

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.

BOG Meeting No.8 cum CNY Dinner Gathering with Student Branch Representatives



GREETINGS FROM THE PRESIDENT

I am excited to announce that we have expanded our MASHRAE Secretariat office by acquiring the office lot next door, which became available for our acquisition. This expansion will provide us with more space to facilitate our day-to-day operations and hosting various events for our members with increased capacities and facilities in future.

We continue to work with the Department of Environment on the HPMP (HCFC Phase-Out Management Plan) roadshow, which is a vital initiative aimed at reducing the use of harmful substances in HVAC&R systems. We will continue to actively work with government agencies to enhance the science and technology growth in our nation. Our efforts are in accordance with the aim of creating a conducive environment for the development and deployment of innovative HVAC&R technologies.

I am pleased that the recent Chinese New Year gathering had given the Board and Committee members as well as some student members the opportunity to celebrate and catch up with each other. We value such event as it provides us an excellent opportunity to build up bonding for the much-needed teamwork spirit and greater understanding as we are all volunteers.

We are yet again committed to strengthening our relationship with IEM and MACRA by supporting the ENGINEER and MARVEX 2023, which will be held on 6-9 September 2023 in KL Convention Centre. We believe that this collaboration will help us achieve our shared goal of advancing the engineering profession in our country.

As always, we will continue our efforts to engage with our members through various programmes such as MP/RP night, ASHRAE Hike, Distinguished Lecture talks, SEDA courses, and iCxS programme. These initiatives have proven to be effective in providing our members and associates with the opportunity to develop their skills and knowledge in the field of HVAC&R as well as promoting fellowship.

In conclusion, I would like to thank all our members for their continued support and contributions towards the advancement of our society. Together, we can achieve our shared goals and make a positive impact to our industry.



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



Best wishes from
Ts. Dr. King Yeong Jin
President, ASHRAE Malaysia Chapter

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 : Intake 1: 8 - 9 Mar 2023
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



BEM CPD applied

“RESILIENCY AGAINST AIRBORNE TRANSMISSION”

IAQ post pandemic

Half-Day MASHRAE-IEM Webinar

Date: **1ST June 2023** Time: **2pm to 5pm**



**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**

ANNOUNCEMENT



An Overview of Prevailing Applied Practices & Solutions to Mitigate Airborne Transmission

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

A Critical Review of the Effectiveness of Current Airborne Transmission Solutions and Assessing Resiliency Post Covid-19

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

MASHRAE's MVC Software Tool & Air Quality Measurement Protocols

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



Results Of Viral Load Reduction Using Ventilation With Other Technologies

Prof. Dr. Gunnar Grün
- 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



Application Of Cerafusion™ Technology

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

17th Asia Pacific Conference on Built Environment (APCBE 2023)

ANNOUNCEMENT



APCBE 2023 Theme: Unique Challenges & Solutions for Climate Change in HVAC&R industry

Asia Pacific Conference on Built Environment (APCBE) is a biennial event of ASHRAE Region XIII and was first launched in 1991. In response to the emerging technologies, the Conference scope has been expanded from HVAC&R to cover wider aspects pertaining to built environment.

The 17th Asia Pacific Conference on Built Environment (APCBE) will be held in Malaysia in 2023 in conjunction with ASHRAE Malaysia Chapter's 38th Annual Dinner. The conference will take place on the 3rd and 4th November 2023 at Connexion Conference & Event Centre, Bangsar South, Kuala Lumpur.

This event will be a great opportunity for professionals and academics in the built environment sector to come together to exchange ideas and discuss the latest advancements and innovations in the industry. The conference will feature keynote speeches, technical sessions, and presentations on various topics related to the built environment. Participants will also have the opportunity to network with other professionals from the 10 Chapters in Asia Pacific and attend the ASHRAE Malaysia Chapter's Annual Dinner for networking and fellowship.

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 service engineering.

Conference Contact Information

For more details about the event, please refer to the link provided: <https://www.ashrae.org.my/apcbe-2023/>

Email: apcbemalaysia2023@gmail.com

Roadshow: Ozone2Climate Technologies in Refrigeration and Air-Conditioning Sector

ANNOUNCEMENT



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 :

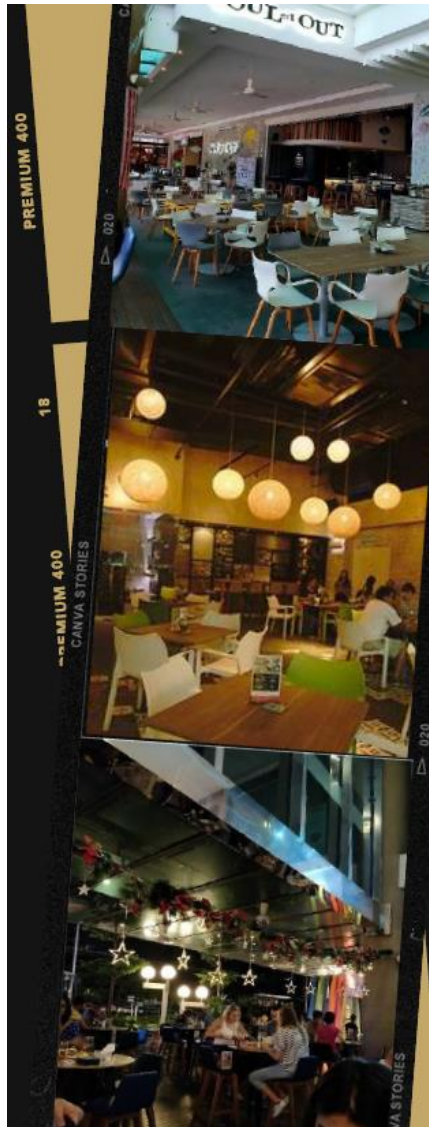


MP & RP Networking Night – 27 April 2023

ANNOUNCEMENT



Join us for **Membership Promotion & Research Promotion Networking Night** on **27 April 2023** at Souled Out, Bangsar South.



