Board (ROB) for the Government Affairs Committee (GAC) define its scope and purpose, membership, and operation. This Manual of Procedures (MOP) details the operating procedures followed in carrying out the responsibilities of the Committee as prescribed in its ROB. This Committee is broadly responsible for organizing and conducting government activities at all levels and advising the BOD on such matters.

## 2. EXPECTATIONS OF COMMITTEE MEMBERS

Committee members are expected to attend and actively participate in regular meetings, serve on assigned Subcommittees, quickly respond to requests from Government Affairs Office staff and Committee leadership, and engage in constructive dialogue.

## 3. DUTIES OF COMMITTEE MEMBERS

### a. Chair

Duties of the Chair consist primarily of directing the operation of this Committee and reporting to the Members Council as required. Specific duties include:

1. Attend meetings of this Committee and assigned Subcommittee meetings.
2. Preside over all meetings of this Committee and its Executive Subcommittee.
- ~~3. Present, in coordination with the staff liaisons, centralized training for RVCs at the Annual Meeting and Winter Conference.~~
3. Review and coordinate approval of the Committee minutes, as prepared by the staff liaisons, for all Committee meetings.
4. ~~5.~~ Prepare the agendas for this Committee's meetings with the assistance of the staff liaisons and Committee members.
5. ~~6.~~ Preparing written reports, including MBO status, at Society Annual and Winter Meetings, and at other times as required.
6. ~~7.~~ In consultation with the GAC Nominating Committee, shall annually appoint the Chairs of the standing Subcommittees.
7. ~~8.~~ Annually appoint each member of this Committee to one or more standing Subcommittees.
8. ~~9.~~ Periodically review the expenditures and budget allocations of the Committee and take any action deemed necessary, in cooperation with the Executive Vice President, to stay within the established budget.
9. ~~10.~~ Appoint Ad Hoc Subcommittees, or working groups from the membership of this Committee, as necessary.
10. Oversee all liaisons activities. Generate liaisons report(s) for distribution to appropriate Society, ASHRAE Regional, and Chapter groups.

### b. Vice Chair

Duties of the Vice Chair include the following:

1. In the absence of the Chair, the Vice Chair shall assume the Chair role at any scheduled or called meeting of this Committee.

2. In the event the Chair is unable to perform its duties, the Vice Chair shall assume all the duties of the Chair until a successor is selected.
3. Prepare recommended budgets for the operation of this Committee for the coming year, in consultation with this Committee's Executive Subcommittee, the staff liaisons, and the BOD ex-officio members, for consideration by this Committee.
4. Perform other duties which may be assigned by the Chair.
- ~~5. —Oversee all liaisons activities. Generate liaisons report(s) for distribution to appropriate Society, ASHRAE Regional, and Chapter groups.~~
5. Serve as the Chair of the Rules Subcommittee.
- ~~6. As needed, coordinate review of the MOP and ROB and recommend changes via motions to the Committee.~~
6. Serve on this Committee's Executive Subcommittee.
7. Serve as GAC representative to the Members Council PAOE Subcommittee.
  8. Coordinate all training activities, which include RVC training, at-large Member and Council Representative trainings held at Winter and Annual meetings, as well as throughout the year.
  - ~~9. Coordinate training at Winter and Annual Meetings.~~

**c. Communications Coordinator**

Duties of the Communications Coordinator shall include working with members and staff to:

1. ~~Work with staff to~~ manage and update relevant ASHRAE webpages and social media outlets.
2. Produce newsletter and/or email updates on a quarterly basis, at a minimum.
3. ~~Work with staff to~~ Manage distribution channels for ~~grassroots~~ government activity clearing house efforts to the membership.
4. ~~Work with staff to~~ Solicit and publish *Journal* and *Insights* articles.
- ~~5. —Manage grassroots government activities training efforts.~~
6. Serve on this Committee's Executive Subcommittee.

**d. Regional Vice Chairs**

Duties of the Regional Vice Chairs include:

1. Work closely with the Director and Regional Chair (DRC) to keep them informed regarding the Committee's activities and assist with public policy issues.
2. ~~Serve on Subcommittees~~ Attend and actively participate in full GAC committee meetings, serve on at least 1 subcommittee, prepare for and attend any special meetings, and perform other duties as directed by this Committee's Chair.
3. Attend the regular meetings of this Committee at the Winter and Annual Meetings of the Society. Additionally, attendance at Subcommittee meetings during the Winter and Annual Meetings is highly encouraged. ~~Meetings are scheduled for Friday all day and Saturday until noon.~~
4. Assist Chapters in planning, coordinating and administering government activities and assist with training for such activities.
5. Monitor PAOE and enter RVC assigned points for Chapter governmental activities within the Region.

6. Prepare and conduct Governmental Activities Workshops at Chapters Regional Conference (CRC).
7. Prepare reports, as required by the Society and this Committee's Chair.
8. Coordinate communication on government activities at the Chapter and Regional levels.
9. Administer this Committee's Government Affairs Awards Program within the Region, solicit entries for each award from the Chapters, and forward qualified entries for Society consideration.
10. Transfer all relevant GAC materials, information, standards, and related information to the successor RVC.
11. Visit as many chapters as possible during the 3-year term in coordination with DRC's plans for chapter visits from region officers ~~During the 3-year term of an RVC, visit each Chapter at least once~~ (though some consideration shall be given to the RVCs in Region XIII, XIV and RAL).
12. RVC responsibility to help organize Government Outreach Events ~~Day on the Hill visits~~.
13. ~~Attend Subcommittee and Ad Hoc Subcommittee conference calls.~~
13. Travel, attend and present at Coordinate with DRC regarding President Elect Training and Regional Training.
14. Coordinate planning calls with Chapter GAC Chairs.

**e. Representative of Technology Council**

Duties of the Representative of Technology Council (TechC) include:

1. Serve as the liaison between GAC and TechC.
2. Ensure that ASHRAE's standards and other technical products are represented in public policy discussions and initiatives.
3. Serve on this Committee's Executive Subcommittee.
4. Keep GAC and subcommittees informed as to what standards, position documents, etc. are currently being discussed and/or edited to coordinate efforts with GAC Executive Subcommittee, Policy and Programs Subcommittee, or any other impacted Subcommittee.

**f. Representative of Members Council**

Duties of the Representative of Members Council include:

1. Serve as the liaison between GAC and Members Council.
2. Ensure that ASHRAE's grassroots interests are represented in public policy discussions and initiatives.
3. Serve on this Committee's Executive Subcommittee.

**g. Representative of Publishing and Education Council (PubEd)**

Duties of the Representative of PubEd Council include:

1. Serve as the liaisons between GAC and PubEd.
2. Ensure that ASHRAE's publications, training, certification, and related products are represented in public policy discussions and initiatives.

3. Serve on this Committee's Executive Subcommittee.

**h. At-Large Members**

Duties of the At-Large Members include:

1. Serve on the Committee's Subcommittees as assigned by the Chair
2. Provide support and advice as an advocate for assigned Committees in communication and interpretation of Committee's goals; guidance in fiscal planning, assistance in preparation and monitoring of annual objectives; assistance in developing and monitoring of action plans to achieve Strategic Plan Objectives; and assist in preparing recommendations to the Members Council.
3. Attend all meetings of the Committee.
4. Other duties from time to time as directed by the Committee Chair.

**i. Ex Officio Member**

Duties of the BOD *Ex-Officio* member include:

1. Serve this Committee in an advisory capacity and provide liaisons with the BOD, Councils, and other Committees.
2. Provide support to this Committee as follows:
  - (a) Guidance in fiscal planning.
  - (b) Assistance in preparation of annual objectives.
  - (c) Monitoring of progress toward completion of annual objectives.
  - (d) Assistance in developing action plans to achieve Strategic Plan Objectives.
  - (e) Monitoring of progress toward completion of Strategic Plan Objectives.
  - (f) Ongoing review of the Committee's ROB and MOP.
  - (g) Assess the Committee's scope and operation, and suggest changes as needed.
2. Attend all meetings of the Committee, except in cases of conflict with BOD meetings.
3. Serve on this Committee's Executive Subcommittee and Rules Subcommittee.

**j. Staff Liaisons**

The staff liaisons shall assist in carrying out Committee duties, including:

1. Generate, submit for approval to the Chair, and distribute meeting minutes within 10 business days after Committee meetings.
2. Distribute other supporting documents to Committee members in a timely manner.
3. Assist the Chair in preparation of timely, informative reports to the Members Council and the BOD.
4. Welcome new members appointed to this Committee and send them copies of the current Committee roster, MOP, minutes of the past Committee meetings, and other pertinent information, as applicable.
5. Assist the Vice Chair with generating the Committee's budget ~~and four-year plan.~~
6. Maintain a copy of accounting records and financial statements for the Committee.
7. Process appropriate transportation reimbursement requests for Committee members.
8. Support the Committee in carrying out Strategic Plan Objectives (SPO's).

