

ASHRAE's MISSION & VISION

Mission

To serve humanity by advancing the arts and sciences of heating, ventilation, air conditioning, refrigeration and their allied fields.

Vision

A healthy and sustainable built environment for all.

Editorial Team

Ir. Leong Siew Meng

Ir. Dr. Khoo Chun Yong

* * * * *

MASHRAE Secretariat:

Unit 518 Block A,
Kelana Business Centre,
97, Jalan SS7/2,
47301 Petaling Jaya,
Selangor Darul Ehsan.

38TH ASHRAE Malaysia Chapter Annual General Meeting **held on 2 June 2023 at Secretariat Office, Kelana Jaya**



President's Roll-out Message

It has been almost two years since I was elected as the President of ASHRAE Malaysia Chapter. With the overwhelming support and encouragement from the BOGs, committees, and members, I am happy that ASHRAE Malaysia Chapter has done well so far despite being affected by the pandemic when I assumed the chapter presidency in July 2021.

Looking back, ASHRAE Malaysia Chapter reacted well to the change of environment due to COVID-19, which had affected our normal chapter operation. The Chapter had tried to remain active by organizing activities via online platform. We hosted our first-ever e-exhibition in-conjunction with our publication of anniversary e-book to celebrate our 36th anniversary. It received great support from our exhibitors and the e-exhibition, which managed to attract more than 100k visit. Following the launching of the IAQ Pandemic Guidelines by DOSH, and the Chapter's successful IAQ webinar (1.0) on COVID & Beyond (IAQ & Ventilation – Airborne & Non-Airborne Solutions) held on 18-19 August 2021 with a record attendance of more than 400 participants, the Chapter established a Local Chapter Epidemic Task Force. The establishment of the Task Force was to disseminate information from ASHRAE's technical resources available both internationally and locally to address the challenges of COVID-19 pandemic and any future epidemics. Air-conditioning and ventilation systems have direct contributions to IAQ in buildings, and mitigating measures on disease transmission in healthcare facilities, the workplace, home, public and recreational environments. As a follow-up, the task force organized IAQ webinar 2.0, and a half-day MASHRAE-IEM webinar on "Resiliency Against Airborne Transmission" - IAQ Post Pandemic. MASHRAE Ventilation Calculator (MVC) was launched during the IAQ webinar 2.0. MVC allows engineers and building owners to evaluate their building performance and potentially improve their ventilation using various methods with capability to evaluate cost effectiveness.

(Continued on next page)



Ts. Dr. King Yeong Jin
President ASHRAE
Malaysia Chapter
2021-2023

President's Roll-out Message (Cont'd)



The 37th Annual Dinner held on 30 September 2022 after the end of MCO, recorded another great achievement by ASHRAE Malaysia Chapter with a huge support from our sponsors and members, and an impressive turn-up of diners taking up 80 tables. This marked a strong bonding between ASHRAE, our local building industry, and the HVAC industry stakeholders and engineers. At the 37th Annual Dinner, the Chapter recorded another milestone achievement with the launching of a first-ever historical publication entitled Roll of Honours & Luminaries of ASHRAE Malaysia Chapter, which was prepared by the Honours and Awards Committee headed by Ir. Ong Ching Loon.

With the commitments from our BOGs, committees and members, ASHRAE Malaysia Chapter continue to strive forward with institutional collaborations such as the Department of Environment Malaysia, The Institution of Engineers Malaysia, MACRA, Suruhanjaya Tenaga, SEDA, MGTC, and other government agencies and non-government organisations through organizing various events including the Energy Efficiency Management for ACMV Training Courses, HPMP roadshows, and conferences collaborated with REVAC and ENGINEER 2022, and more.

Everyone at the Chapter has tried his/her best to contribute to the Chapter voluntarily and unconditionally. The Chapter organized many activities including seminars, training, certification courses, MP & RP night, YEA activities, etc. The YEA committee also assisted the society in organizing the YEA Leadership International (YLI) which was held in Kuala Lumpur on 28-30 October 2022. At ASHRAE Malaysia Chapter, we are happy to volunteer and serve to achieve the Mission and Vision of ASHRAE.

I am also proud to announce that Malaysia Chapter performed extremely well even during the pandemic. We have maintained a positive financial account for 2021 and 2022, thanks to the great foundation which was gradually built up by our past presidents. As a result, we are in the process of acquiring a new office unit adjacent to our existing office. Hopefully, the acquisition process can be completed by the end of 2023.

Last but not least, I would like to take this opportunity to thank all the BOGs, committees, members, sponsors, and individuals in the HVAC industry who have made ASHRAE Malaysia Chapter advanced to another year of success. I would also like to apologize for any shortcoming during my term of office as the Chapter President.

Looking forward to working with everyone again and together we should be “Shaping Tomorrow’s Built Environment Today”.

ASHRAE Malaysia Chapter 38th Annual General Meeting & Chapter Officers, BOGs and Committee Chairs 2023-24

ANNOUNCEMENT



ASHRAE Malaysia Chapter 38th Annual General Meeting (AGM) was held in the secretariat office from 5:30 p.m. to 7:30 p.m. on 2nd June 2023. A total of 20 members and 1 observer attended the AGM.

President, Ts. Dr. King Yeong Jin welcomed members to the meeting and thanked them for setting aside valuable time from their busy schedule to be present at the meeting. He gave a brief summary of activities held during the 2023-24 session.

He expressed his appreciation to the Board of Governors, Chapter Chairs and members for their cooperation, endless contribution, time spent and whole-hearted support to enable him to carry out his duties and functions as a President to have accomplished the various tasks in accordance with the plans and objectives set.

An election of the Board of Governors (BOGs) was successfully conducted and the following were elected for the 2023-2024 session:

ASHRAE Malaysia Chapter Officers		Board of Governors	
President : Mr. Tee Tone Vei		1 st Ordinary Board Member : Ms. Lin Ye Shan	
President-Elect : Mr. Law Kok Zhen		2 nd Ordinary Board Member : Ts. Ng Wen Bin	
Vice President : Ir. Lam Kim Seong		3 rd Ordinary Board Member : Ir. Leow Chee Huan, Keith	
Honorary Secretary : Mr. Poh Kai Sin, Anthony		Chapter Internal Auditor	
Honorary Treasurer : Mr. Lai Ching Sheng		Mr. Chan Jian Wen	
Immediate Past President : Ts. Dr. King Yeong Jin		Ir. Tan Chioo Bin	

ASHRAE Malaysia Chapter 38th Annual General Meeting & Chapter Officers, BOGs and Committee Chairs 2023-24

ANNOUNCEMENT



Chapter Chairs	
Membership Promotion (MP) Chair: Dr. Hui Kar Hoo	Student Activity (SA) Chair: Mr. Lim See Boon, Jeffrey
Research Promotion (RP) Chair: Mr. Lim Tiong San	Refrigeration Chair: Ts. Ng Wen Bin
Chapter Technology Transfer (CTT) Chair: Ir. Leow Chee Huan, Keith	Young Engineer in ASHRAE (YEA) Chair: Ts. Denise Lim
Government Affair Chair (GAC): Mr. Chea Suei Keong	Newsletter & Publication Chair : Ir. Leong Siew Meng
Webmaster/Electronic Communication (EC) Chair: Ms. Chia Hui Yin	Librarian : Ir. Dr. Khoo Chun Yong
Historian: Ms. Kang Siew Foon, Irin	Publicity Chair: Ts. Dr. King Yeong Jin
Honors & Awards: Ir. Ong Ching Loon	
Chapter Sustainability Committee	Chapter Nominating Committee
Ir. Chen Thiam Leong (Chair)	Ir. Leong Siew Meng (Chair)
Dr. Chin Wai Meng	Ir. Low Han Guan, Den
Ir. Ong Ching Loon	Mr. Chea Suei Keong
Ir. Tan Chioo Bin	Ir. Ong Ching Loon
Ir. Ng Yong Kong	Ms. Kang Siew Foon, Irin