EVENT FLOW

- 6:00 PM Registration
- 7:00 PM Networking & Dinner Served
- 8:00 PM President's Speech, MP Chair's & RP Chair's Speech, Recognition of RP Donors
- 9:00 PM Networking Session Continue
- 9:30 PM Lucky Draw
- 10:00 PM End of Event

RSVP:

Tony Cheng (MP Chair) 017-903 0286
Kar Hoou (MP Co-Chair) 012-753 7328



← Scan here to register

Please note that this event is by invitation only, and seats are limited. Don't miss your chance to be a part of this exciting event!



ASHRAE HIKE

BUKIT BANDARAYA, MIRROR LAKE

30 APRIL 2023

8.30 AM

Just Scan the QR code below and lets meet there



Open to All members and Non Members

Join us for a hiking adventure like no others!

We cordially invite you to join us for a day full of fun, fitness and friends on a beautiful hiking trail on **30th April 2023 at 8.30 am.**

The hike will take us through picturesque landscapes, steep inclines, and rocky trails, so prepare to challenge yourself both mentally and physically.

Come and experience the magic of the great outdoors with us, and leave behind the stress of your daily routine.



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.



What are you waiting for? Let's Join Us & Run Beyond Boundaries

Click on the link below and join us now:

<https://www.ticket2u.com.my/event/29959/ashrae-run-2023>

For further information, be sure to follow us on social media to get the latest update:

-Facebook: ASHRAE RUN

-Instagram: @ashraerun [#ashraerun2023](#) [#onceuponafantasy](#)

ATTENTION! ASHRAE Run 2023 is coming 🏃🏃

EARLY BIRD PROMO is open to all run lovers! 😊

The long-awaited moment has finally arrived. We are delighted to announce that the registration for ASHRAE Run 2023 is now open.

ASHRAE Run is an annual themed run organised by the ASHRAE UM Chapter to raise funds for the UM Student chapter to carry out their educational activities. The theme for ASHRAE Run 2023 is "ONCE UPON A FANTASY". By having this fantasy theme, we hope that participants get to escape from reality, bring them back to the fantasy once they belong, just like every child has his/her own fantasy. We hope to provide a remarkable and memorable event to all participants.

🏆 Early Bird Prices:

Student/Junior(5km): RM45

Student/Junior(10km): RM60

Adult(5km): RM50

Adult(10km): RM65

Trophy and prizes will be provided to 10km winners!

Event details:

Date : October 2023 (To be confirmed)

Time : 5.30a.m. - 10.30a.m. (To be confirmed)

Venue: Dataran Dewan Tunku Canselor, University of Malaya

Heartiest Congratulations to Ir. Chen Thiam Leong on his appointment to the Panel of Experts by the Minister of Local Government Development, Malaysia



Heartiest Congratulation!

Congratulations to the fellow
ASHRAE Malaysia Students Chapters
for receiving the

ASHRAE 2022-23

Undergraduate Program Equipment Grants

1. ASHRAE Malaysia Student Chapter – Universiti Kuala Lumpur (UniKL MFI)
 - Experimental evaluation of solar-assisted heat pump hot water system (Instructor, Ts. Ng Wen Bin)
2. ASHRAE Malaysia Student Chapter – Universiti Tunku Abdul Rahman (UTAR)
 - Evaluation of radiative cooling with thermoelectric for application in tropical region (Instructor, Ts. Dr. Jun Hieng Kiat)

ANNOUNCEMENT

ASHRAE Malaysia Chapter Scholarship

Malaysia Chapter has officially launched the ASHRAE Malaysia Chapter Scholarship. Established by a financial donation by one of the Past Presidents of ASHRAE Malaysia. The goal is to provide financial support to deserving students to pursue undergraduate degree in Engineering. Under this Scholarship, ASHRAE Malaysia Student Branch Members can apply for a scholarship with the value of USD 1,500 per year (approximate RM6,000 per year). If you are interested, please drop an email to mashrae.my@gmail.com

The scholarship awards will be conferred during the 38th Annual Dinner to be held on 3 November 2023.

On behalf of ASHRAE MALAYSIA CHAPTER, the Annual Dinner Organizing Committee and Research Promotion would like to thank you for your support of ASHRAE Malaysia 38th Annual Dinner

Platinum Sponsors

- Daikin Malaysia Group of Companies • American Air Filter Manufacturing Sdn Bhd •
- MayAir Manufacturing (M) Sdn Bhd •

Gold Sponsors

- CAMFIL Malaysia Sdn Bhd • Emerson Commercial & Residential Solutions •

Bronze Sponsors

- BAC Malaysia Sdn Bhd • Panasonic Malaysia Sdn Bhd • TROX Malaysia Sdn Bhd •
- Belimo Automation Malaysia Sdn Bhd • Bitzer (South East Asia) Sdn Bhd •
- Dunham-Bush Industries Sdn Bhd • INTRIX Renewable Sdn Bhd •
- Japan Air Filter Malaysia Sdn Bhd • JCT Energy Sdn Bhd • Kingspan Insulation Pty Ltd •
- NRS Process System Sdn Bhd • TICA Climate Solutions Malaysia Sdn Bhd •
- Truwater Cooling Towers Sdn Bhd •

List of BOGs' Meeting December 2022 ~ March 2023:

Meeting No.	Mode	Date	Call to Order	Adjourned	No. of Attendees
6	Hybrid	20-12-2022	6:15 P.M.	8:30 P.M.	19
7	Hybrid	17-01-2023	6:00 P.M.	8:30 P.M.	20
8	Physical	21-02-2023	6:15 P.M.	8:30 P.M.	17
9	Hybrid	21-03-2023	6:15 P.M.	8:30 P.M.	17

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

Expansion of ASHRAE Malaysia Chapter Secretariat

On 27 February 2023, ASHRAE Malaysia Chapter has completed the acquisition of an adjacent office lot, which would be utilized for the expansion of ASHRAE Malaysia Chapter Secretariat, where the premises would be utilized as the venue to cater for seminars, workshops, training courses, meetings, networking events, etc. in future.