9. Update this Committee's MOP as directed by the Committee.
10. Update and process materials for this Committee's workshops at CRC's.
11. Assist in the preparation of materials for training incoming Committee members.
12. Assist the Vice Chair in conducting training of Committee members at the Annual Meeting and the Winter Conference, and in qualifying Committee members to provide training at CRC Workshops and Chapter events.
13. Respond to inquiries from Chapters regarding this Committee's activities.
14. Assist the Communications Coordinator, the Vice Chair, and ASHRAE IT staff with maintaining a website whereby the membership of ASHRAE can readily obtain information regarding ~~grassroots~~-government activities in any geographical location where ASHRAE has a presence.
15. Provide support for this Committee's Government Affairs Awards Program, coordinate notifications, transportation to the Society Meeting, and Society notification to award winners.
16. Provide information and appropriate contact with government agencies in support of Committee ~~grassroots~~-government activities.
17. Provide administrative support for this Committee's programs.
18. Coordinate update of website per this Committee's directives.
19. Offer public policy updates and guidance to the Committee on:
  - a. Summary of recent ~~grassroots~~-government activities (as informed by the Society's Public Policy Priorities).
  - b. Trends relative to such priorities at the grassroots government level.
  - c. Existing or potential collaboration with partnering policy organizations.
  - d. Summary of recent requests for input from ASHRAE's GA team, requests for ASHRAE GA action for specific issues being addressed at national, sub national, and local government levels, and the actions that were taken (or not taken) to respond to these requests.

#### **46. SUBCOMMITTEES**

The Chair shall appoint Committee members to each Subcommittee annually. Subcommittee members may include voting members of this Committee and individuals with specific and relevant experience needed on each Subcommittee.

The Chair of this Committee shall form Subcommittees to conduct the business of the Committee in a practical and efficient manner. As conditions change, standing Subcommittees may be dissolved. The Chair may also form ad-hoc Subcommittees as needed.

Subcommittee Chairs must have served on the Subcommittee to which they are being appointed for at least 1 year, with the exception of the Nominating Subcommittee.

Subcommittee members are appointed for a period of one year and may be reappointed by the incoming Chair.

Standing Subcommittee membership and responsibilities are assigned as follows:

##### **a. Executive**

The Executive Subcommittee ~~(ES)~~ consists of the Chair, Vice Chair, Subcommittee Chairs, Communications Coordinator, Representative of Tech Council, Representative of Members Council, Representative of PubEd Council, Consultants and the BOD ExOs.

Responsibilities of the Executive Subcommittee shall include:

1. Develop the proposed yearly Public Policy Priorities for the Society.
2. Develop and monitor the Committee's MBOs.
3. Develop budgets and monitors Committee expenses.
4. Review and approve requests for action alerts.
  - a. Action alerts are requests to the membership to support an active issue such as pending action on a bill affecting indoor environment.
  - b. Requests for action alerts may be ~~proposed by~~ initiated by individuals or groups within or outside GAC.
  - c. When a request for an action alert is received, ES shall make a preliminary judgment as to whether it is necessary and supported by an approved positions of the Society.
  - d. If an action alert request is deemed necessary and supported by approved positions of ASHRAE, and if ES agrees that an alert should be issued, timely concurrence from Society Executive Committee will be sought by the Coordinating Officer.
  - e. If an action alert is found to lack support in approved ASHRAE positions and if ES believes an alert should be issued, the Coordinating Officer shall, in a timely manner, seek a supporting position from Society Executive Committee and report it to ES for further consideration.
5. Review and approve requests for input and/or support for specific issues being addressed at national, sub national, and local government levels.
  - a. Requests for input and/or support for specific issues being addressed at national, sub national, and local government levels are initiated by those outside of the GAC. Requests for support often are asking ASHRAE to publicly express an opinion on issues that are considered to be related to ASHRAE's interests.
  - b. Requests for input and/or support may be proposed or initiated by individuals or groups within or outside GAC or ASHRAE.
  - c. When a request for input and/or support is received, if time allows, ES shall make a preliminary judgment as to whether it is supported by an approved position of the Society.
  - d. If an input and/or support request is deemed relevant and supported by approved positions of ASHRAE, and if ES agrees that the input and/or support should be provided, timely concurrence from Society Executive Committee will be sought by the Coordinating Officer.
  - e. If a request for input and/or support is found to lack support in approved ASHRAE positions and if ES believes the input and/or support should be provided, the Coordinating Officer shall, in a timely manner, seek a supporting position from Society Executive Committee and report it to ES for further consideration.
  - f. ASHRAE GA staff should inform the GAC chair when requests are received and advise the chair as to whether or not the request aligns well with existing ASHRAE priorities and documented positions. If time allows, the chair then determines whether to bring the issue to the ES for discussion or authorize staff to address the issue directly.
  - g. For requests received by staff that do not allow time to be considered by the GAC ES and/or GAC ES chair, staff may recommend action directly of the Society Executive

Committee and/or Society President. Staff should inform the GAC chair of these time-sensitive requests and recommendations, along with the action taken.

6. Review, comment, and approve Public Policy Issue Briefs (PPIBs) developed by the Policy and Programs Subcommittee.
  - a. Recommendations, if any, for new PPIBs shall be provided to the Policy and Programs Subcommittee.
  - b. Recommendations, if any, for the retirement of PPIBs shall be provided to the Policy and Programs Subcommittee.
  - c. PPIBs approved by the Executive Subcommittee shall be sent to the full Government Affairs Committee for approval.

#### **b. Policy and Programs**

The members of the Policy and Programs Subcommittee are appointed annually by the Chair of the GAC and consist of approximately half of the RVCs on the GAC. Members of the Executive Subcommittee may, at their discretion, serve as *Ex Officio* members of the Policy and Programs Subcommittee.

Responsibilities of the Policy and Programs Subcommittee shall include:

1. Develop and oversee implementation of public policy goals and initiatives, as drawn from the Society's Public Policy Priorities.
2. Provide regular reports to the GAC on the status of public policy initiatives and goals. These reports shall include recommendations for improving the effectiveness of the Society's public policy operations.
3. Seek opportunities in conjunction with Member Mobilization Subcommittee efforts for influencing public policy through active outreach with governmental and non-governmental organizations.
4. When deemed necessary, prepare and submit requests for action alerts to the Executive Subcommittee.
5. Review and recommend revisions to the PAOE criteria.
6. Review annually existing PPIBs and make recommendations to the Executive Subcommittee to retire or update the PPIBs. If an update is recommended, the Policy and Programs Subcommittee shall develop the PPIB and submit to the Executive Subcommittee for review and approval.
7. Recommend and develop any new PPIBs, as needed.

#### **c. Member Mobilization**

The members of the Member Mobilization Subcommittee are appointed annually by the Chair of the GAC and consist of approximately half of the RVCs on the GAC. Members of the Executive Subcommittee may, at their discretion, serve as *Ex Officio* members of the Member Mobilization Subcommittee.

Responsibilities of the Member Mobilization Subcommittee shall include:

1. Monitor and respond to public policy-related requests from government officials and non-governmental organizations on public policy issues deemed important by the Society, including, but not limited to those issues identified in the Society's Public Policy Priorities. Monitor and respond to public policy-related requests from government officials and non-governmental organizations on public policy issues deemed important by the Society, including, but not limited to those issues identified in the Society's Public Policy Priorities. Refer to GAC MOP section 6.a.4 and 6.a.5.
2. When deemed necessary, prepare and submit requests for action alerts or for providing input and/or support for specific issues being addressed at ~~state, provincial,~~ national, sub national levels to the Executive Subcommittee.
3. Provide regular reports to the GAC on the status of ongoing public policy projects. These reports shall include recommendations for improving the effectiveness of the Society's public policy operations.
4. Provide recommendations to the GAC on emerging issues that are not the current primary focus of the Society, but have the potential to become of greater interest and thus may warrant greater future attention.
5. Manage Government Affairs Awards Program.
6. Review and update training materials for chapter chairs prior to Winter Meeting. The Subcommittee must provide feedback on training materials and work with staff to update and develop the training materials for Regional and chapter training events.prior to Winter Meeting.

#### **d. Global Affairs**

The members of Global Affairs Subcommittee are appointed annually by the Chair of the GAC. Membership of the Subcommittee includes the RVC's from Regions 2, 8, 11, 12, 13, 14 and the RAL and in addition, up to 3 At Large Members from the Regions involved. The Chair of the Subcommittee needs to be an RVC with a minimum of 1 year experience and be from the Regions involved.

Responsibilities of this Subcommittee shall include:

1. Developing strategies to promote and grow activities that reflect the global nature of the Society;
2. Identifying regional best practices for government outreach outside of the U.S. so that chapters can successfully promote the Public Policy Priorities internationally and build connections with government officials, institutions, non-governmental organizations, and private parties;
3. Monitor key public policy needs of government officials and policy makers internationally concerning the built environment, and make ASHRAE recommendations for responding to these issues;
4. Provide regular reports to the GAC on global outreach activities.

#### **e. Rules**

1. The Vice Chair of GAC will be the chair of this Subcommittee.
2. Membership of the Subcommittee will be the GAC Vice Chair, the Communication Coordinator, the Members Council Representative, and if needed up to one additional

member from the Executive Subcommittee. Need for the additional subcommittee member shall be determined by the Chair of the Rules Subcommittee.

3. Responsibilities of this Subcommittee is to conduct an annual review of the MOP, ROB, the Resource Manual, and Section 2.5 of the Manual of Chapter Operations.

- a. **Rules of the Board (ROB):**

The rules of the board for the GAC define its scope and purpose, membership and operation. Specifically, section 2.402.001 of Volume 2 covers the scope and purpose of the committee, section 2.402.002 Membership, and 2.402.003 Operation. Changes to this document must be preliminary reviewed by the Society Rules Committee, then passed as a motion to Members Council for approval, and lastly passed to the Board for Final approval. The content of these sections should be high level and identify the “who”, “what” and “why”. The ‘how’ should be described in the Manual of Procedures.