ASHRAE Malaysia Chapter 38th Annual General Meeting & Chapter Officers, BOGs and Committee Chairs 2023-24

ANNOUNCEMENT



Kuching Section		Student Branch Advisors	
Section Chairman: Mr. Rafal Lulko		Dr. Chew Bee Teng (University Malaya)	
Technology Transfer Chair: Dr. Bong Nee Shin, Victor		Ts. Dr. King Yeong Jin (Universiti Tunku Abdul Rahman)	
Membership Promotion Chair: Ir. Christopher J Boniface		Ts. Ng Wen Bin (Universiti Kuala Lumpur)	
Penang Section		Ms. Siti Nor'Ain Mokhtar (Universiti Teknikal Malaysia Melaka)	
Section Chairman: Mr. Chew Soon Jin		Dr. Bong Nee Shin, Victor (Swinburne University of Technology)	
		Ts. Dr. Mohd Faizal Fauzan (Taylor's University Lakeside Campus)	
ASHRAE Region XIII Officers (From Malaysia Chapter)		Scholarship Committee	
Region Members Council Representative : Ir. Ong Ching Loon		Ts. Dr. King Yeong Jin (Chair)	
Regional Historian : Mr. Ng Kah Chong		Ir. Low Han Guan, Den	
Regional Vice Chair RP : Mr. Chea Suei Keong		Mr. Lim Tiong San	
Regional Nominating Committee : (Alternate) Ir. Low Han Guan, Den		Ts. Ng Wen Bin	
APCBE Steering Committee Chair : Ts. Dr. King Yeong Jin		Mr. Lim See Boon, Jeffrey	
		Trustee	
Chapter Secretariat Officer		Mr. Ng Kah Chong	Ir. Chen Thiam Leong
Ms. Nurfattma Erniey Idayu		Ir. Ong Ching Loon	

17th Asia Pacific Conference on Built Environment (APCBE 2023) – 3 & 4 November 2023

ANNOUNCEMENT



17th ASIA PACIFIC CONFERENCE ON BUILT ENVIRONMENT (APCBE), MALAYSIA 2023

Unique Challenges & Solutions for Climate Change in the HVAC&R Industry

3 & 4 November 2023,
Connexion Conference & Event Centre (CCEC), Kuala Lumpur, Malaysia

Conference

Asia Pacific Conference on the Built Environment (APCBE) is a biennial event of ASHRAE Region XIII and was first launched in 1991. In response to the growing technology, the Conference scope has been expanded from HVAC&R to cover various aspects related to the built environment. This international conference provides an excellent platform for researchers and practitioners to share ideas, best practices, new technologies and future prospects.

This is a 1½ -days conference with participants from academics, architects, building owners, consultants, contractors, facilities managers, government, industries, suppliers and other parties who have an interest in the design, installation, testing, commissioning, operation and maintenance of the built environment.

WHO SHOULD ATTEND

ASHRAE Malaysia Chapter welcomes engineers, architects, designers, researchers, academics, property developers, professionals and practitioners involved in the wide range of disciplines associated with building design and building services engineering. The official language of the Conference is English.

CONFERENCE CONTACT INFORMATION

Website: <https://www.ashrae.org.my/apcbe-2023/>

Email: apcbemalaysia2023@gmail.com



ASHRAE Malaysia Chapter 38th Annual Dinner

ANNOUNCEMENT



Operation & Maintenance of Air-Conditioning And Mechanical Ventilation (ACMV) Competency Course

ANNOUNCEMENT



2-Day Course **HRDF Claimable**
Limited to 20 Pax

Registration Fee : RM 1,300

Time: 8:30 AM – 5:30 PM

Venue: MASHRAE Secretariat

Unit 518, Block A, Kelana Business Center,
No 97, Jalan SS7/2, 47301 Petaling Jaya, Selangor

Contact Person:

- Ms Nur 011- 15744931
- David Gan 012- 2482689

Organised By:



Supported By:



Biodata of Speaker:

Ts. Ng Wen Bin *P.Tech,*
iCxS, MASHRAE, CSTP-I, Grad. Eng

*Senior lecturer in the Heating, Ventilating,
Air Conditioning, and Refrigerating sector,
Universiti Kuala Lumpur Malaysia France
Institute (UNIKL MFI).*

- *Heads a Research Centre for Refrigeration Engineering and Indoor Environment.*
- *More than 25 years of experience in HVAC&R industry and vocational training.*
- *Involved in the development of numerous National Skill Standards for air conditioning and refrigeration since 1999 with MLVK, JPK and CIDB.*
- *Served in several working committees on developing the Training Manual for Technicians in Refrigeration & Air-Conditioning Sector for DOE, CIDB and developed standards and code of practice for SIRIM.*
- *Appointed by DOE Malaysia as Master Trainer for Certified Service Technician Program(CSTP) and as Speaker for roadshows on Phaseout refrigerant supported by (HCFC) Phased-out Management Plan (HPMP Stage 2) (2017 – 2022)*

Highlights of Course:

1. Course Contents

- Principle of Refrigeration
- Refrigerants & Pressure-Enthalpy Chart
- Psychrometric Chart
- Cooling load estimation & software
- Factors affecting air conditioning design
- Refrigeration cycles and components
- ACMV basic & advanced tools, specialty & safety tools, utilities and accessories
- Types of ACMV systems
- Water distribution system

2. Practical Activities

- Refrigeration cycle analysis
- Charing procedures

3. Practical Assessment

Energy Efficiency Management For Air-Conditioning And Mechanical Ventilation (ACMV) Training Course

ORGANISED BY :



SUPPORTED BY :



HRDCorp Claimable:



Speakers:



Ir. Chen Thiam Leong



Ir. Ng Yong Kong

ANNOUNCEMENT



**HRDF Program ID:
10001238021
BEM CPD Points Applied
8 REEM CPD Approved**

DATES : **Open for Registration**
Intake 2: 5 - 6 July 2023
Intake 3: 8 - 9 Nov 2023

TIME : 8.30 am - 5.30 pm

VENUE : MASHRAE Secretariat

Unit 518 Block A, Kelana Business
Center, No 97 Jalan SS7/2, 47301
Petaling Jaya, Selangor Darul Ehsan.

REGISTRATION FEE

(inclusive of 6% SST) :

MASHRAE Member : RM 954
Non MASHRAE Member : RM 1060

CONTACT PERSON : 1) 011-15744931 (Nur)
2) 012-3008893 (Keith Leow)

Terms & Condition:

- Registration is based on first-come-first-served basis.
- Course is subject to postponement due to unforeseen circumstance.



Training Material Provided



MP & RP Networking Night – 27 April 2023

EVENTS & NEWS



Thanks for your participation!