Honours & Awards Book Launch

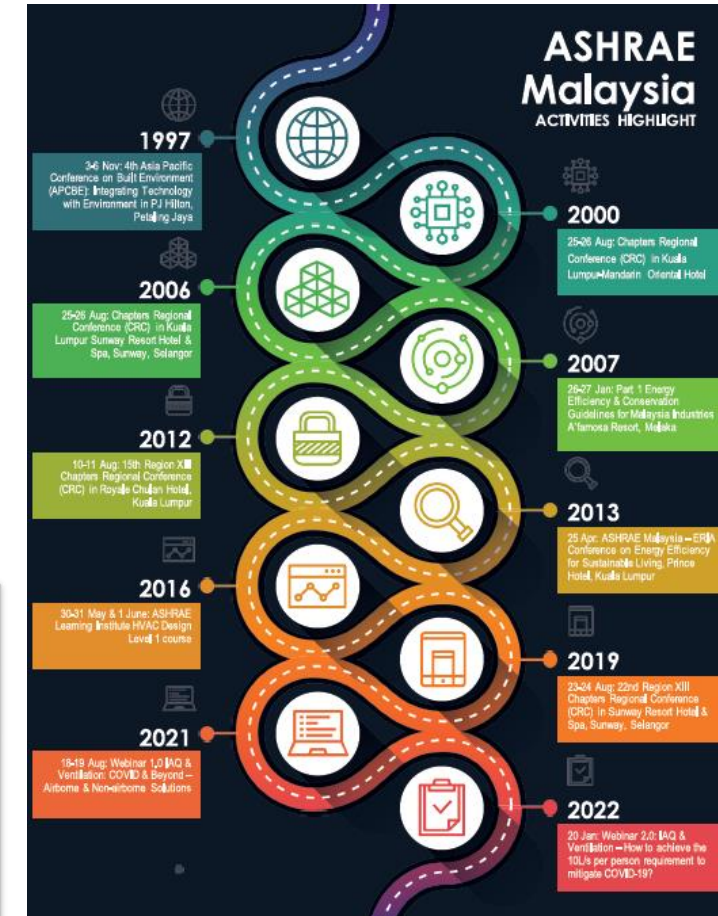
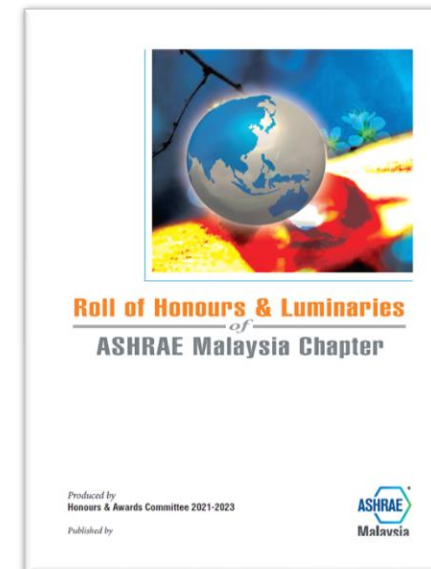
EVENTS & NEWS



H&A Committee, headed by Ir. Ong Ching Loon, conducted an in-depth research and meticulously-compiled history and milestones of ASHRAE Malaysia (MASHRAE) Chapter that began with the formation of the MASHRAE Chapter and Region XIII, and MASHRAE's contributions to the society and HVACR industries. The Who's Who of Malaysia's HVAC&R industry, the Luminaries and Aspirations of the Chapter are also recorded in the book.

H&A Committee dedicated a section to recognize the historical development of the HVACR and allied industries in Malaysia. For this section of the book, the committee identified and extended invitation to companies deemed to have long history, contributed, and played a significant role in the historical development and progress. Those companies which had responded with respective writeups, are listed below (not listed in any particular order of priority or importance):

- 1) Daikin Malaysia Group of Companies
- 2) Smartech Industries Sdn Bhd
- 3) Dunham-Bush Industries Sdn Bhd
- 4) Danfoss Industries Sdn Bhd
- 5) Truwater Cooling Towers Sdn Bhd
- 6) Johnson Controls – York
- 7) MayAir Manufacturing (M) Sdn Bhd
- 8) American Air Filters Manufacturing Sdn Bhd
- 9) Japan Air Filters Manufacturing (M) Sdn Bhd
- 10) Johnson Controls – HITACHI Air Conditioning
- 11) Carrier Malaysia Sdn Bhd
- 12) TROX Malaysia Sdn Bhd
- 13) CAMFIL (M) Sdn Bhd
- 14) RICWIL (Malaysia) Sdn Bhd
- 15) Grundfos Pumps Sdn Bhd
- 16) ADF Technology Sdn Bhd
- 17) InviroTech Systems Sdn Bhd
- 18) Kruvent Industries Sdn Bhd
- 19) SystemAir Sdn Bhd



Graphic prepared by TS Lim



ASHRAE Distinguished Lecture Programme

EVENTS & NEWS



ASHRAE Malaysia Chapter organized another ASHRAE Distinguished Lecture Programme on 20 April 2023 successfully. *Decarbonization with Energy Conservation* was the focus of this programme and conducted by PE. Doug Cochrane, ASHRAE Distinguished Lecturer, and Ir. Pua Ching Tian. A total of 30 participants attended this programme.