- b. **Manual of Procedures (MOP):**

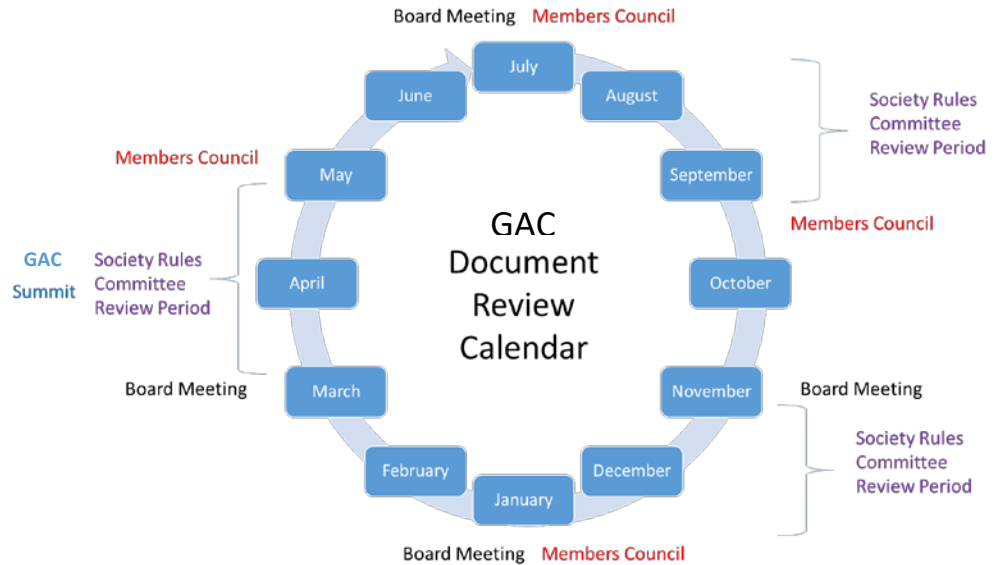
This manual details the operating procedures followed in carrying out the responsibilities of the committee as prescribed in its ROB. For example, this document contains the expectations of Committee members, their duties, a description and make-up of the GAC working subcommittees, the requirements for developing annual objectives, and the awards that the GAC committee is empowered to distribute. Changes to the MOP must be approved by Members Council, but do not require Board approval.

- c. **GAC Resource Manual (RM):**

The Government Affairs Committee Resource Manual is a reference for guidelines, forms, procedures, sample documents and other tools that the Committee uses in its day-to-day operations. It ensures consistency in the operation of the Committee at the Society, Region, and Chapter level and serves as an educational tool for new members. The Government Affairs Committee Resource Manual is an internal document of the Committee and changes require the approval of the GAC Committee, only.

- d. **Section 2.5 of the Manual of Chapter Operations (MCO):**

This section of the Manual of Chapter Operations describes the duties of the Chapter level GAC organizations and rules procedures for disseminating information from the Society GAC and when and how to engage local government officials. The MCO is owned and maintained by Members Council. Changes made to this document must be presented and approved by that entity. Members Council meets 4 times a year and proposed changes must have background information and justification for changes.



#### f. Nominating

1. Membership of this Subcommittee shall be the Chair, Vice Chair, a Presidential Member, the Communication Coordinator, the GAC ExO and up to one additional member, if needed. Need for an additional subcommittee member or members shall be determined by the GAC Chair.
2. The ~~Subcommittee shall be Chaired by a Presidential Member and the~~ Subcommittee shall select a Vice Chair to serve in the absence of the Chair.
3. Responsibility of this Subcommittee is to make recommendations to the Society Appointments Roadmap Committee through the Board ExO for the next year's GAC Committee Chair and Vice Chair.
4. The Subcommittee shall seek input from Chairs of Subcommittees on their recommendations regarding nominations.
5. ~~4-~~ This Subcommittee shall also submit recommendations for the next year's Chairs of the various GAC Subcommittees to the newly appointed GAC Committee Chair and Vice Chair.
6. ~~5-~~ This Subcommittee shall meet at the Winter Meeting and at other times during the year as needed. Meetings shall be held in Executive Session and the staff liaison will be tasked with disposal of any worksheets at the end of each meeting.
7. ~~6-~~ All nominations should be submitted by the nominating subcommittee within a maximum of two weeks' time after the Winter Meeting.

#### **57. Committee Objectives (MBOs)**

Prior to the Society Annual Meeting, the incoming Committee Chair, in consultation with the Executive Subcommittee, will prepare objectives for the Committee for the next Society Year and present these objectives to the Committee for review during the Society's Annual Meeting. The objectives will be included in the Committee's report to the Members Council at the Annual Meeting as an information item, and a copy of the objectives will be sent to ASHRAE Headquarters staff, Assistant to the BOD.

1. If any Committee does not submit its objectives to the BOD at the Annual Meeting, an assigned BOD Ex-Officio is responsible for contacting the incoming Committee Chair and working with him/her to complete these objectives.
2. ASHRAE Headquarters staff Director of Member Services will send copies of objectives to the BOD Ex-Officio, Committee staff liaisons and council staff liaisons. Staff liaisons will send objectives to Committee members.
3. Each objective should be measurable and should include a projected completion date, fiscal impact (if any) and other information that would clarify the intent of the objective. If an objective is to be assigned to a specific member or Subcommittee of the Committee, this should also be included.
4. A status report of the objectives will be included in the Committee report submitted to the Members Council at the Society's Winter Meeting, and a copy of the objectives will be sent to ASHRAE Headquarters staff, Director of Member Services.
5. A final report of the objectives will be included in the Committee report submitted to the Members Council at the Society Annual Meeting, and a copy of the objectives will be sent to ASHRAE Headquarters staff, Director of Member Services. The objectives prepared by the incoming Committee Chair for the next Society Year (or by the individual who will be the next year's Chair) will also be included in this report. These two reports on objectives will show the Members Council what the Committee accomplished during the Society Year that is ending and what is planned for the upcoming year.

## **68. AWARDS PROGRAM**

### **a. Government Affairs Award**

The Government Affairs Award was established to recognize an individual for outstanding effort and achievement in national, sub-national, and local government activities in connection with technical issues related to the activities of the Society.

- Recognition is in the form of a plaque for first place winner.
- One awarded per year.
- The Government Affairs Committee makes recommendations for the award to the Honors and Awards Committee at the Winter Meeting.



# ASHRAE Leadership Presentation

Dunstan L. Macauley

January 27, 2021

ASHRAE 2021 Winter Conference (Virtual)

*-Government Activities Committee*

## Code of Ethics

“We will act with honesty, fairness, courtesy, competence, inclusiveness and respect for others, which exemplify our core values of excellence, commitment, integrity, collaboration, volunteerism and diversity, and we shall avoid all real or perceived conflicts of interest.”

## Sexual Harassment

ASHRAE is committed to educating members to eliminate all instances of sexual harassment. The Society will deploy an online training program for volunteers to help educate and protect all members, and to sustain the professional environment members deserve and expect. This training will be required prior to serving on certain standing committees and/or in leadership positions.

[ashrae.org/about/governance/ashrae-discrimination-and-harassment-policy](https://ashrae.org/about/governance/ashrae-discrimination-and-harassment-policy)

## Commercialism

**ASHRAE's Commercialism Policy** allows for Society activities that fulfill the mission of technological advancement with adherence to business plans that generate income to offset operational expenses such as AHR Exposition, ASHRAE periodicals, website, and Society conference events such as the Welcome Party, luncheons, registration kits, and receptions.

[ashrae.org/commercialism](https://ashrae.org/commercialism)

View ASHRAE Governing Documents at [ashrae.org/about/governance](https://ashrae.org/about/governance)



# Memoranda of Understanding (MOUs)



National Association of  
State Energy Officials  
(NASEO)  
November 2020



Chartered Institution  
of Building Services  
Engineers (CIBSE)  
December 2020



New York State Energy Research &  
Development Authority (NYSERDA)  
July 2020  
Umbrella Contract followed this  
MOU, bringing revenues to ASHRAE.



American Society of  
Health Care Engineering  
(ASHE)  
July 2020



Air Movement and  
Control Association  
(AMCA)  
September 2020



Deutscher Kalte und  
Klimatechnischer  
Verein (DKV)  
July 2020



Kuwait Foundation for  
the Advancement of  
Sciences (KFAS)  
November 2020



U.S. Department of  
Homeland Security  
Science and  
Technology  
Directorate  
February 2021

Learn more at [ashrae.org/mous](https://www.ashrae.org/mous)

# Financial Impact of COVID-19



- The pandemic economy and loss of the AHR Expo income has strained ASHRAE's budget significantly.
- Membership levels have been impacted but are down less than predicted at the start of SY 2019-20.
- **ASHRAE secured a Payroll Protection** Program loan to help offset some of the losses from operational income. We have applied for loan forgiveness and hope to hear a resolution in the next few months.
- Staff expenses have been reduced, including the downsizing staff from 120 to 110 FTE.
- Volunteer and staff travel expenses have been reduced significantly, reflecting pandemic travel restrictions.