ASHRAE Hike – 30 April 2023 & 18 June 2023

EVENTS & NEWS



ASHRAE HIKE

BUKIT BANDARAYA, MIRROR LAKE

30 APRIL 2023

8.30 AM

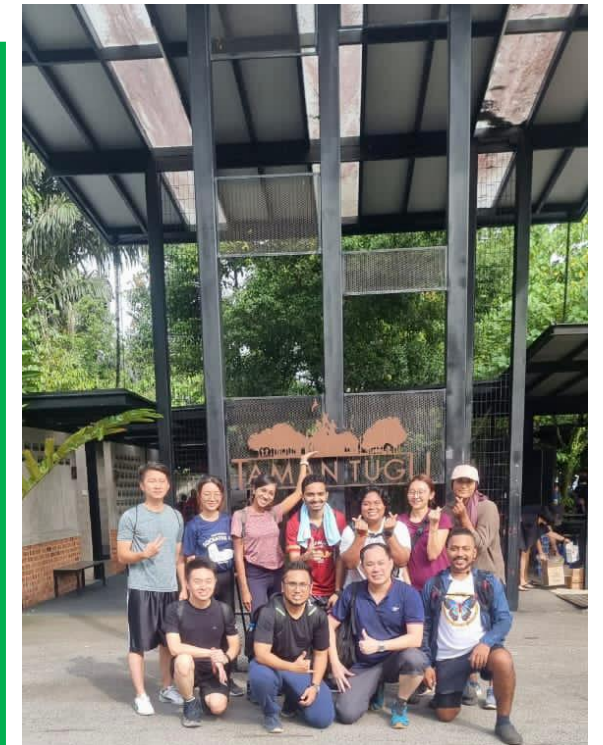
Few YEA members and student branch members went for a beautiful hiking trail to Mirror Lake, Bukit Bandaraya, on last 30th April 2023. They shared photos that showed the beautiful landscape at Mirror Lake.



ASHRAE Malaysia Chapter organized another hike on last 18th June 2023 together with The Institute of Engineers Malaysia. Members of both organizations went for a hike to Taman Tugu Trail on that sunny day.



Look forward to meeting you again next round to experience the magic of the great outdoors with us, and leave behind the stress of your daily routine.



Roadshow: Ozone2Climate Technologies in Refrigeration and Air-Conditioning Sector in Penang, 9 May 2023

EVENTS &
NEWS



Roadshow

OZONE2CLIMATE TECHNOLOGIES IN REFRIGERATION AND AIR-CONDITIONING SECTOR

TOPIC HIGHLIGHTS

- HPMP Implementation in Malaysia
- Revolution and Evolution of Refrigerants
- Natural Refrigerants : Coming Full Circle - Naturally
- Low GWP Refrigerants Chiller
- Safety Standard & MS2678 - Overview
- Climate Change & Green Buildings

BEM CPD applied

Registration is FREE!

EVENT DETAILS
VENUE : THE ASCOTT HOTEL, PENANG
DATE : 9 MAY 2023 (TUESDAY)
TIME : 8:30AM - 4:30PM

Click [HERE](#) for registration
Available seats are on first-come, first-served basis

Contact Us : Miss Nur +06011 1574 4931
mashrae.my@gmail.com

Organised by : Supported by :

In supporting and collaborating with the DOE, MASHRAE successfully conducted the final roadshow in Penang on 9 May 2023. A total of 122 participants attended this seminar and learned about the phase-out and phase-down of HFC. The latest development in refrigerant and technology in HVAC-R industry and valuable insights into how we can help our country to achieve its goals were shared with the participants.



Webinar: Resiliency against Airborne Transmission

1 June 2023

EVENTS &
NEWS



BEM CPD applied

“RESILIENCY AGAINST AIRBORNE TRANSMISSION”

IAQ post pandemic

Half-Day MASHRAE-IEM Webinar
Date: **1ST June 2023** Time: **2pm to 5pm**

Ts. Dr. King Yeang Jin
 - MASHRAE President
 - MASHRAE Epidemic Task Force Member

Ir. TL Chen
 - MASHRAE Past President
 - Epidemic Task Force Chair
 - Sustainability Committee Chair

Ir. Au CH
 - Managing Director,
 Primetech Engineers Sdn Bhd

Prof. Dr. Gunter Gribb
 - Deputy Director of the Fraunhofer
 - Institute for Building Physics IBP
 - Professor for Building Physics at the
 University of Stuttgart
 - Institute for Acoustics and Building
 Physics IABP

Daniel Lu
 - Chief Technology & Innovation Officer,
 Medkila International Sdn Bhd

Click or Scan QR Code for Local Registration

Registration Fee:
 • MASHRAE / IEM Members **RM30** • Non-Member **RM60**
 • AFEO AER Members/ ASHRAE Members of Region XIII **USD10**

MASHRAE and Institute of Engineers Malaysia (IEM) were successfully conducted a webinar on 1 June 2023 that discussed the topic of Indoor Air Quality Post Pandemic. The theme of this webinar was “Resiliency against Airborne Transmission”.

**MASHRAE IEM Webinar on
“Resiliency against Airborne Transmission”
– IAQ Post Pandemic –**

Date: 1st June 2023 (Thursday) Time: 2.00pm to 5.00pm

Points for Participant to take note

1. Questions to the speakers are to be keyed into the chat box
2. The question to be posed must include name and organization of the participant
3. There is no Q&A slot immediately after the presentation of each speaker.
4. All questions from the chat boxes will be posed to the panel of speakers by the moderator only during the Q&A session (after all 5 speakers have completed their presentations)
5. Certificate of attendance will be emailed by IEM secretariat
6. Please allow a few days for the presentation materials to be sent to those participants who have submitted the survey forms of the webinar

Thank you
MASHRAE-IEM

Background to MVC

Introduction to MVC (Non-Centralised and Centralised)

ASHRAE Std 241P Public Review – Control of Infectious Aerosols

Measuring and Computing Time Weighted Average

World Health Organization

- Roadmap to improve and ensure good indoor ventilation in the context of COVID-19
 - Health care settings
 - 160 L/s/patient or 12 ACH where AGP are performed
 - 60 L/s/patient or 6 ACH other
 - The airflow direction should be from clean to less clean area
 - Air should be exhausted directly to the outside away from air intake vents, people and animals.
 - Heating and air conditioning with recirculating units should be used carefully and after assessment
 - Verify heat recovery unit
 - HVAC system should be Operated continuously when people are in the building and should be regularly inspected, maintained and cleaned.

<https://www.who.int/publications/i/item/9789240021280>

ASHRAE Malaysia Chapter

**Paper 2:
A Critical Review of the Effectiveness or Otherwise
of the Various Airborne Transmission
Solutions in Use Today
and
Assessing Future Resiliency After Covid-19**

Ir. TL CHEN
 FASHRAE, FIFireE, CIBSE
 MASHRAE PP and ETF
 5h 45min

ASHRAE Malaysia Chapter

38TH Annual General Meeting – 2 June 2023

EVENTS & NEWS



The 38TH Annual General Meeting of ASHRAE Malaysia Chapter was held physically on 2nd June 2023 (Friday), 5:30 pm, at ASHRAE Malaysia Chapter Secretariat.