BEM CPD CREDITS APPLIED

Decarbonization With Energy Conservation

SPEAKERS:



Doug Cochrane
ASHRAE Distinguished Lecturer



Ir. Pua Ching Tian
Founder of KVA Consult

"The 12th Malaysia Plan (12MP) 2021-2025 guided by the pillars of sustainability (economy, social and environment) aims to achieve net-zero greenhouse gas (GHG) emissions by as early as 2050". A typical office building HVAC system accounts for approximately 40% of total building energy consumption, therefore reducing HVAC energy use is one of the most important and urgent steps we can take to decarbonize our buildings. ASHRAE Distinguished Lecturer Doug Cochrane will be speaking on Building Decarbonization – an Introduction and then on ASHRAE Building EQ, which is the pathway for compliance to GBI (Green Building Initiative) Green Globes building certification. For ASHRAE Building EQ, he will give you an overview of the portal, recent changes made including the carbon score, and what are the plans are moving forward. If your focus is on hospitals, then you are in luck because we have Ir Pua who is here to help you on all the intricacies related to designing an energy efficient hospital. Don't miss this full day seminar, packed with useful knowledge and up to date information on energy efficient building design and requirements.

ASHRAE Members : RM 200.00
IEM / PAM / ACEM / MGBC Member : RM 250.00
Public : RM 300.00

8.30 AM - 5 PM
Venue : ASHRAE Malaysia Chapter
Unit 518 Block A Kelana Business Centre, 97,
Jalan SS 7/2, SS7, 47301 Petaling Jaya, Selangor

[Registration Link](#)

20
APR
2023

Mr. Tee Tone Vei, President Elect of ASHRAE Malaysia Chapter attended the soft launch of Engineer & MARVEX 2023 on 22 March 2023 at KLCC Convention Centre. In conjunction with the exhibition to be held on 6-9 September 2023, ASHRAE Malaysia Chapter will organize a conference on *Building Decarbonization – Journey to Zero*.



New Publication from ASHRAE

EVENTS & NEWS



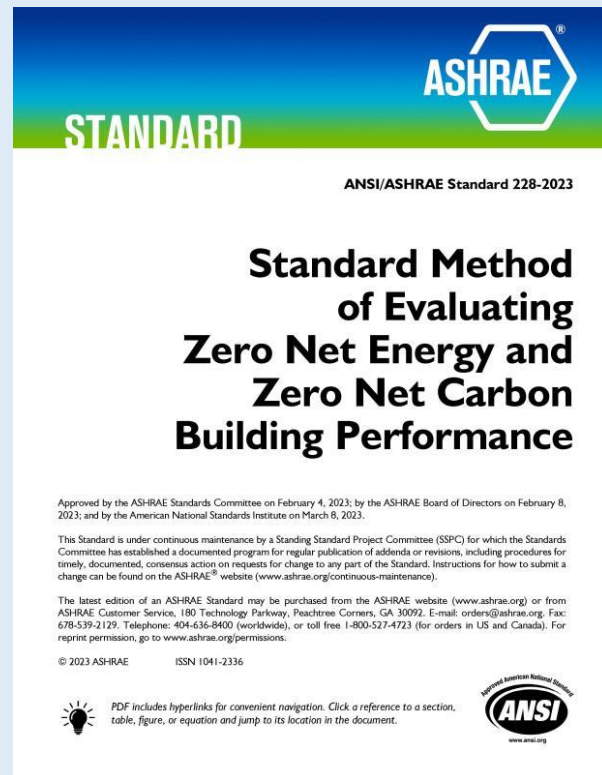
Exciting news! ASHRAE has just published the first net zero energy and net zero carbon standard, providing much-needed guidance on how buildings can achieve net zero carbon or net zero energy operations.

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

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

GAC Report

GOVERNMENT
AFFAIRS



Event : Forum Bersama Pengerusi Jawatankuasa Pembangunan Standard (SDC)
Organisation : Standards Malaysia, Ministry of International Trade and Industry, Malaysia
Date & Time : 7 November 2022, 8:00 a.m. – 1:00 p.m.
Venue : Hotel Sama-Sama KLIA
MASHRAE Reps: Tee Tone Vei and Ir. Chen Thiam Leong

Agenda

1. Feedback on standard development processes from experts.
2. Explanation on JSM new system including MySQL, budget, ExpertKit, etc.
3. Other requests from experts for process improvement.

Report

The meeting includes all TC groups under NSC 19, various presenters from Department of Standards Malaysia (JSM) presented annual updates of the accomplishments from this NSC group, and new changes, updates & improvements on the standard writing and management processes & tools, budget allocation included. The meeting further open to forum discussion between JSM and the experts, proposing idea future improvements to the above processes, clarification on the budgets allocated, and ended with a list of suggestions.

Reported by : Tee Tone Vei



GAC Report

GOVERNMENT
AFFAIRS



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

Organisation : Department of Environment (DOE)

Date & Time : 15 February 2023, 9:00 a.m.– 4:30 p.m.

Venue : The Waterfront Hotel, Kuching, Sarawak

MASHRAE Reps: Chea Suei Keong, Ts. Ng Wen Bin, Dr. King Yeong Jin, Chew Soon Jin, Dr. Victor Bong, Christopher Jantai Boniface & Rafal Lulko.