## Member Assistance

Due to the financial impact of the COVID-19 pandemic members have experienced, ASHRAE is **not increasing member dues** for the 2020-2021 Society Year.

### **MCO 3.15 Hardship Cases and Natural Disaster Relief Action. 3.15.1 Hardship Cases**

Members Council is responsible for determining what constitutes a hardship case and providing guidance to staff for determination of special consideration with respect to dues and other member benefits. Issues not covered by this guidance shall be ruled on by the chair of Members Council in consultation with staff. For more information, contact [membership@ashrae.org](mailto:membership@ashrae.org).

# Proactive Diversity Task Group

*Created June 2020 to recommend detailed programs and initiatives that will seek to eliminate all forms of discrimination and social injustice, and proactively drive diversity, through all levels within ASHRAE.*



## 5 Goals of the Task Group include:

1. Communicate a compelling rationale for diversity and inclusion in engineering, the HVAC&R industry and ASHRAE.
2. Develop an understanding of the diversity profile of those in engineering, the HVAC&R industry and ASHRAE relating to education, training, employment and membership.
3. Understand and remove barriers to diversity and inclusion through programs, education and advocacy.
4. Identify metrics and then measure and report on impact.
5. Lead the way in demonstrating good diversity in practice.

All Member Survey sent Dec. 2020 received 821 responses. Task Group members are working through survey responses and **welcome your continued feedback** (which can be provided anonymously) here:

[ashrae.org/communities/committees/feedback-on-ashrae-s-culture-of-diversity-and-inclusivity](https://ashrae.org/communities/committees/feedback-on-ashrae-s-culture-of-diversity-and-inclusivity)



Tim McGinn, Chair



Robin Bryant



Dunstan Macauley



Russell Lavitt



Sheila Hayter



Andres Sepulveda



Tanisha Meyers-Lisle

# Nominations Needed!



## Committee Nominations

- Due by **mid-February**. Council, RAC, TAC, Standards and Handbook nominations are due **mid-September**
- Speak with your committee ExO if your current appointment ends in June and you wish to be nominated for another committee

 [ashrae.org/committee-nominations](https://ashrae.org/committee-nominations)

## Honors & Awards Nominations

ASHRAE's awards fall into one of six categories:

- Personal Honors
- Personal Awards for General & Specific Society Activities
- Paper Awards
- Society Awards to Groups or Chapters
- Chapter and Regional Awards

[ashrae.org/honorsandawards](https://ashrae.org/honorsandawards) 

Learn about ASHRAE Technical Committees (TCs) at [ashrae.org/communities](https://ashrae.org/communities) 

# Bylaws Update



Proposed Bylaws change, to be voted on Spring 2021:  
Change title of 'Member' grade to "Full Member"

## ASHRAE Bylaws

Section 2.1 Grades of Membership.  
These shall be designated as follows:

- (A) Honorary Member,
- (B) Presidential Members,
- (C) Fellow,
- (D) Life Member,
- (E) Life Associate Member,
- (F) Full Member,
- (G) Associate Member,
- (H) Affiliate Member, and
- (I) Student Member.

'Member' grade refers to individuals who have provided necessary education and professional background information to the Society in order to advance from Associate to Member grade.

This proposed Bylaws change would update the title of 'Member' to '**Full Member**'.

[ashrae.org/about/governance](https://ashrae.org/about/governance)

# Professional Development



## eLearning

Convenient, on-demand courses for individuals or groups.

**90+** online courses starting at **\$42** for members.

### Group Rates Available

Updated Course Catalog:  
[elearningcatalog.ashrae.org](http://elearningcatalog.ashrae.org)



## ASHRAE Learning Institute (ALI)

Instructor-led courses in a variety of formats.

### New Virtual HVAC Design Courses

Live, Instructor-led

- Level I – Essentials
- Level II – Applications

### New 2021 Instructor-led Online Series

[ashrae.org/onlinecourses](http://ashrae.org/onlinecourses)

**Courses Available for ASHRAE Chapter, and In-Company Presentations.**

## Certification

Validate and promote your expertise via **online examination and digital badging:**

Building Design

- Energy Modeling (BEMP)
- Healthcare Facility Design (HFDP)
- High-Performance Building Design (HBDP)
- HVAC Design(CHD)

Building Performance

- Commissioning (BCxP)
- Energy Assessment (BEAP)

Building Operations

- Operations & Performance Maintenance (OPMP)

[ashrae.org/professional-development](http://ashrae.org/professional-development)



# New Global Headquarters



 **180 Technology Parkway NW**  
**Peachtree Corners, GA 30092**



ASHRAE has officially moved into a renovated 66,700 ft<sup>2</sup> building, originally built in 1978.



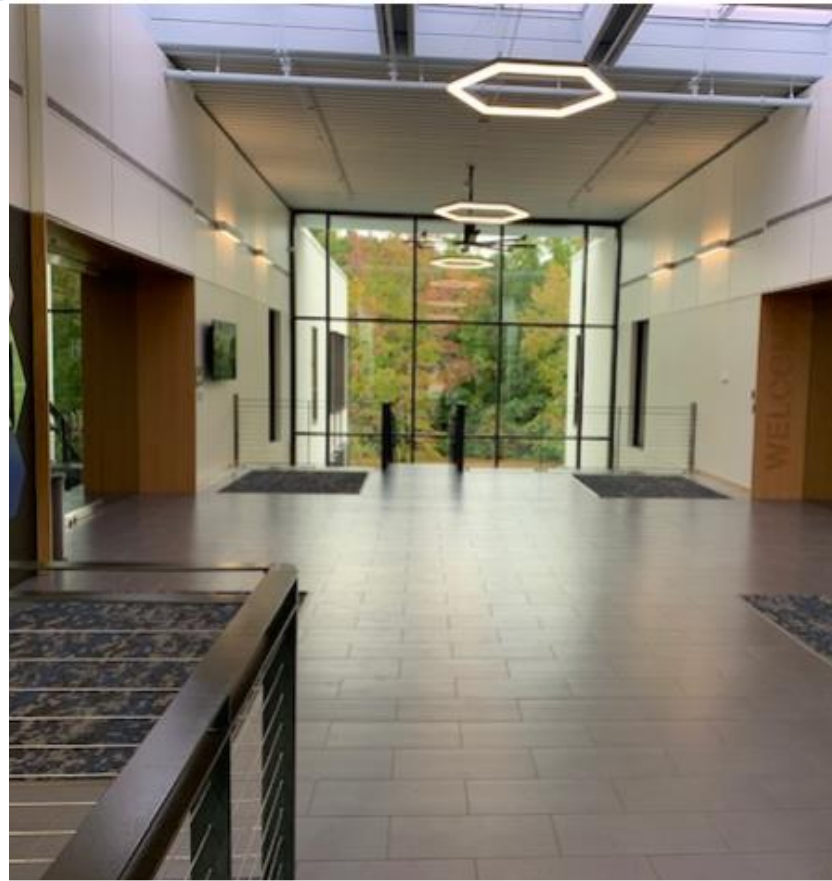
Over \$10.2M in monetary and in-kind support was received from generous stakeholders to support this renovation project.



*PV system design is underway with installation to be completed this spring to drive NZE performance*

See the video tour, photos, building technical features and our generous sponsors at [ashrae.org/newhq](https://ashrae.org/newhq)





# Informational Items

# ASHRAE Conferences



## ASHRAE VIRTUAL WINTER CONFERENCE

▶▶▶ February 9-11, 2021

MAR  
2021

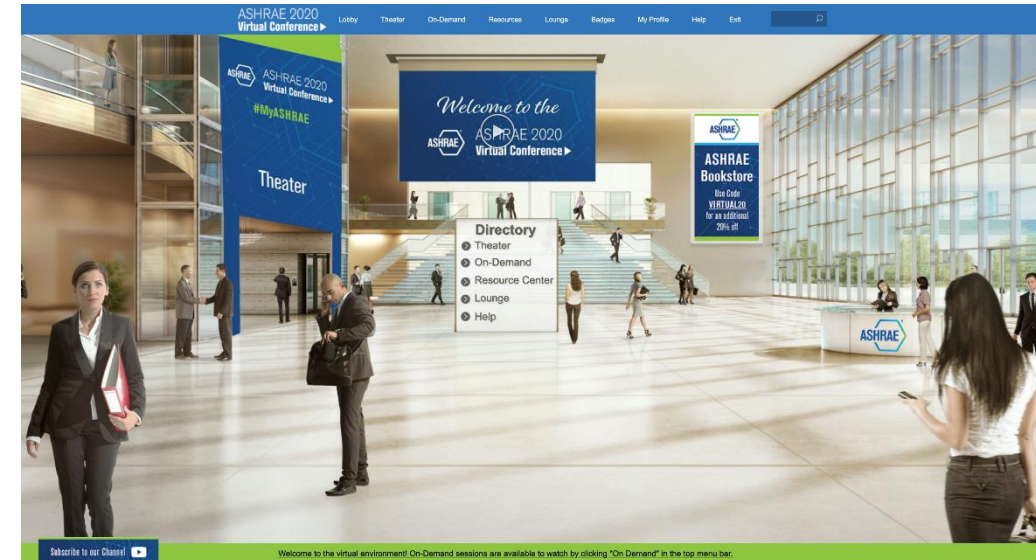
**2021 ASHRAE Virtual Design and Construction Conference**  
March 8-10, 2021 | Virtual

JUN  
2021

**2021 ASHRAE Annual Conference**  
Jun 26–30, 2021 | Phoenix, AZ

SEP  
2021

**IAQ 2020: Indoor Environmental Quality Performance Approaches**  
September 13-15, 2021 | Athens, Greece




[ashrae.org/conferences](https://ashrae.org/conferences)



## Research Promotion (RP)

The Research Promotion campaign supports ASHRAE Research, Education, YEA programs, Scholarships, Endowed Funds, and the RP General Fund.