Outline of Agenda of 38TH AGM Meeting

1. President's welcome note.
2. To confirm and adopt the Minutes of last Annual General Meeting held on 27th May 2022.
3. To receive the Secretary's Report for the year 2022/2023.
4. To receive the Audited Treasurer's Report for the year ending 31st December 2022.
5. To review the constitution.
6. To elect members of the Board of Governors for the year 2023-2024.
7. To elect Nominating Committee 2023-2024.
8. Other matters arising.

The AGM was adjourned at 7:30pm.



ASHRAE Malaysia Chapter 38TH Annual General Meeting – 2 June 2023

EVENTS & NEWS



TOKEN OF
APPRECIATION





ASHRAE RESEARCH PROMOTION

Do you know?

ASHRAE currently has 42 active research projects.

The total value of all active projects is USD 6,263,721

Since 1959, ASHRAE has sponsored 943 projects with a combined value of \$79.7 million.

Since 1960, ASHRAE has sponsored research studies at universities and research firms. The results of these studies have been used to prepare chapters in the ASHRAE Handbook series, as foundational material in special publications and to train university students as they prepare for service in the HVAC&R industry.

ASHRAE members receive an annual subscription to ASHRAE Research Reports for free, which includes over 600 Research Project Final Reports, as a benefit of membership.

For more information on research promotion & how you can support, contact our local chapter Research Promotion Committee Chair at +6012-6610859 (TS Lim)

*Support us at
www.ashrae.org/contribute*

CURRENT PROJECTS IN REGION XIII (2022-2024)

Graduate Student Grant-in-Aid

National University of Singapore

Effectiveness of Ultraviolet Germicidal Irradiation (UVGI) Systems in Air Handling Units in Enhancing IAQ and Energy Performance

Undergraduate Program Equipment Grants

Universiti Teknikal Malaysia Melaka (UTeM)

Natural Refrigerant Residential Air-Conditioning (RAC) System IOT Integrated Experiment Setup

The development of Internet of Things-connected laboratory training equipment for evaluating the airflow performance of multi-angle ducting.

Board of Governors' Hybrid Meetings #10 ~ #12

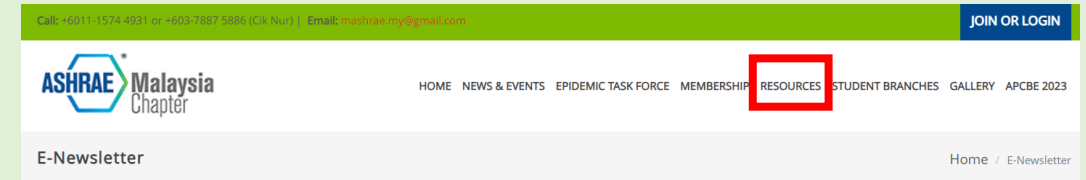
List of BOGs' Meeting April ~ May 2023:

Meeting No.	Mode	Date	Call to Order	Adjourned	No. of Attendees
10	Hybrid	18-04-2022	6:15 P.M.	8:30 P.M.	18
11	Hybrid	16-05-2023	6:15 P.M.	8:30 P.M.	15
12	Hybrid	20-06-2023	6:15 P.M.	8:30 P.M.	-

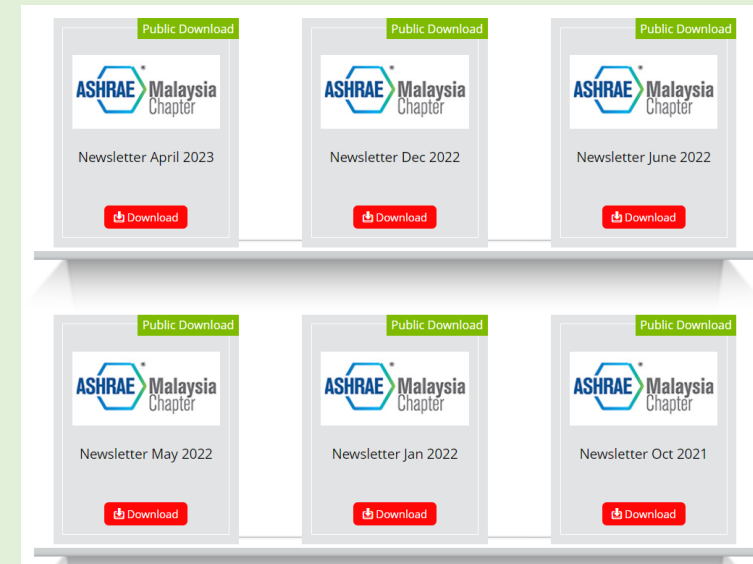
Outline of Agenda of BOGs' Meetings

1. Financial report
2. PAOE 2022-23 updates
3. Activity report by respective Chapter Chairs
4. Reports by Kuching & Penang Sections
5. Chapter's operation
6. Region XIII – CRC 2022 and RPM
7. APCBE : 17th APCBE 2023 will be hosted by Malaysia Chapter on 3-4 November 2023 at Connexion Conference & Event Centre, Bangsar South, Kuala Lumpur, and will be chaired by Ts. Ng Wen Bin.
8. Industry events

Where can I search for the previous issues of Newsletters of ASHRAE Malaysia Chapter



1. Go to <https://www.ashrae.org.my>
2. Look up Section "Resources" > "E-Newsletter".



Activities held by ASHRAE Malaysia Student Branches

UTAR Student Branch made a factory visit to AAF Manufacturing Malaysia Sdn. Bhd. in Shah Alam on 7 April 2023.



UNIKL MFI Student Branch held a membership drive on 31 May 2023.



UM Student Branch made a visit to Daikin Malaysia Sungai Buloh factory on 12 May 2023.



ASHRAE Region XIII – Regional Planning Meeting No.2 (2022-2023)

EVENTS & NEWS



ASHRAE Macao Chapter as the host of Regional Planning Meeting No.2 (RPM-2, 2022-2023) had conducted this RPM-2 for both Business Session (Day 1, 27 May 2023) and Workshop Session (Day 2, 28 May 2023) at Macau Studio City. All regional officers, delegates and alternates, Section Chairpersons, as well as the committee members of respective chapters and sections had attended this meeting. The Director and Regional Chair, P.E. Leong Cheng Wee chaired both the Business and Workshop Sessions.

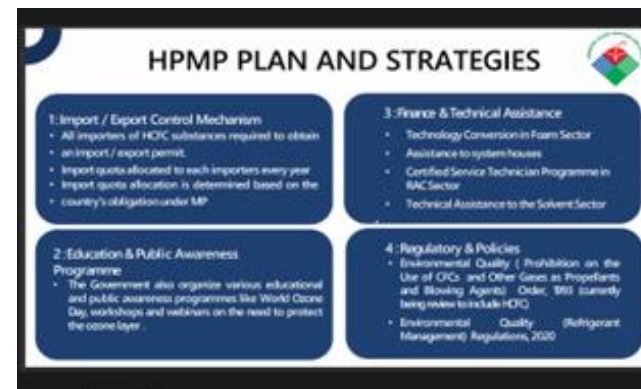


GAC Report

GOVERNMENT AFFAIRS



Event : HCFC Phase-out III Action Plan (HPMP III) Workshop
Organisation : Department of Environment, Malaysia
Date & Time : 9:00 a.m. – 1:30 p.m.
Venue : Zoom platform
MASHRAE Reps: Ir. Chen Thiam Leong and Chea Suei Keong
NGO & Corp : ACEM, IEM, MACRA, MEADA, MRACS, TEEAM, Persatuan Pengusaha Industri-Industri Bengkel Malaysia, Manufacturer, Suppliers, etc.
Total : 105 participants
Report : HPMP Stage III Success Implementation in Brazil and Indonesia - Mr Andersen Alves, UNDP Regional Coordinator for Asia Pacific, Technical Advisor
Reported by : Chea Suei Keong