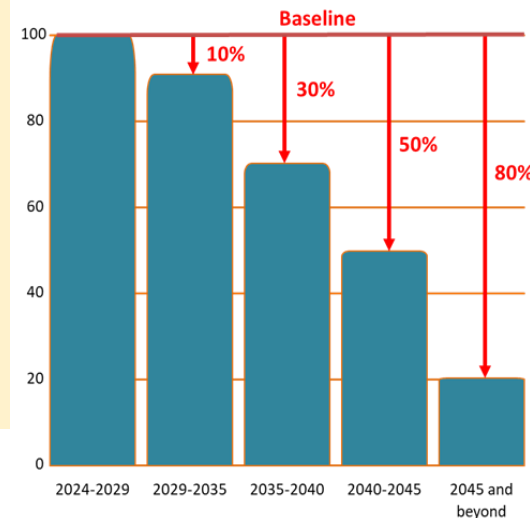
Govt. Reps : (1) Department of Environment (DOE) - Mr Ryan Ooi Chean Weai, Ms Amy Charlene Wong. (2) JKR Sarawak. (3) Sarawak Energy Commission: Mr Ryan Ooi Chean Weai, Ketua Pengarah Kanan, DOE.

Other Attendees: Sarawak Shell; Petronas.

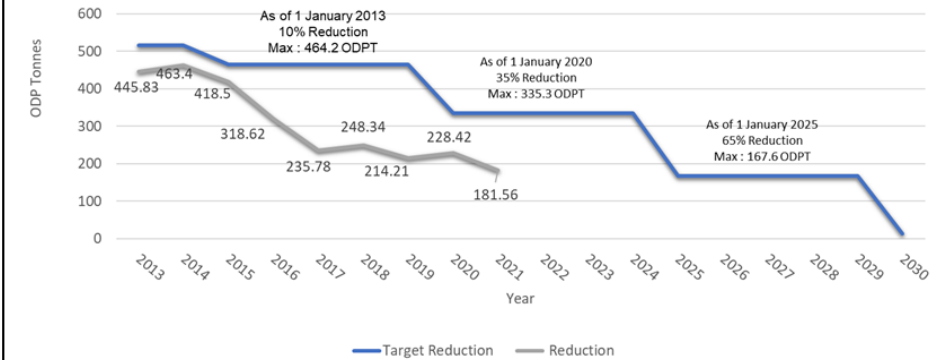
Report

The purpose of the Roadshow was for Department of Environment (DOE) Malaysia to disseminate the latest updates, policies, regulatory guidelines and action plans on Montreal Protocol and Kigali Amendment to the HVACR Industries.

Reported by : Chea Suei Keong



Montreal Protocol: HCFC Phase Out Management Plan



Kigali Amendment: HFC Phase Down Implementation Plan →

GAC Report

GOVERNMENT AFFAIRS



Event : National Consultation Workshop for KIP Preparation
 Organisation : Department of Environment (DOE) and The World Bank
 Date & Time : 6 March 2023, 9:00 a.m. – 1:30 p.m.
 Venue : Cyberview Resort & Spa + Zoom (Hybrid session)
 MASHRAE Reps: Chea Suei Keong, Ir. Chen Thiam Leong and
 Ts. Ng Wen Bin (Zoom)

Other Attendees:

Mr Yasuhiko Matsuda (Representative to Malaysia and Country Manager - World Bank Group), Ms Mary-Elleb Foley (The World Bank)
 Mr Peter Ho Yueh Chuen (Principal Consultant, Tri-EcoEdge Sdn Bhd)
 Mr Erik Pedersen and Dr Viraj Vithoontien (The World Bank)

Agenda

Kigali Implementation Plan (KIP) Preparation for Malaysia

Report

World Bank will support Malaysia KIP by providing funds through Multilateral Fund (MLF) to supports the action plans. Tri-EcoEdge Sdn Bhd shared the latest National Survey Findings. World Bank presented the factors to consider in alternative choices: Dr Viraj presented Malaysia's Kigali Baseline, application to all sectors mentioned, proposed KIP Strategy and Quota Management.

Reported by Chea Suei Keong

Preparation of Kigali Implementation Plan

Upgrade licensing system for **Approval Permit** to capture the HFC imports and exports in March 2020.
 Register all HFC Importers (manufacturer, chemical supplier, etc).

Assigned HS Codes for single HFCs & HFC Blends.

Survey and update HFC data for 2019 – 2021.

Preparation of KIP Stage 1 & overarching strategy.

KIGALI IMPLEMENTATION PLAN (KIP)

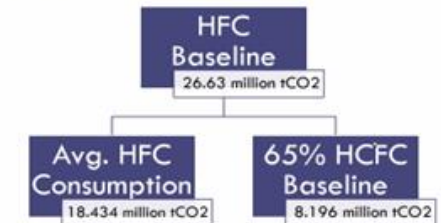
- The World Bank is the implementation agency (IA) to assist Malaysia to prepare KIP.
- National Data Survey Update is completed by the appointed consultant, Tri EcoEdge Sdn Bhd.
- The survey data will be used in preparing for the overarching and Stage I (2024 – 2029) Plan & Strategy.
- Identify the priority sector and investment project.
- The KIP is expected to be finalized in April 2022.

Import Data – Survey Vs Customs (2018-2021)

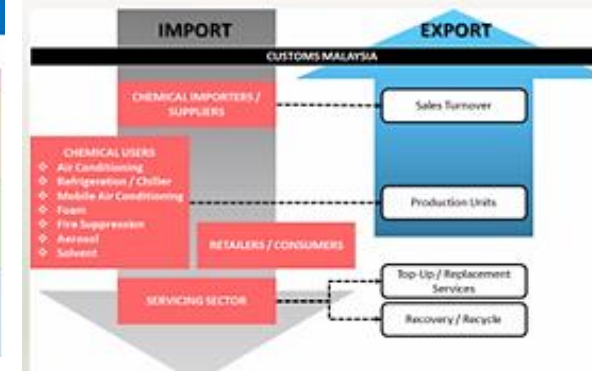
	2018	2019	2020	2021
Survey Data (kg)				
Total	8,539,678.90	8,503,422.86	9,478,463.08	9,478,705.50
Chemical supplier	7,132,119.90	7,353,280.86	8,491,983.08	8,564,309.50
Other importers	1,407,559.00	1,150,142.00	986,480.00	914,396.00
Customs Data (kg)				
Total	7,499,544.75	9,063,891.16	9,848,335.25	9,792,917.32
Chemical supplier	6,011,278.17	7,425,246.48	8,603,647.00	8,314,050.12
Other importers	1,488,266.58	1,638,644.68	1,244,688.25	1,478,867.20
Difference (%)				
Total	12.18%	-6.50%	-3.90%	-3.31%
Chemical supplier	15.72%	-0.98%	-1.31%	2.92%
Other importers	-5.73%	-42.47%	-26.17%	-61.73%