 **Thank You** to all the **donors and volunteers** for your support during this challenging year.

**Society Year 2019-2020** total raised: **\$2,117,677**

- **\$1,635,596** in contributions for Research
- **\$277,720** for ASHRAE Foundation
- **\$170,596** for Scholarships
- **\$33,765** for General Fund, YEA, and Education

## ASHRAE Foundation Grants & Scholarships

The ASHRAE Foundation is an endowed trust that provides funding for professional development and research programs, supplies qualified engineering students with much needed scholarship assistance, and provides grants to help support the Society's vital work.

**30**

**Society Scholarships totaling \$167,000**

**30**

**Chapter-Awarded Scholarships totaling \$56,000**

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# Resources



## ASHRAE Technology Portal

A one-stop location for ASHRAE papers, articles, reports, Handbook PDFs, and seminar recordings.

## Online Standards Database

Allows access to public review drafts for standards, guidelines, and addenda to submit comments, to do online balloting, and to submit proposals to standards and guidelines.

## Zero Energy Advanced Energy Design Guides (AEDG)

For offices and K-12 schools are available for free download.  
**Multifamily AEDG available early 2021.**

## Science and Technology for the Built Environment

Provides free online access to archival research publication offering comprehensive reporting of original research.

## ASHRAE Technical Apps

Deliver mobile design, calculation, and analysis tools to the palm of your hand.

## Free Technical Resources

Offer downloads of a variety of well-known resources to everyone.

## ASHRAE 365

Free year-round updates on all things ASHRAE.

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# Publications and Standards



Recently Published items available at [ashrae.org/bookstore](https://www.ashrae.org/bookstore)



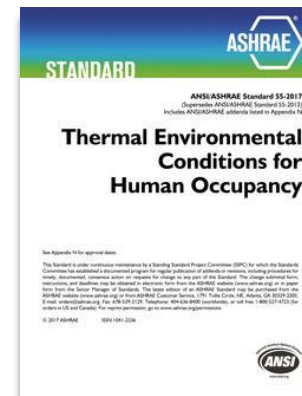
**Standard 135-2020**  
**BACnet**  
A Data Communication  
Protocol for Building  
Automation and Control  
Networks



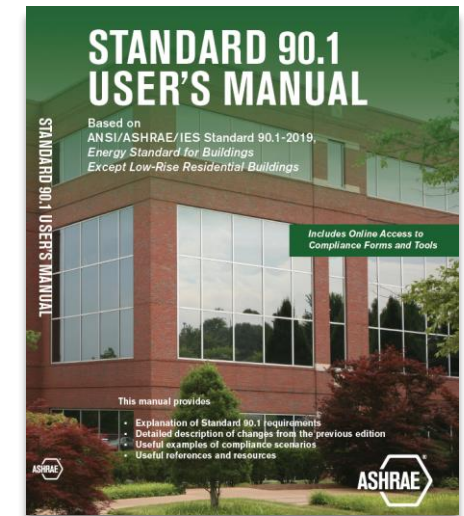
**Guideline 41-2020**  
Design, Installation and  
Commissioning of Variable  
Refrigerant Flow (VRF)  
Systems



**Standard 170-2021**  
Ventilation of Health  
Care Facilities  
*Coming soon!*



**Standard 55-2020**  
Thermal Environmental  
Conditions for Human  
Occupancy



**Standard 90.1  
User's Manual**  
(based on  
ANSI/ASHRAE/IES  
Standard 90.1-2019)

# Epidemic Task Force (ETF)



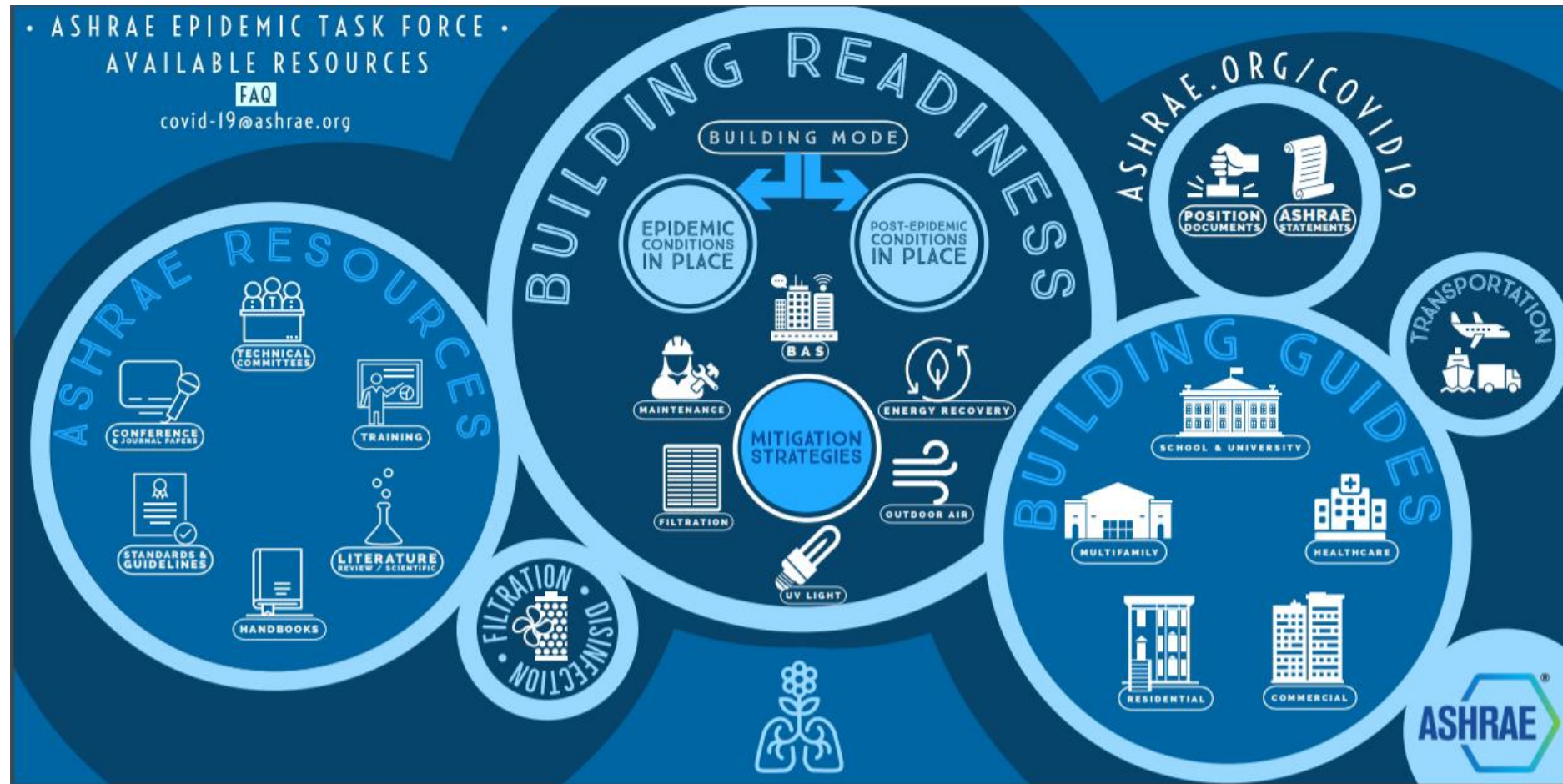
Continues to provide COVID-19 related resources, making ASHRAE a trusted source of critical guidance during the pandemic.

The most visited page on our website:  
[ashrae.org/covid19](https://www.ashrae.org/covid19)



Clickable infographic for easy navigation, FAQ's and free resources

[ashrae.org/covid19](https://www.ashrae.org/covid19)