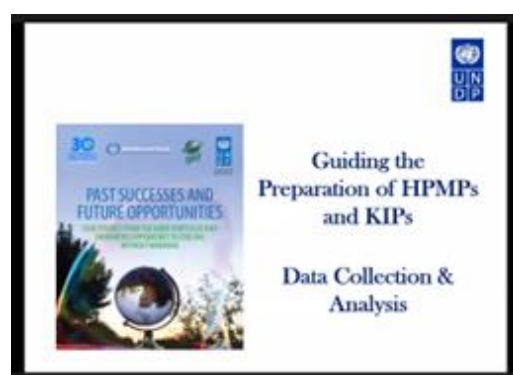


HCFC Consumption Baseline (average of 2009 and 2010 consumption levels)			
SUBSTANCE	2009 (ODP tonnes)	2010 (ODP tonnes)	BASELINE (ODP tonnes)
Annex-C Group-I substances (HCFCs)	494.2	537.5	515.8

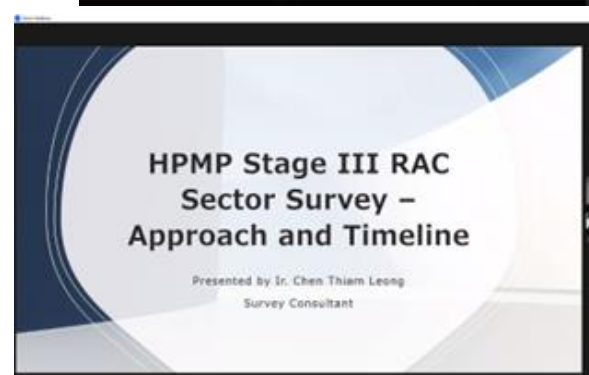
Targets for compliance	
Target of Reduction	Maximum Consumption Level (ODP tonnes)
From 01 January 2013 (Freeze)	515.8
From 01 January 2015 (10%)	464.2
From 01 January 2020 (35%)	335.3
From 01 January 2025 (65%)	167.6
From 01 January 2030 (97.5 %)	12.89 (Strictly for servicing)
From 1 January 2040 (100%)	Total prohibition on the use of HCFC

Technical Assistance	Technology Conversion	Technical Support
<ul style="list-style-type: none"> Technical assistance to 4 system houses to ensure availability of low GWP and cost-effective alternatives. It is expected that these system houses will assist the small medium enterprise in the technology conversion in Stage II of HPMP. 	<ul style="list-style-type: none"> Stage I conversion of 13 large and medium enterprises, equal to 94.6 ODPt. Stage II conversion of 67 small and medium enterprises, equal to 66.84 ODPt. 	<ul style="list-style-type: none"> Information dissemination on emerging low GWP alternatives.

YEAR	PLANNED REGULATORY ACTION
2020	<ul style="list-style-type: none"> Prohibit the manufacture, assembly and import of all products and equipment for essential use Prohibit HCFC 141b as blowing agent Prohibit the use of HCFC in the manufacturing and installation of new f...
2025	No more installation of new products and equipment using HCFCs
2030	AP limited to 2.5% of baseline for servicing use only
2040	Total ban on the import and use of HCFCs



EQ (REFRIGERANT MANAGEMENT) REG 2020
<ul style="list-style-type: none"> Enforcement started on 1 June 2020 Controlled substances: CFC (First Schedule) & HCFC (Second Schedule) Prohibition on the use of environmentally hazardous substances: <ul style="list-style-type: none"> CFC – Total Ban HCFC – Prohibition on the use of new HCFC based equipment Servicing of RAC equipment involving handling of refrigerant must be carried out by a trained personnel Container of refrigerant must be labelled according to its type and must be visible Prohibition of discharge of any CFC / HCFC to the environment CFC / HCFC can only be disposed at DOE approved facility Record on trade, reclamation, recycling and disposal of refrigerant must be kept for at least 3 years and shall be made available for inspection by any authorized officer Offences under the regulation may be compounded in accordance with EQ(Compounding of Offences) Rules 1978.



Event : DOE Roadshow 2022-2023 : Ozone2Climate Technologies in Refrigeration and Air-Conditioning Sector

Organisation : Department of Environment (DOE)

Date & Time : 9 May 2023, 9:00 a.m. – 4:30 p.m.

Venue : The Ascott Hotel, Penang

MASHRAE Reps: Chea Suei Keong, Ts. Ng Wen Bin, Dr. King Yeong Jin, Chew Soon Jin,

Govt. Reps : (1) DOE - Mr Ryan Ooi Chean Weai, Cik Nurul Erda Wanie.
(2) JKR Penang. (3) Ministry of Health. (4) Malaysian Green Technology And Climate Change Corporation (MGTC), (5) Petronas Carigali,
(6) Ministry of Human Resources.

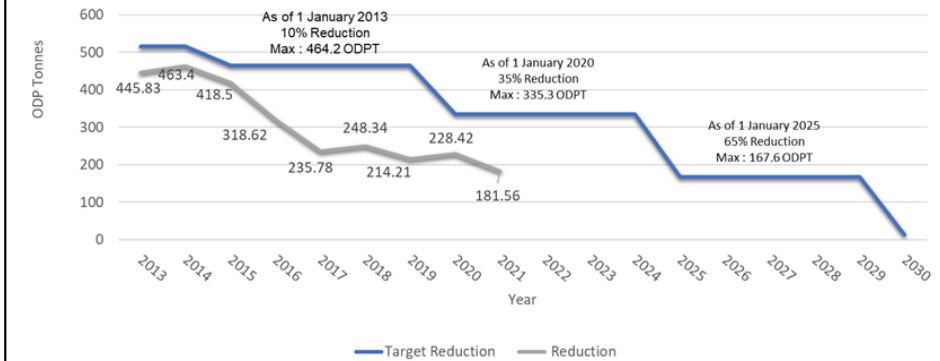
Report : Department of Environment (DOE) held a forum with HVACR Industries to disseminate information regarding HPMP Implementation in Malaysia under the heading of OZONE2CLIMATE TECHNOLOGIES IN REFRIGERATION AND AIR CONDITIONING SECTOR.

Montreal Protocol: HCFC Phase Out Management Plan:

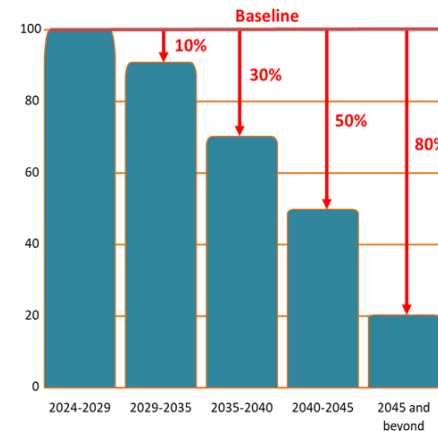
- Technology transfer investments
- Policies and regulations
- Technical assistance
- Training and capacity building
- Awareness and education
- Monitoring and management in the selected HCFC consuming sectors

Reported by : Chea Suei Keong

Montreal Protocol: HCFC Phase Out Management Plan



Kigali Amendment:
HFC Phase Down
Implementation
Plan



Event : Technical Committee (TC) meeting on safety of household and similar electrical appliances (NSC 19/TC)

Organisation : Department of Standards Malaysia, Ministry of International Trade and Industry, Malaysia.