Malaysia's Kigali Baseline



Material flow pathway



Event : Ozone2Climate Technologies in Refrigeration and Air-Conditioning Sector

Organisation : Department of Environment (DOE)

Date & Time : 16 March 2023, 9:00 a.m. – 4:30 p.m.

Venue : The Hilton Hotel, Kota Kinabalu, Sabah

MASHRAE Reps: Chea Suei Keong, Ts. Ng Wen Bin, Dr. King Yeong Jin, Ir. Chen Thiam Leong, & Dr. Victor Bong

Govt. Reps : (1) Department of Environment (DOE) - Mr Ryan Ooi Chean Weai, Cik Nurul Erda Wanie binti Mohd Anas. (2) JKR Sabah. (3) Ministry of Health Sabah.

Other Attendees: Consultants, Contractors, Building Operators/Owners, Suppliers, Manufacturers, Lecturers, Students and Others.

Agenda : National roadshow to disseminate information on ozone to climate change technologies

Report

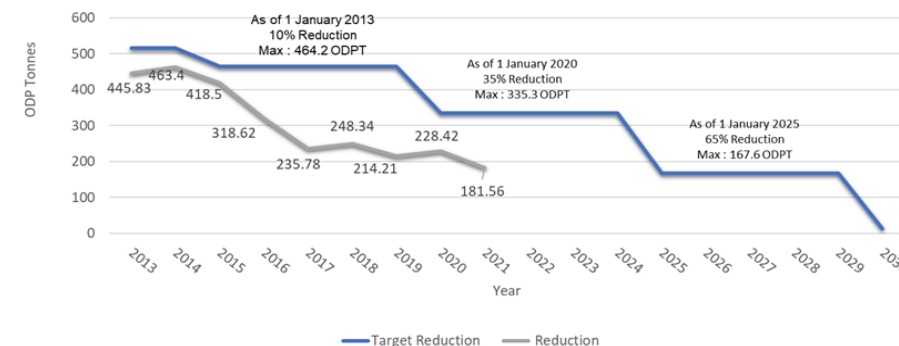
Department of Environment (DOE) holding a forum with HVACR Industries to disseminate information regarding HPMP Implementation in Malaysia under the heading of OZONE2CLIMATE TECHNOLOGIES IN REFRIGERATION AND AIR CONDITIONING SECTOR.

Montreal Protocol: HCFC Phase Out Management Plan:

- Technology transfer investments
- Policies and regulations
- 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



Event	: National Energy Award (NEA) 2023
Organisation	: Malaysia Green Technology and Climate Change Corporation
Date	: 23/3/2023, 2.30 - 4.30pm
Venue	: NRECC Office at Wisma Sunber Asli, Putrajaya
MASHRAE Reps	: Ir. Chen Thiam Leong
Other Organisations	: NRECC officials, MOF rep, MGTCC staff and the 3 head judges of NEA 2023

Agenda

To brief the Deputy Sec Gen of NRECC on the results of NEA 2023 for his endorsement and approval of AEA 2023 candidates.

Report

Ir. Chen presented the judges' selection of winners for the categories of EE Designated Buildings, Tropical Buildings, Retrofitted Buildings, Green Buildings, Zero Energy Buildings and Energy Performance Contracts. He followed up with the judges' recommendation on improvements for NEA 2024 competition.

Reported by Ir. Chen Thiam Leong

Site visit: Setting Up of Furnace for MS2587-7:2015 Smoke Duct Testing

On 1 February 2023, Ir. Lam K.S. as the representative of ASHRAE Malaysia Chapter attended the testing site for the setting up of furnace for MS2587-7:2015 Smoke Duct Testing.



GAC Report

GOVERNMENT
AFFAIRS



Event : Energy Management Gold Standard (EMGS) & MyHIJAU Briefing Session

Organizer : Malaysian Green Technology and Climate Change Corporation (MGTC)

Date & Time : 5 April 2023, 9:00 a.m. – 1:30 p.m.

Venue : MGTC Resource Centre

MASHRAE Reps: Chea Suei Keong, Ir. Leong Siew Meng & Ir. Ong Ching Loon

Total attendance: 105 participants

Report:

1. Opening remark by Puan Norhasliza Mokhtar, Senior Director- Climate Action Group, MGTC.
2. Energy Management Gold Standard (EMGS) Certification under ASEAN Energy Management Scheme (AEMAS): (a) Sustainable Energy Management System (SEMS), (b) ASEAN Energy Management Scheme AEMAS), (c) Energy Management Gold Standard (EMGS).
3. EMGS Best Practice Testimonial by:
(A) Puan Norzariah Kamardin, Timbalan Pengarah Kanan, Jabatan Pentadbiran, Dewan Bandaraya Kuala Lumpur (DBKL).
(B) Ir Noor Muhammad Bin Abd. Rahman, Bahagian Perkhidmatan Kejuruteraan, Sektor Program Lestari, Kementerian Kesihatan Malaysia (KKM).
(C) Profesor Madya Dr Musthafah Mohd Tahir, Pengarah Pusat Alam Sekitar Pintar (CENSEi), Universiti Teknikal Malaysia Melaka (UTeM).
4. Taklimat Energy Management Gold Standard (EMGS) presented by Syimiullah Mohamed Gani, Executive, Green Growth Group, MGTC.