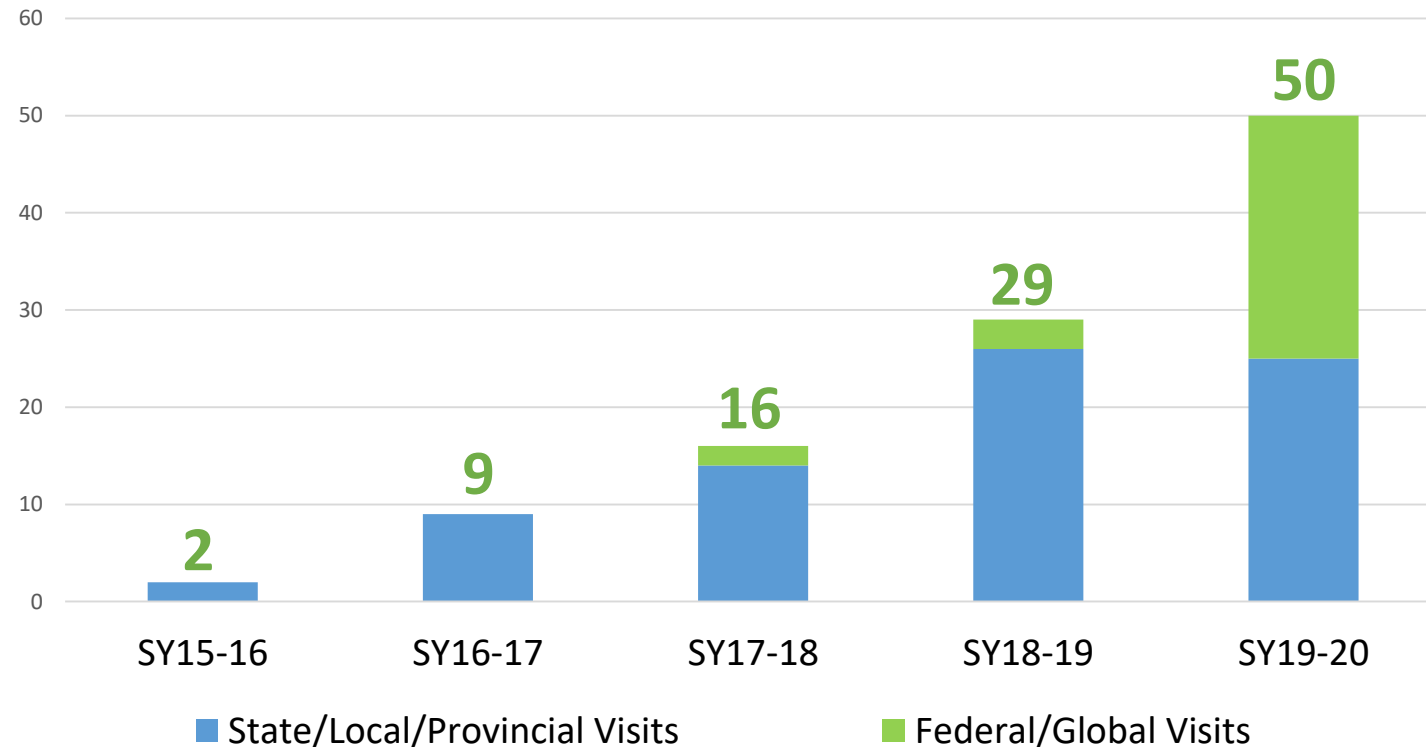


ASHRAE **Government Affairs** program works to **establish ASHRAE as a leading source of trusted expertise for policy-makers** in the development of legislation and regulations affecting the public and HVAC&R industry.

- **Government Affairs Update** bi-weekly newsletter provides updates on government activities. Subscribe online or by emailing [GovAffairs@ashrae.org](mailto:GovAffairs@ashrae.org).
- **Government Outreach Events** connecting ASHRAE volunteers with policy makers.
- Briefings & Testimony, Regulatory Meetings, Hearings, and Comments.
- **Letters** related to public policy priorities.

Get Involved + Get Resources  
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## Government Outreach Events



**DRAFT**  
**Communications Coordinator Report to the GAC**  
**January 27, 2021**

**June Virtual Meeting**

GAC Subcommittees met virtually throughout May and early June prior to the June 9, 2020 virtual meeting of the full Government Affairs committee.

Copies of all the reports, minutes, motions, presentations, etc. are archived on the GAC Basecamp.

**Report From ASHRAE Government Affairs – Alice Yates, Jeremy Pollack, Emily Porcari and Patricia Ryan** from the ASHRAE Washington Office provided a brief presentation on the work they did over the past year. Highlights included Senior Leadership meetings in the DC office, Congressional Briefings, Testimony & Letters to Policy Makers, Gov’t Outreach Days (training, planning and support) and engagement with other organizations (AIA, ACC, IEA, ICC, ASE)

**Subcommittee Reports**

**Executive – Walid Chakroun** presented a motion to streamline the PPIB process. Motion passed. He further reported on the activities of the ASHRAE Epidemic Task Force on COVID-19. **Terry Townsend** presented a motion on Public Policy Priorities for SY2020-21. Motion passed.

**Policy and Programs – Rob Hoadley** presented **Steven Gill’s** report and proposed five PPIB’s for approval: Climate Change and the Built Environment, Environmental Tobacco Smoke, STEM Education & Workforce, Resiliency in the Built Environment, and Utilizing Energy Metrics and Building Benchmarking to Improve Whole Building Energy Performance. Motion passed. Mr. Townsend then discussed MBOs and subcommittee assignments for the new Society Year.

**Member Mobilization - Chad Smith** reported that an Ad-Hoc committee to focus on better defining Government Outreach Days, and established metrics and reporting mechanisms to better track their impact. Though the coronavirus has derailed multiple Government Outreach Days, significant progress was already made with respect to meeting GAC’s goals; if the remaining events could be conducted virtually, the goals can be met.

**Global Affairs - Eduardo Conghos** reported that the subcommittee is developing a training presentation for conducting Government Outreach Days on a global basis. They are also creating of a chart on global government outreach best practices. Mr. Conghos reported that a total of 13 global government outreach events were held this year.

**Rules - Terry Townsend** reported that the Rules Subcommittee met two times this year, and reviewed changes to the MOP and Resource Manual.

**Nominating - Sheila Hayter** reported that the subcommittee has completed its work for the year.

### **Regional Vice Chair Reports**

Reports were received from the GAC RVCs.

### **Reports From Council Liaisons**

**Technology Council - Mr. Bilderbeck** reported that Technology Council approved the Position Document on Infectious Aerosols.

**Members Council - Chris Gray** reported that Members Council is working prepared to support the chapters, especially as it spreads from the big cities; effective messaging of this support and ASHRAE's resources is critical.

**Publishing and Education Council - Larry Fisher** provided a written report and highlighted that the April 21 webinar on UVGI by Bill Bahnfleth is attracting a lot of interest, and they already have about 900 registrants.

### **Reports From Committee Liaisons**

**Building EQ - David. Underwood** reported on the positive relationship between the GAC and the Building EQ Committee, and that several new resources were developed to aid the GAC in its advocacy for Building EQ. He thanked Lilas Pratt and John Constantinide for their hard work.

**Residential Committee - Paul Francisco** reported that the committee worked on the one-page Fact Sheets on Standard 90.2, and that the committee will continue to work with the GAC as additional updates are needed. He also reported that they are finalizing a report that should be useful to the GAC.

### **Refrigeration Technology Committee for Comfort, Process, and Cold-Chain (REF-CPCC)**

**Rajan Rajendran**, Chair of the REF-CPCC, noted the name change of the Refrigeration Technology Committee, and that they are looking at a wider range of applications. He also noted that they develop a technology report every two years, and one will be coming out shortly.

### **Other Business**

Preview for GAC - SY2020-2021: **Terry Townsend**, as the incoming GAC Chair, provided a preview of what he envisions the committee will accomplish in SY 2020-21.

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### **Fall Subcommittee Meetings**

**Executive Subcommittee** met on September 23, 2020. **Terry Townsend** provided updates to the MBOs.

Subcommittee Chairs reported on their progress:

**Policy and Programs - Mr. Hoadley** reported that the PPSC held its first meeting, and its next meeting is slated for mid-October. Assignments have been given to all subcommittee members.

**Member Mobilization - Ms. Phillips** reported that the MMSC met in September and a second meeting is planned for mid-October. An ad-hoc group has been assigned to each MBO to help ensure progress is made. The GAC has only received one nomination for the GAC Award, and she encourages members to get their nominations in! Ms. Phillips also reported on the goals and status of Government Outreach Events.

**Global Affairs - Mr. Hui** reported that the first GASC meeting will be held Sept. 30, and the subcommittee will set their themes for the year. He anticipates a big focus of the GASC will be on COVID-19, and he is grateful for the support of the ETF and Dr. Bill Bahnfleth.

**Rules - Mr. Smith** reported the Rules SC met Sept. 16 and will be reviewing all the documents under its jurisdiction, first with the MOP, then Resource Manual, then Rules of the Board.

**Nominating - Ms. Hayter** reported that the Nominating Subcommittee will begin their activities closer to the winter conference.

#### **Other Business**

There was some discussion concerning the Winter Meeting, and Mr. Macauley reported that the Board is reviewing all options and a decision will be made in early October, after the Joint Expo Committee meets.

**Policy & Programs SC** met on September 14<sup>th</sup> and October 16<sup>th</sup>. MBOs #6 and #9 were discussed. PPIBs were also discussed and Subcommittee members were urged to review prior to next meeting.

**Member Mobilization SC** met on August 19<sup>th</sup> and October 20<sup>th</sup>. MBOs #3 (Training) and #7 (Fiscal Note) were discussed.

Action Item #1: Develop ideas for a training webinar increase participation, including the COVID-19 response and ASHRAE's relevant guidance as a potential basis for chapters to reach out to government officials.

Action Item #2: Work with staff to contact FiscalNote and determine its capabilities in terms of supporting chapters' need for government official contact information, updates on legislation and regulations, and any other information helpful in conducting outreach.

The Subcommittee also had a discussion on proclamations, regarding the level of interest in continuing to request proclamations from elected officials.

**Global Affairs SC** met on September 30<sup>th</sup>. MBOs #5 (Identify Gov't official events for ASHRAE members to connect) and #8 (Identify countries who have used ASHRAE Standards) were discussed.

Action Item #1: ASHRAE staff Jeremy Pollack will work with GTC to create a contact list.

Action Item #2: Each member to identify an international organization that hosts events of interest to ASHRAE members by the next meeting.