Date & Time : 25 May 2023, 9:30 a.m.– 1:00 p.m.

Venue : Hybrid meeting (physical meeting at JSM Cyberjaya & Google Meet)

MASHRAE Reps: Tee Tone Vee and Poh Kai Sin

Agenda :
1. Presentation of "comparison study between MS IEC 60335-1-2015 Household And Similar Electrical Appliances - Safety - Part 1: General Requirements (Third Revision) (IEC 60335-1:2010, IDT) and IEC 60335-1-2020.
2. Working Group Progress Report for WG1, WG2, WG3, WG4
3. MS Review
4. Application of Mr Lau Kay Chai (Daikin) nominated as expert - TC 61/MT 4

Report : The meeting was chaired by Mr Virendra Tansukhlal Doshi, President of Technical Committee on Safety of Household and Similar Electrical Appliances (NSC 19/TC 5). The meeting started with introduction of TC committee members. The meeting continue with Mr. Chia Chin Hui presenting the comparison of MS IEC 60335-1-2015 and EC 60335-1-2020. Mr. Noorhafiz suggested to allocate time for committee members to review the comparison and provide feedbacks. The due date for feedback is one week before the next TC meeting. Mr. Noorhafiz present the brief report for WG1, WG2, WG3 and WG4. Then seven Malaysia Standards are reviewed. Association is requested to check with respective industry stakeholders whether industry is using standard MS IEC 60335-2-81 and MS IEC 60335-2-95. TC agreed on Mr. Lau Kay Chai to be nominated as expert. The meeting adjourned at 12.00pm and the next meeting is 10th August 2023, 10:00 a.m.

Reported by : Tee Tone Vee



ASHRAE EPIDEMIC TASK FORCE is formed to deploy ASHRAE's technical resources to address current pandemic and future epidemics: -

- HVAC System Operation during Building Shutdown
- How to Return the HVAC System to Normal Operation
- Operating of Heating/Cooling System in Home
- Healthcare Facilities, Commercial, Residential, Schools and Universities, Residential, Transportation
- Riding Mass Transit and Airlines
- Upgrading Filters and Use of Air Cleaners
- Ventilation Systems
- Exhaust Systems
- Filtration and Disinfection
- BAS and Access Control Systems
- Elevator Control
- Water Systems
- Air Conditioning and Heating

For more information, visit to www.ashrae.org/covid19

List of Webinars/Seminars/Courses To Date

CHAPTER
TECHNOLOGY
TRANSFER



List of Webinars/Seminars/Courses July 2022 – December 2022:

1. Independent Commissioning Specialist (iCxS) Competency Course #1 held on 6-8 Aug 2022 with examination conducted on 27-28 Aug 2022.
2. One-day technical seminar on “Securing our Future” in conjunction with 37th Annual Dinner, conducted by ASHRAE DL, Luke Leung, Nicholas Chan, Weerachai Weerawatprachya, Liew Shan Qi & TL Chen on 30 September 2022.
3. ASHRAE Conference on “Indoor Environmental Quality (IEQ)” in conjunction with ASEAN M&E SHOW, KLCC, 8 November 2022.
4. Half-Day Seminar on Compressor Technology 2022 – Refrigeration & Air-Conditioning, jointly organized by IEM, 24 November 2022.
5. 6th Energy Efficiency Management for Air-conditioning and Mechanical Ventilation jointly organized by MASHRAE & SEDA, 30 November & 1 December 2022.
6. Decarbonization with Energy Conservation, conducted by DL Doug Cochrane and Ir Pua Ching Tian on 20 April 2023.
7. Innovate Your Hygiene Practices to Achieve Better Customer Experience & Higher Productivity, Half-Day Webinar jointly organized with IEM, 1 June 2023.

ANNOUNCEMENT



Another milestone achieved by ASHRAE Malaysia Chapter!

ASHRAE Malaysia Chapter is now the
HRD Corp Registered Training Provider.

New Publication from ASHRAE

EVENTS & NEWS



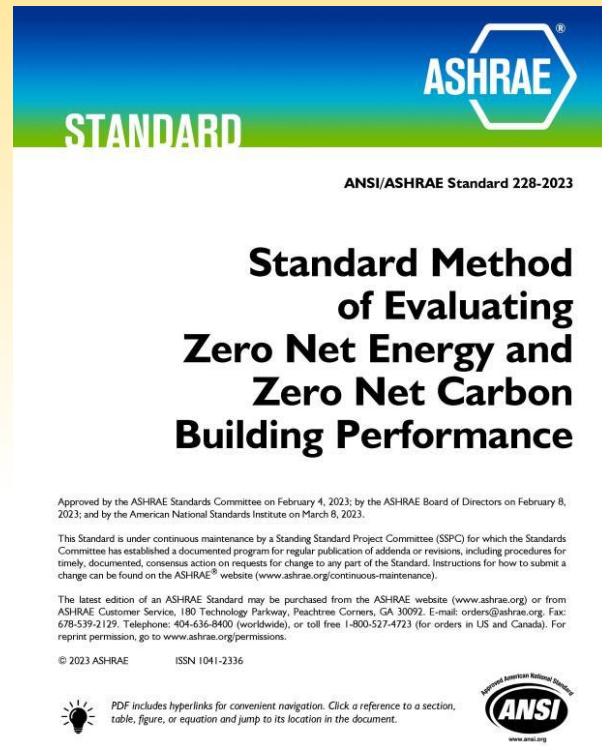
Exciting news! ASHRAE has just published the first net zero energy and net zero carbon standard, providing much-needed guidance on how buildings can achieve net zero carbon or net zero energy operations.

This groundbreaking standard addresses energy and carbon flows across the site boundary, energy sources, and even allows for individual hours of operation to be taken into account.

As sustainability becomes a top priority in the built environment, this standard sets the bar for green building practices and paves the way for a more sustainable future.

<https://lnkd.in/gDqB7S5>

#myashrae
#sustainabilitymatters
#netzero
#greenbuilding
#carbonneutral
#energyefficiency



Newly revised Standard 90.4 includes changes to account for existing circumstances in building projects and improvements in equipment efficiency, as well as changes to incentivize deployment of renewable energy and recovered energy while still requiring the use of energy-efficient mechanical and electrical systems. See what's new and grab your copy at <https://bit.ly/3ApjUvT>!



Follow [ASHRAE @LinkedIn](#) for more updates

What do we have at ASHRAE The 90.1 Portal?

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THE 90.1 PORTAL

- ASHRAE STANDARD 90.1
- USER'S MANUAL
- REDLINES

Now in an all-in-one interactive tool!



Update:

ASHRAE's 90.1 Portal is on hiatus pending a redesign, expansion, and relaunch at an undetermined future date. We look forward to soon providing 90.1 and more to you bigger and better than ever.