Reported by Chea Suei Keong



Leadership Recall Interview with Ir. Tan Chioo Bin

1. How did you become an engineer? Was it your childhood ambition?

I graduated from Oklahoma State University in 1996 with Bachelor of Science in Mechanical Engineering. After 10 years of practicing, I've become a Professional Engineer, Mechanical in 2006.

Yes, engineer is one of my childhood ambitions.

2. Tell us briefly of your career as an HVAC engineer.

I started my career as a project engineer with an Air-Conditioning and Mechanical Ventilation (ACMV) contractor in 1996. 3 years later, I move-on and joined another HVAC contracting company for 4 years. In 2003, an opportunity arises which I became a Director and continue for 14 years as partner and business owner in a HVAC contracting company.

In 2018, I started to involve in building's Energy and HVAC audit and become a GBI competent Commissioning Specialist until today.

3. What are your main fields of interests in HVAC engineering research and excellence?

As a HVAC project engineer, my interest is to manage and deliver project. It became very exciting and equally challenging when design changes incurred due to site constraints, I have to re-look into equipment sizing while deliver the project on schedule and within budget. In addition, I find satisfaction in carry out professional testing and commissioning to ensure quality deliverables.

After involving in GBI Commissioning Specialist, my focus expanded and very much into design reviews and systems commissioning. I helped owner to improve energy efficiency by optimizing the overall system.

(Continued to next page)



Ir. Tan Chioo Bin

Past President

Board of Governor 2022-23



Reported by

Chan Jian Wen

Historian

Leadership Recall Interview with Ir. Tan Chioo Bin

4. Can you tell us briefly what your most satisfying HVAC project is?

My most satisfying HVAC project is the Pusat Perubatan Universiti Malaya – Menara Selatan in Kuala Lumpur which was completed in 2012. It is a water-cooled chiller project with 2 nos. of 800RT chillers and 2 nos. of 400RT baby chillers for night load operation. There are 5 nos. of Operating Theatres (OT) and 5 nos. of Isolation Rooms in the project. It's the largest and complex project that I've completed so far, which I learned most detailed engineering and unique control system for the OT.

5. You have been very active in the HVAC industry over the years. How did you first become involved in the MASHRAE?

I firstly involved in MASHRAE in 2010 when Dennis Lim invited me to help him in the preparation of Souvenir Program for the Annual Dinner in 2010. Then, I continue volunteering myself and take-up the Chapter Chair for Research Promotion role in 2011, eventually I was the Chapter President for Year 2017–19.

6. You have contributed much valuable time to MASHRAE and HVAC industry? Do you think the time has been well spent? What are the benefits you have gain and the satisfaction you have derived from all these volunteerisms?

Yes, volunteerism work in MASHRAE has also enriched my leadership skills and networking in the industry.

7. Can you give some advice to those engineers and members out there who have yet to volunteer their services to MASHRAE?

Get involve, join the MASHRAE family, contribute and at the same time build your network in the industry.

(Continued to next page)

Leadership Recall Interview with Ir. Tan Chioo Bin

8. How do you think ASHRAE can contribute to society especially with issues of energy efficiency and global warming?

ASHRAE contributed to advance human well-being through research and sustainable technology, focuses on energy efficiency, indoor air quality, high performance buildings and refrigeration across the industry.

9. Are you proud of being an engineer?

Yes, I'm proud to be involved in building the HVAC industry for the country and focusing on energy efficiency to reduce the carbon footprint of the environment.

10. What is your advice for young engineers?

Work hard, love what you do and strive for excellence.

11. Finally, what advice can you give to the present and future BOGs of MASHRAE?

Continue to serve the members and promote ASHRAE Standards, Guidelines and Handbooks to meet the evolution of the industry.

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.

ANNOUNCEMENT



Another milestone achieved by ASHRAE Malaysia Chapter!

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

SmartStart Program for Graduate Member

MEMBERSHIP PROMOTION

& YEA



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**.