A motion to amend MBO #8 passed.

**Rules SC** met on September 16<sup>th</sup>. The subcommittee reviewed proposed changes to the GAC Manual of Procedures (MOP), Resource Manual and the GAC section of the Rules of the Board (ROB). Members were assigned to submit proposed changes to staff. Changes to the MOP are to be finalized at the next Rules SC meeting and submit to the full GAC for approval. Changes to the Resource Manual and ROB will be reviewed after the Winter Meeting in January 2021.

\*\*\*

### **Fall GAC Meeting**

The Full GAC met on October 21<sup>st</sup>.

**Mr. Townsend** reviewed the first virtual annual meeting of ASHRAE, encouraging GAC members to stay engaged, even though we cannot meet in person. Mr. Townsend reported on highlights from the annual meeting.

### **Update On Action Items**

**Ms. Yates** reported that all of Action Items have been completed.

### **Update From Epidemic Task Force**

**Mr. Townsend** reported the Epidemic Task Force continues to make updates to its guidance documents, and that government affairs staff have worked with the ETF to create several one-page summaries of the guidance useful to elected officials and policy audiences.

### **Subcommittee Reports**

**Executive - Mr. Townsend** reviewed 3 MBOs:

**MBO #1:** Develop a 2030 vision statement for the GAC, accompanied with goals and objectives.

**MBO #2:** Establish a GAC Advisory Board made up of senior staff from various government bodies; this group would advise ASHRAE on what technical resources they need.

**MBO #4:** Develop a general training for code officials, which could be used by chapters globally. – training with code officials.

**Policy and Programs - Mr. Hoadley** reported the subcommittee has met two times and is expected to meet again in early November. The committee has spent a significant amount of time discussing needed updates to PPIBs, including possible new PPIBs which might include one on residential, decarbonization, and possibly adding diversity to the STEM PPIB and revising the Climate PPIB so it also discusses economic issues.

**Global Affairs - Mr. Hui** was not on the call, so staff liaison **Jeremy Pollack** reported in his stead. The subcommittee has met once and is expected to meet again before the Winter meeting.

Action Item: Jeremy will follow-up with Ayah on outreach to government officials who received training at the Global Training Center.

The motion to amend MBO #8 passed.

**Rules - Mr. Smith** reported this subcommittee met once this year. Their goal is to have all updates to the GAC Manual of Operations available to full committee at the Winter Meeting. They will then work on the Resource Manual and the Rules of the Board.

**Nominating - Ms. Hayter** explained the work of this subcommittee is concentrated during the Winter meeting. The subcommittee will meet virtually or through email exchange in advance of the Winter meeting. At the Winter Meeting, this subcommittee will submit recommendations to the full committee.

### **Reports From Committee Liaisons**

**Residential Building Committee – Ms. Yates** reported that the Chair of the Residential Building Committee reported that as an MBO, they are working on some policy documents like the EHC emerging issue briefs. These could be of interest and beneficial to the work of the GAC.

**Building EQ Committee – Ms. Meghan McNulty** attended some of the subcommittee meetings but does not have an update on the overall BEQ effort. Mr. Rob Hoadley thought the GAC policy goals could be useful to the Building EQ committee.

Action Item: Emily will send PPIBs and policy positions of interest to the Building EQ Committee. Deadline: ASAP.

**YEA Committee – Ms. Madison Schultz** reported they had their fall weekend, which was a virtual event. Mr. Colin Leisure-Pool reported that this was a very positive and productive event.

**Student Activities – Mr. Jared Larson** reported this committee runs the Building EQ competition, and they are working with the BEQ committee. Ms. Yates noted that if the committee has information that they want to get out on government affairs to send it to her, and she can include in the GAU.

**Refrigeration Committee – Ms. Alice Yates** reported that Mr. Rajan Rajendran was called away for a work assignment. They are working on Standard 15.2P, and will keep the GAC informed. Ms. Nanette Lockwood reported the REF has reorganized by adding subcommittees, and are tracing various state regulatory efforts, particularly in California. Staff noted that President Gullledge wrote two letters on California refrigerants regulations, and a hearing will be held, which we are working to have ASHRAE participation.

#### **Reports From Regional Vice Chairs**

Reports were received from the GAC RVCs.

#### **Other Business**

**GAC Mentor Program - Mr. Smith** thanked the mentors for all their great work; it appears this program is working well. Keep up the great work!

#### **GAC Award Nominations**

Action Item: Emily will send email concerning GAC award nominations

\*\*\*

Report to Members Council

On November 9<sup>th</sup>, Mr. Townsend reported on the Fall GAC Meeting. Of note were two attachments:

Attachment A - Summary of State Re-opening Guidelines, Regulations, and Legislation that specifically name ASHRAE Standards and ETF Guidance

Attachment B - ASHRAE Letters sent to Government Officials.

\*\*\*

#### **Next Meeting**

Winter Meeting: The Full GAC will meet on Wednesday, January 27, 2021.

## **Report from Council Liaison**

### **Technology Council – Steven Emmerich**

1. Most Standing Committees and all subcommittees reporting to Technology Council have yet to meet.

2. Technology Council MBOs for the Society Year include:

- Each standing committee chair is to identify 5 lean assessment Ideas per standing committee in support of the Finance committee effort to meet the 2020/2021 by budget shortfall by December 18, 2020
- Each standing committee chair is to identify 3 ways to streamline member participation and involvement in the activities of their standing committee and implement each by the end of FY Q3 2021
- Develop a comprehensive assessment and roadmap for achieving the Strategic Plan Initiative 1, Resilient Buildings and Communities in the form of a scoping document.
- Develop a comprehensive assessment and roadmap for achieving the Strategic Plan Initiative 2 on Indoor Environment Quality in the form of a scoping document.
- Develop a strategy of what to do with the Epidemic Task Force once the pandemic subsides.
- Provide a recommendation to ExCom regarding if/how carbon as a metric can be used in the Society's technical content.

3. Society Strategic Plan – EHC has added an MBO to develop a plan to pursue the Indoor Environmental Quality Initiative of the Strategic Plan. TC 2.10 Resilience and Security has developed a plan to achieve the Resiliency Initiative of the Strategic Plan. The Research Advisory Panel is developing the Research Strategic Plan to support the Society Strategic Plan.

4. The Document Review Subcommittee will consider a proposal to develop a Position Document on On-Site Renewable Energy Generation.

5. Guideline Project Committee 44P Protecting Building Occupants from Smoke During Wildfire and Prescribed Burn Events has developed an Interim Guidance document to provide practical guidance to ASHRAE members and the public on this topic quicker than possible through the full AHSRAE/ANSI development process. The Interim Guidance has been reviewed by the Environmental Health Committee and the Epidemic Task Force. The scope of this document is primarily commercial buildings.

6. EHC has added an MBO to develop a plan to pursue the Indoor Environmental Quality Initiative of the Strategic Plan. TC 2.10 Resilience and Security has developed a plan to achieve the Resiliency Initiative of the Strategic Plan. The Research Advisory Panel is developing the Research Strategic Plan to support the Society Strategic Plan. The Environmental Health Committee has recommended a chair and roster for the Infectious Aerosol Position Document revision. EHC recommended to reaffirm the Air Cleaning PD and has recommended a chair to revise it. The chair for the Limiting Indoor Mold and Dampness in Buildings PD revision is working on the roster. The Indoor CO2 PD is progressing and may be completed later this Society Year. EHC is exploring revision of the Environmental Tobacco Smoke PD. No new PDs or Emerging Issue Briefs are currently proposed. All PD-related recommendations will go to the DRSC for approval.

7. The Residential Building Committee is developing their first emerging issue report with the topic being the impact of wildfire smoke on residences. RBC is not proposing any new PDs at this time.

## **Members Council Report to GAC**

- No updates on the lean assessment effort discussed at the Fall Members Council meeting. There will likely be more information available at the Members Council meeting on February 2<sup>nd</sup>.
- On behalf of chair Mick Schwedler, we would like to thank the GAC for their contributions towards our MBO of documenting the 3 – 5 best virtual practices. Below is the compiled information shared as of January 8<sup>th</sup>.

## **Members Council MBO 1A Results**

**8 January 2021**

MBO: Develop maximum 3-5 “best virtual practices” and share them with Regions, Chapters and Members via RVCs.

*For full information on Virtual Meeting Guidance:*

<https://www.ashrae.org/file%20library/communities/committees/standing%20committees/communications%20committee/ashrae-virtual-meeting-guidance.pdf>

There are some duplications, but since these are likely to be shared through RVCs, those duplications were not removed.

## **CTTC**

- Use the Virtual Meetings Guidance document developed by the Electronic Communications committee. We've been asking RVC's to pass this out and encourage its use by the chapters.
- Ensure that participants just listening in mute their microphones to avoid feedback. Use Chat and Messaging features to ask questions and "raise hands". Better yet, if Host has capability to mute and unmute, then that can help keep the conversations clear.
- Encourage participants to turn on their video when they can. We've all missed seeing each other, and it's nice to see faces even if only virtual. But if there are bandwidth issues, then turning video off can help keep the meeting more stable for users.