To purchase copies of any edition of ANSI/ASHRAE/IES Standard 90.1 or its User's Manual, visit the ASHRAE Bookstore by clicking on the links below and scrolling down for historical editions:

- [ANSI/ASHRAE/IES Standard 90.1-2022 \(I-P units edition\)](#)
- [ANSI/ASHRAE/IES Standard 90.1-2022 \(SI units edition\)](#)
- [Standard 90.1-2019 User's Manual \(dual units\)](#)

The screenshot displays the ASHRAE Standard 90.1 Portal interface. At the top, a navigation bar includes the ASHRAE logo and the title 'Standard 90.1 Portal'. Below this, a tabbed interface shows 'Content', 'Tables', 'Figures', 'Equations', 'Interpretations', 'Definitions', and 'Errata'. The main content area is split into two columns. The left column features a large blue and green gradient header with the word 'STANDARD' in white. Below this, it reads 'ANSI/ASHRAE/IES Standard 90.1-2016 (Supersedes ANSI/ASHRAE/IES Standard 90.1-2013)' and 'Includes ANSI/ASHRAE/IES addenda listed in Appendix H'. The right column displays the cover of the 'STANDARD 90.1 USER'S MANUAL', which is based on the 2016 standard and includes a 'Includes Online Access to Compliance Points and Tools' badge. A blue arrow points from the top text 'View the standard and User's Manual side by side' to the split-view interface. Another blue arrow points from the top text 'Copy, paste and print with one click' to a 'Print' button and a menu icon in the top right corner.

Online Reading-Only-Version of Latest ASHRAE Publications is Available Now! (1/2)

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[Click this link to access to the online "Read-Only-Versions" of ASHRAE Standards & Guidelines](#)

Guidelines Available:

- Guideline 1.4-2019, Preparing Systems Manuals for Facilities
- Guideline 11-2021, Field Testing of HVAC Control Components [Latest Version]
- Guideline 12-2020, Managing the Risk of Legionellosis Associated with Building Water Systems
- Guideline 28-2021, Air Quality within Commercial Aircraft [Latest Version]
- Guideline 29-2019, Guideline for the Risk Management of Public Health and Safety in Buildings
- Guideline 36-2021, High-Performance Sequences of Operation for HVAC Systems [Latest Version]

Standards Available:

- Standard 15-2022, Safety Standard for Refrigeration Systems [Latest Version]
- Standard 34-2022, Designation and Safety Classification of Refrigerants [Latest Version]
- Standard 52.2-2017, Method of Testing General Ventilation Air-Cleaning Devices for Removal Efficiency by Particle Size
- Standard 55-2020, Thermal Environmental Conditions for Human Occupancy (ANSI Approved)
- Standard 62.1-2022, Ventilation for Acceptable Indoor Air Quality [Latest Version]
- Standard 62.2-2022, Ventilation and Acceptable Indoor Air Quality in Residential Buildings [Latest Version]
- ANSI/ASHRAE Standard 84-2020, Method of Testing Air-to-Air Heat/Energy Exchangers (ANSI Approved)





Online Reading-Only-Version of Latest ASHRAE Publications is Available Now! (2/2)

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[Click this link to access to the online "Read-Only-Versions" of ASHRAE Standards & Guidelines](#)

Standards Available:

- Standard 90.1-2022, Energy Standard for Sites and Buildings Except Low-Rise Residential Buildings (I-P version) [Latest Version] 
- Standard 90.2-2018, Energy Efficient Design of Low-Rise Residential Buildings
- Standard 100-2018, Energy Efficiency in Existing Buildings
- Standard 111-2008 (RA 2017)-- Testing, Adjusting, and Balancing of Building HVAC Systems
- Standard 154-2022, Ventilation for Commercial Cooking Operations [Latest Version]
- Standard 161-2018, Air Quality within Commercial Aircraft
- Standard 170-2021, Ventilation of Health Care Facilities [Latest Version]
- Standard 180-2018, Standard Practice for Inspection and Maintenance of Commercial Building HVAC Systems (ACCA Co-sponsored)
- Standard 183-2007 (RA 2020), Peak Cooling and Heating Load Calculations in Buildings Except Low-Rise Residential Buildings (ACCA Co-sponsored)
- Standard 185.2-2020, Method of Testing Ultraviolet Lamps for Use in HVAC&R Units or Air Ducts to Inactivate Microorganisms on Irradiated Surfaces
- Standard 188-2021, Legionellosis: Risk Management for Building Water Systems [Latest Version]
- Standard 189.1-2020, Standard for the Design of High-Performance Green Buildings
- Standard 202-2018, Commissioning Process for Buildings and Systems 
- Standard 211-2018, Standard for Commercial Building Energy Audits

What do we have at ASHRAE Technology Portal ? [\(Link\)](#)

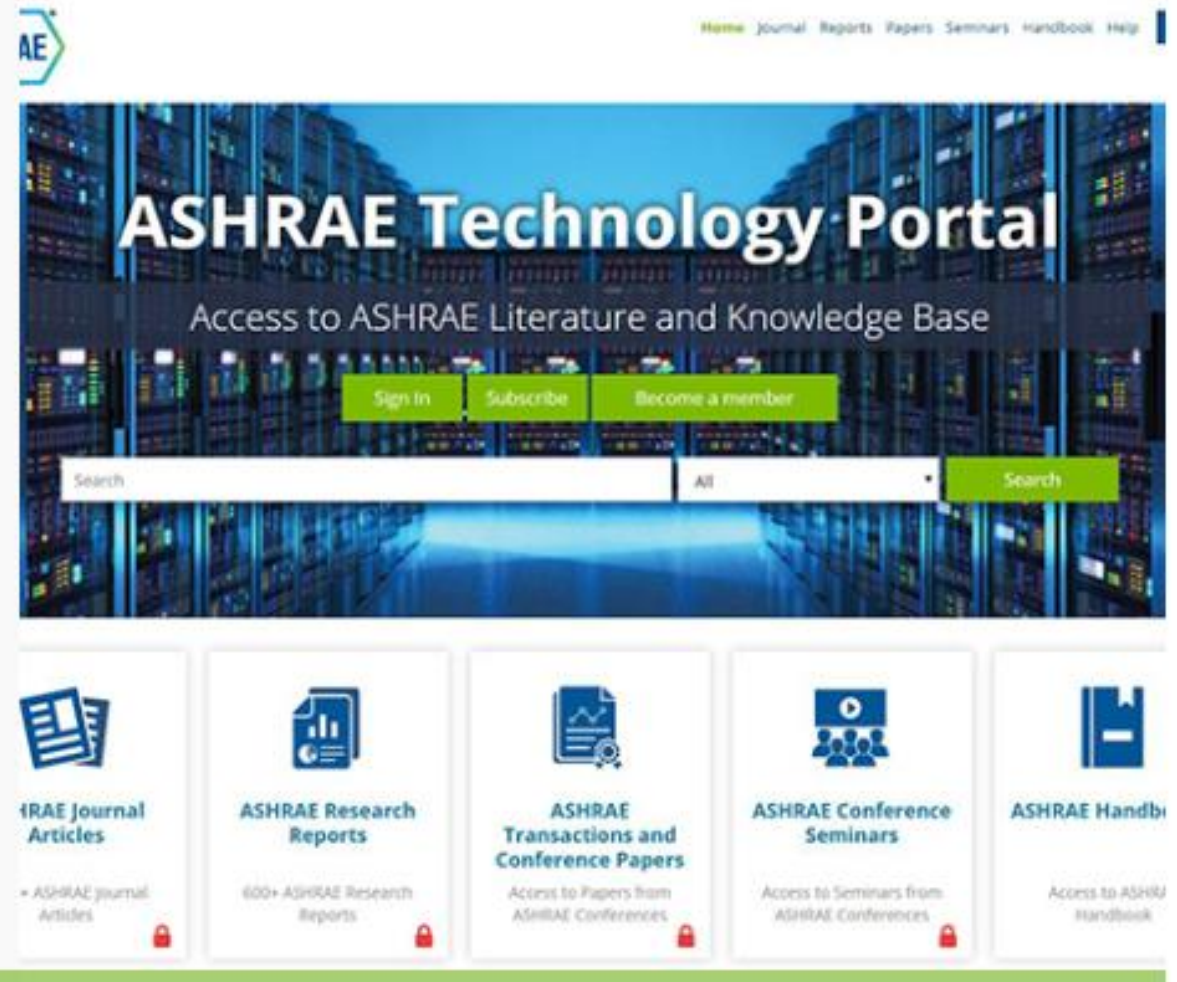
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ASHRAE Technology Portal