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

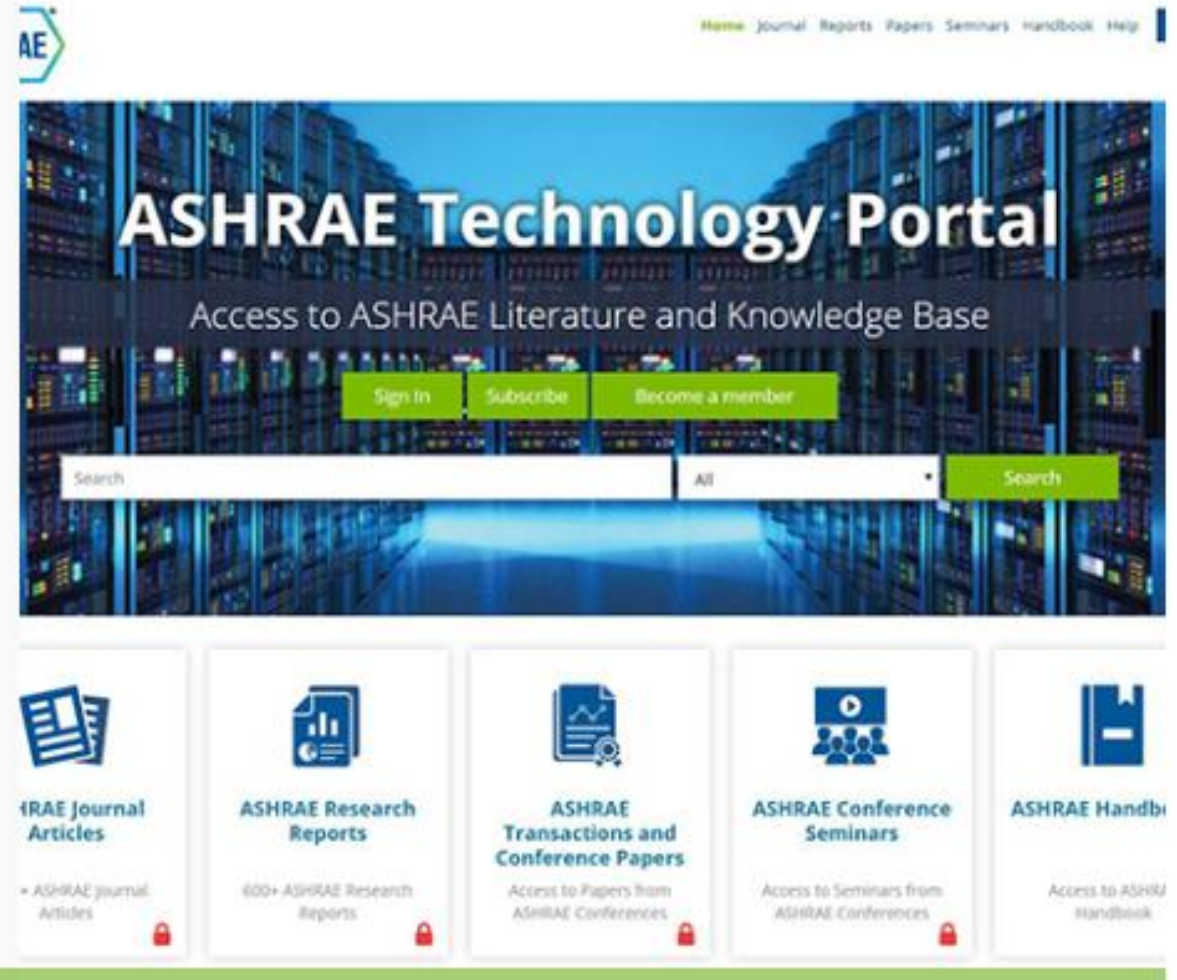
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ASHRAE Technology Portal

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

Healthier Homes During Epidemics



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.

The Strategic Guide to Commissioning



This guide, a report from the ASHRAE Presidential Ad-Hoc Committee, Building Performance Alliance on Commissioning, serves as a quality-focused, high level strategic commissioning providing stakeholders with a basis for understanding enhanced delivery of new and existing building projects. It describes the value, benefits, and rationale for verifying and documenting that all commissioned systems and assemblies are planned, designed, installed, tested, operated, and maintained to meet the Owner's Project Requirements (OPR) for new buildings and/or major renovations, and the Current Facility Requirements (CFR) for existing buildings. This guide is also available in Spanish.

ENGLISH

SPANISH

Building Our New Energy Future



Learn how you too can help Build Our New Energy Future

If you are a buildings professional, it is highly likely you will experience significant changes in your professional practice during your career. That's because a rapid evolution is underway in the electricity sector that will also have a significant impact on the buildings sector. As a critical organization for buildings professionals, ASHRAE and its members must take an active role in the ongoing changes that will create this new energy future.

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 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!



Subscribe Now
ashrae.org/901portal

View the standard and User's Manual side by side

Copy, paste and print with one click

The screenshot displays the ASHRAE Standard 90.1 Portal interface. At the top, there's a header with the ASHRAE logo and the text "Standard 90.1 Portal". Below this is a navigation bar with tabs for "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 lists "ANSI/ASHRAE/IES Standard 90.1-2016 (Supersedes ANSI/ASHRAE/IES Standard 90.1-2013)" and "Energy Standard for Buildings Except Low-Rise Residential Buildings (I-P Edition)". The right column features a large image of the "STANDARD 90.1 USER'S MANUAL" cover. Above the image, there's a callout box that says "Includes Online Access to Compliance Paths and Tools". Below the image, there's a list of features: "Examination of 90.1-2016 requirements", "Detailed, step-by-step guidance for compliance", "Model simulation of building systems", "Access to online version of the standard and manual", and "Model performance and verification".

What do we have at ASHRAE eLearning?

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eLearning

The Complete HVAC&R Learning Experience

Virtual Learning for Your Team
Affordable, Convenient, Effective!

ASHRAE Group Discounts Available

The advertisement features a group of diverse professionals smiling and working together in a modern office setting. The text "Virtual Learning for Your Team" is prominently displayed in blue, followed by "Affordable, Convenient, Effective!" in a lighter blue. At the bottom, the ASHRAE logo is on the left and "Group Discounts Available" is on the right.

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.
- **Easy Administration:** No special software required. Transcripts maintained automatically. Free tracking reports.
- **Affordable:** Reasonably priced. Save even more with group discounts.

Discounts Available

Group Size	ASHRAE Chapter Groups
5-10 users	10% Off Member Price
11-19 users	15% Off Member Price
20-49 users	20% Off Member Price

There are 250 hours of training available, and more to come!

For a complete catalog of ASHRAE eLearning, visit elearning.ashrae.org

For more information contact elearning@ashrae.org or 678-500-3917

Online Reading-Only-Version of Latest ASHRAE Publications is Available ! (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 [Recently Added]
- 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 ! (2/2)

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

Standards Available:

- Standard 90.1-2019, I-P version, Energy Standard for Buildings Except Low-Rise Residential Buildings
- 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 211-2018, Standard for Commercial Building Energy Audits



Some Standards
with latest
version of 2022

Your (NEW!) Membership Benefits

A NEW selection of complimentary ASHRAE products is now available to new and renewing, full dues paying Member and Associate grade members.



Renew your ASHRAE membership today at ashrae.org/renew.

(Continued to next page)

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7



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