## **Communications**

- Have a **Virtual Meeting Housekeeping** (see link above) agenda item at the beginning to address virtual meeting protocol.
- **Video/webcam use is strongly encouraged** – it allows attendees to see visual cues such as body language and engagement. Webcam usage and video transmissions can cause internet connections to slow down. Meeting of 20 or more may decide to limit webcam usage to key speakers.
- **Mute** – Remind attendees to mute themselves unless they need to speak. Optionally, the meeting facilitator can mute everyone to start and announce how to make comments.
- **Listening/speaking** – Use a headset or earpiece to minimize your ambient noise interference when unmuted.
- **Designate a Facilitator** – Good facilitation is critical to a successful virtual meeting. (see link below)
- **Use Chat** – For quick answers (yes, no, agree, disagree, etc.) and other comments

- **Meeting Length** – Trim your agenda and take breaks every 40 minutes. It is more difficult for most people to stay engaged during a long virtual meeting.

## **GAC**

1. Format/Style
  - a. With the MASSIVE number of webinars, virtual calls and meetings that are taking place during the pandemic, these additional calls are just becoming white noise. To make ASHRAE virtual meetings productive, we have round meetings should feel more like an ongoing dialog between the presenter(s) and the audience: Relaxed, laid back, and engaging on both side to have any chance of the message coming across.
  - b. It is more effective to have multiple people speaking and presenting. We found during trainings that it helps to have a main speaker who then calls on others (who have prepared in advance) to provide additional perspective on talking points. This is arranged ahead of time, and allows the people being training to hear from others in the same positions with a little additional experience.
  - c. DON'T DO DEATH BY POWERPOINT. People are getting this all the time. Very ineffective to put a slide on the screen and just read it as the presenter.
2. Length of meeting and audience size
  - a. This year, we found instead of doing one 1.5-hour training, we have more effectiveness in doing three 30- to 45-minute sessions. This structure allowed us to be more focused on a particular topic and we were able to keep the group size smaller.
  - b. Large 25+ participant meetings tend to stifle comments and discussions as some people are still hesitant to comment to big groups. Ideal size would be 12 or fewer people.

## **MP**

- Provide a virtual meeting for your members. This still allows for the networking and fellowship that our members love about ASHRAE Chapter meetings. Distinguished lecturers are still available virtually for program content.
- Do a practice session with presenters to reduce risks of having sound or visual technical issues during presentation.
- Show the presenter on camera, not just the slide deck. It helps with engaging the audience.
- Be sure to still recognize your members; new members, students, members that won awards, etc. Ask for a photo, so you can introduce them to the chapter membership and make it more than just a name.
- For a virtual meeting, the same tips go as for an in-person meeting: have an agenda ready, screen sharing of documents for better understanding, respect the meeting's time frame, limit to two-hours long meetings, allow breaks. For a virtual meeting, cameras shouldn't be mandatory, but it's nice to have for first-time meets.

## **RP**

- Invite your attendees. Make sure to include registration instructions, if any, and information about logging in. Set the invite to remind participants the day of the event/meeting. If that is not an option, be sure to send out a reminder shortly before the event/meeting begins.
- Practice. Get familiar and comfortable with your platform to minimize the risk of hiccups during your event. Set up a short meeting with your chapter board or volunteer committee and have everyone test the various features of your chosen platform.

- Recognize your sponsors or donors. You can be as elaborate or simple as you want. Use powerpoint or another program to create slides thanking sponsors or donors and run it during your event. You can also mention your event is “sponsored by” in your invite or follow-up communications.
- On the day of the event, assign one person to deal with any issues from attendees like trouble logging in, sending the link, issues with their interface, etc.
- Follow-up. Send a thank you to the attendees and sponsors. Ask for feedback so you can correct anything before your next event or meeting and keep the attendee involved. If you already have the next one scheduled, include that information.

### **YEA**

Find ways to make connections as personal as possible given the situation

- Incent people to attend events by providing
  - Financial (raffle) or award
  - New skill (professional or personal – e.g. cooking)
  - Continuing education units
- Host events during the day rather than hour that compete with family time
- Develop a group for quick communication (e.g. Whatsapp)
- Possible socially distanced events
- Outdoors: Bocce ball, biking, disc golf
- Virtual
  - Happy hour – themed or mailed supplies in advance
  - HVAC Essentials /101 Tech Sessions
  - Visit into engineering classes with Student Activities
  - PE study sessions
  - Book clubs – leadership or other themes
  - Trivia, Escape room, cooking class
  - Seminar series – e.g. History of refrigeration
  - Presentations – nontechnical skill roundtable
  - Health and fitness
  - Costume contest for various holidays (Halloween, winter) with awards

### **MC Planning Subcommittee**

- Grassroots digital training is effective as a supplement, but is not recommended as a total replacement of in-person training.
- Distribute the Communication Committee’s “ASHRAE Virtual Meeting Guidance: Tips for Hosting a Successful Virtual Event” to all hosts prior to the event. This document should be updated as lessons are learned, and virtual meeting technologies evolve (see Communications Committee link above)
- Presenters should have training using the meeting software and on how to run effective training, including how to actively encourage participation.
- Someone other than the trainer should be assigned to monitor and/or respond to online chat.
- Software should have “break-out room” capability as an option

**GOVERNMENT AFFAIRS COMMITTEE**  
**Executive Subcommittee Meeting**

January 22, 2021  
10:30 a.m. – 12:00 p.m. EST

**Report from Council Liaison**  
**Publishing and Education Council – Larry Fisher**

1. Both volunteers and staff have been active in partnering with Michigan State University and The Ohio State University in response to a funding opportunity with US DOE for workforce training.
2. Per ASHRAE's recent MOU and umbrella agreement with the New York State Energy Research and Development Authority (NYSERDA), webinars and courses on content developed by ASHRAE's Epidemic Task Force (ETF) have been presented to NYSERDA audiences, with more planned and new proposals in the works on those and other topics. Alice Yates, staff Director of Government Affairs and liaison to GAC, can also speak to some of these efforts with which she has been heavily involved.
3. ASHRAE is also a participant in DOE's Better Buildings Workforce Accelerator program, which is designed to increase the quantity, quality, diversity, and productivity of today's building energy efficiency workforce. This three-year effort will support the vision of the U.S. building workforce as a global leader in delivering quality efficiency products and services to American residents and businesses, thereby increasing energy affordability across the economy. Over the next three years ASHRAE will provide five (5) in-person and/or online training events on designing, constructing, maintaining and operating high-performance buildings. The training will be based on ASHRAE's *High-Performance Buildings Simplified* textbook and other educational resources. Training will be made available at reduced cost to participants identified as underrepresented or occupying roles with skill gaps. The pricing level will be determined depending on sponsorships or subsidies available.
4. Training activities have also been conducted for the Naval Facilities Engineering Systems Command (NAVFAC), with whom we have a long record of cooperation, and recently with the South Carolina Energy Office.
5. Professional Development staff are also in communication with Region XIV regarding HVAC Design Trainings and other courses tailored to and timed for the region.
6. GTC (Global Training Center) Update – Briefly, GTC is making ends meet with its conversion from in-person to virtual meetings. Although fees had to be reduced, and programs had to be converted to virtual, programs for the first half of the year did well.

GTC has been sending names of training attendees to ASHRAE staff for determining if government employees are attending so GAC can reach out to them and invite them to share their needs or to join ASHRAE.

End of Report

**Report from Building EQ Committee  
to Government Affairs Committee  
Virtual Winter Meeting – January 2021**

1. Three Standard Operating Procedure (SOP) documents have been created by Building EQ to provide direction for Student Branches, University Outreach, Government Outreach. The final versions of the SOPs will be posted on the ASHRAE website and distributed to the appropriate ASHRAE committees and staff liaisons.
  - The Student Branch SOP is focused on student chapters using Building EQ to work on Building EQ projects under a qualified professional.
  - The University and Government Outreach SOPs are focused on how to reach out to get these entities involved with the Building EQ Portal.
2. An Energy Genius Award proposal has been submitted to Honors & Awards Committee under the category for Personal Awards for Specific Student Activities. Honors & Awards will discuss the award at their Winter meeting in January.
3. Information has been added to the Building Energy Assessment Professional (BEAP) Certification Candidate Handbook noting that Building EQ In Operation projects documented by Building EQ Narrative and Spreadsheet Audit Reports qualify as energy audit experience for BEAP certification candidacy and renewal.
4. An interpretation request was submitted for Standard 211 regarding remote site visits to conduct building energy audits during epidemics and pandemic situations. That interpretation request has now been officially approved and posted to the ASHRAE website.
5. System level KPIs (key performance indicators) are being investigated as a possible future addition to the Portal in order to provide buildings owners with more detailed, system-specific information to improve building energy performance
6. A Journal article is in development as a follow up to the Orlando Seminar 42 on Building EQ.
7. Case studies on University use of the Portal are being created and will be posted on the Building EQ webpage and used at presentation handouts.
8. The University of Nebraska-Lincoln has developed an Environment, Sustainability, and Resilience Master Plan that includes the requirement for Building EQ In Operation and As Designed assessments as strategies for achieving their energy objectives.
9. BEQ is working with members from TC 9.9 *Mission Critical Facilities, Data Centers, Technology Spaces and Electronic Equipment* to develop appropriate metrics to add data centers as a building type in the Building EQ Portal. This will be helpful to building types that currently include data centers as a space type but are not really able to address the high energy usage in that part

of the building

10. Work on the new ASHRAE HQ As Designed rating continues. The work is being done pro bona by ASHRAE members. Final issues with the model are being resolved.