ASHRAE Technology Portal is your one-stop location for ASHRAE papers, articles, reports, Handbook PDFs, and seminar recordings. ASHRAE Members have free access to download ASHRAE Journal articles and ASHRAE Research Reports. ASHRAE Transactions and Conference Papers and seminar recordings from ASHRAE conferences are also available to Members and nonmembers by subscription.

ACCESS PORTAL



For more information about ASHRAE Technology Portal, please contact 1-800-527-4723 or technologyportal@ashrae.org.

What do we have at ASHRAE Free Resources? [\(Link\)](#)

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Free Resources for Everyone Members Only Free Resources

Resources Free for Everyone

Design Guidance for Education Facilities: Prioritization for Advanced Indoor Air Quality, Version 2.0

Newly Added

Design Guidance for Education Facilities: Prioritization for Advanced Indoor Air Quality, Version 2.0

Developed for



This document provides guidance to owners, operators, designers, and professional service providers on how to best implement indoor air quality (IAQ) improvements, including risk mitigation strategies, in educational facilities. It will also help facilitate discussion between designers and stakeholders, identify minimum recommendations, and discuss further considerations to improve IAQ and reduce the transmission risk of infectious pathogens and other contaminants of concern. This document will be updated to further align with developing information. It is not intended to replace or supersede other documents, including, but not limited to, other standards such as ANSI/ASHRAE Standard 62.1 or the proposed ASHRAE Standard 241. Instead, this guidance is intended to illustrate principles and practical considerations within the existing framework to mitigate risk. HVAC professionals should use this guidance in conjunction with all relevant bylaws, codes, and standards.



ASHRAE HVAC&R Global Summit Final Report: The ASHRAE Global HVAC&R Summit – a key element of 2022–2023 ASHRAE President Farooq Mehboob's vision for his Society year theme, "Securing Our Future" – was designed to create an environment of collaboration and strategic dialogue to address the critical issues of the day, which were determined via the results of an international survey developed and distributed by the ASHRAE Associate Society Alliance (AASA).

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Healthier Homes During Epidemics

Healthier Homes During Epidemics

White Paper Developed by



Preparing your home in advance can help you, your family, and other household members stay physically and mentally healthy during an outbreak. This white paper describes strategies for protecting household members from infection and for isolating those who develop the infectious disease or have a high risk of severe outcomes if they become infected. This paper also describes the supplies you might need, the information you should gather about your home and its heating and cooling systems, and other actions you can take before or during an outbreak to minimize your household's risk of illness.

Free Resources for Everyone Members Only Free Resources

Resources Free to Members Only

Chapter Promotion Supplies

Use this form to request brochures, greeting cards, stickers, and other ASHRAE Logo materials to help promote your Chapter.

[Chapter Promotion Supplies Request Form](#)

Membership Promotion Materials

These materials are available free to you as an ASHRAE member for use in membership promotion. Includes brochures and other materials to help you promote ASHRAE Membership.

[Membership Materials](#)

ASHRAE Technology Portal

The ASHRAE Technology Portal is a Membership Resource that requires Member Login for Access. Non-ASHRAE members may browse the portal and choose to purchase items.

[Enter the Portal](#)

CAMEE

Tools from CAMEE, free for Members. Available for purchase by non-ASHRAE members for \$60 each.

[Engineering Practice Tools](#)

Commissioning Definitions and Terminology for the Building Industry: A Common Overview

Commissioning Definitions and Terminology for the Building Industry: A Common Overview is a joint effort between ASHRAE, AiCAAR and CIBSE to standardize terminology related to commissioning. This resource is an important step in improving building performance through improved communication and consistent, globalized terminology to improve collaboration among building technology professionals.

What do we have at ASHRAE eLearning?

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Group Discounts Available

The advertisement features a group of diverse professionals in a meeting setting, smiling and looking at a laptop. The text "Virtual Learning for Your Team" and "Affordable, Convenient, Effective!" is overlaid on the image. At the bottom, the ASHRAE logo and "Group Discounts Available" are displayed.

Why ASHRAE eLearning?

- **Expertise:** Created by HVAC&R professionals using ASHRAE's extensive pool of knowledge.
- **Convenient:** Employees can learn anytime, anywhere, from any computer with internet access.
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SmartStart Program for Graduate Member

MEMBERSHIP PROMOTION

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What is the SmartStart program?

Simply put, it's the best way for ASHRAE student members to receive the many benefits of Associate grade membership after finishing college. SmartStart is a 3 year program that allows Student members to transfer to Associate grade membership at a rate that is recent-graduate friendly.

Prices as of July 1, 2020: SmartStart participants who join or renew after this date will be part of the new dues structure. Participants who only paid for one year upon transferring their membership will renew based on this new dues structure. New program prices are (for 3 years respectively): \$25 (+) \$85 (+) \$115= \$225 for 3 years.

The Developing Economies pricing (\$15 + \$45 + \$60 = \$120) is open to those residing in countries considered to be "Low Income" & "Lower Middle Income" by the World Bank. [Visit the World Bank's Web site for a list of low income /lower middle income countries.](#)

By submitting this application you are agreeing to abide by the ASHRAE Code of Ethics, found at ashrae.org/codeofethics.

Please note that the SmartStart program is for current ASHRAE Student members who have been a Student member for at least one year.

Why Transfer to Associate Membership?

List of Associate Membership Benefits: -

- **Dedicated events and resources** for young professionals are offered at the chapter and Society level through the Young Engineers in ASHRAE (YEA) program.
- Tremendous **networking opportunities** through chapter events, committee participation, volunteering, attending conferences, and more.
- **The ASHRAExChange** – participate in the online forum that brings together members from across the world to discuss design, construction, operation, and support of the built environment.
- **The ASHRAE Handbook** — the indispensable, industry-wide resource for all HVAC&R professionals.
- **ASHRAE Journal** — this monthly resource is the most trusted technical magazine in the HVAC&R community.
- **High Performing Buildings** — the quarterly magazine for innovation in building technology design and operation.
- **HVAC Industry News** — a weekly news resource keeping ASHRAE members abreast of the latest industry news.
- **Bookstore** — Access to, and discounts on, more than 300 of the industry's **leading technical publications**.

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(Continued to next page)

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