

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

Ir. Lam Kim Seong

* * * * *

MASHRAE Secretariat:

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



President's Message



Tee Tone Vei
President
ASHRAE
Malaysia Chapter
(2023-2024)

Greetings,

As we embark on the new chapter of the 2023-2024 ASHRAE Malaysia journey, I extend my heartfelt gratitude to all our esteemed members. It is with great honor and enthusiasm that I assume the role of Chapter President for the upcoming year, and I am thrilled to continue collaborating with each one of you in our collective mission to advance the fields of heating, ventilation, air conditioning, refrigeration, and their related disciplines throughout Malaysia.

The onset of this new society year presents us with an array of challenges, particularly in the aftermath of the COVID-19 pandemic. We find ourselves grappling with the far-reaching consequences of the climate crisis and the global energy dilemma. Nevertheless, I hold a steadfast belief that by uniting our efforts, we can surmount these challenges and forge a more sustainable and healthier built environment for all.

Inspired by the thematic call of ASHRAE Society Year 2023-24, "Challenge Accepted: Tackling the Climate Crisis," championed by our esteemed Society President, P.E. Ginger Scoggins, we recognize that we stand at a critical juncture. The climate crisis looms ominously, necessitating immediate action to avert calamity. Our built environments bear a substantial responsibility in this crisis, accounting for nearly 40% of global energy consumption and greenhouse gas emissions. In my capacity as ASHRAE Malaysia Chapter President for the 2023-2024 society year, I issue a challenge to all our members: embrace the duty of addressing the climate crisis. We possess the expertise and knowledge to conceive and refurbish energy-efficient, sustainable buildings. It is our duty to disseminate this knowledge and collaborate in the pursuit of a more sustainable future, not only for Malaysia but for the world at large.

(Continued on next page)



President's Message (Cont'd)

Our commitment remains unwavering. We are dedicated to providing our members with essential resources and support required to excel in this endeavour. So, do anticipate technical seminars and workshops, which will be organized, focusing on sustainable design, energy efficiency, and indoor air quality. Our network will thrive with opportunities to connect and interact with fellow ASHRAE members who share a fervent commitment to driving a meaningful and beneficial changes to our built environment.

With great confidence, I foresee the 2023-2024 ASHRAE Malaysia Chapter year as one of immense success and productivity. Together, we will transform this vision into a reality. In closing, I extend my heartfelt appreciation to the outgoing Board of Governors for their unflagging dedication and hard work. Their support and guidance are invaluable as I assume the mantle of Chapter President.



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: Ir. 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

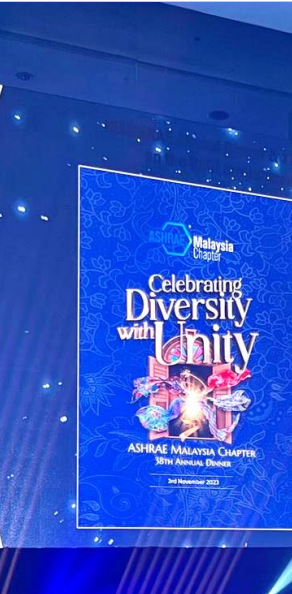
ANNOUNCEMENT



Kuching Section		Student Branch Advisors	
Section Chairman: Mr. Rafal Lulko		Dr. Chew Bee Teng (University Malaya)	
Technology Transfer Chair: Dr. Bong Nee Shin, Victor		Ir. Ts. Assoc Professor Dr. Bernard Saw Lip Huat (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)	
Section MP Chair: Mr. Jack Ng		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 Choong		Ir. Low Han Guan, Den	
Regional Vice Chair Research Promotion : Mr. Chea Suei Keong		Mr. Lim Tiong San	
Regional Nominating Committee : Ir. Low Han Guan, Den (Alternate)		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 Choong	Ir. Chen Thiam Leong
Ms. Nurfattma Erniey Idayu		Ir. Ong Ching Loon	

38th Annual Dinner – 3 November 2023

EVENTS & NEWS



ASHRAE Malaysia Chapter 38th Annual Dinner

EVENTS & NEWS



ASHRAE MALAYSIA CHAPTER



Souvenir Programme

IN CONJUNCTION WITH
17th ASIA PACIFIC CONFERENCE ON BUILT ENVIRONMENT (APCBE)

FRIDAY | 3RD NOV 2023

CELEBRATING DIVERSITY WITH UNITY



Platinum Sponsors

1. Daikin Group of Companies
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3. Camfil Malaysia Sdn Bhd
4. Mayair Manufacturing (M) Sdn Bhd

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1. Panasonic Malaysia Sdn Bhd

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7. TROX Malaysia Sdn Bhd
8. Bitzer (South East Asia) Sdn Bhd
9. Pascal Engineering Sdn Bhd
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Celebrating
Diversity
with
Unity

Appreciation of Sponsors at 38th Annual Dinner – 3 November 2023

EVENTS & NEWS



GOLD SPONSOR



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BRONZE SPONSORS

BAC MALAYSIA SDN BHD
DANFOSS INDUSTRIES SDN BHD
DUNHAM-BUSH SALES & SERVICES SDN BHD
INTRIX RENEWABLE SDN BHD
KINGSPAN INSULATION PTY LTD
TIC CLIMATE SOLUTIONS MALAYSIA SDN BHD
TROX MALAYSIA SDN BHD
BITZER (SOUTH EAST ASIA) SDN BHD
PASCAL ENGINEERING SDN BHD
TRUWATER COOLING TOWER SDN BHD

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

EVENTS & NEWS



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.

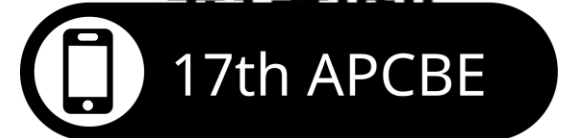
WHO SHOULD ATTEND

ASHRAE Malaysia Chapter welcomes designers, researchers, academic professionals and practitioners in disciplines associated with building engineering. The official language of

CONFERENCE CONTACT INFORMATION

Website: <https://www.ashrae.org.my>

Email: apcbemalaysia2023@gmail.com



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

EVENTS & NEWS



Operation & Maintenance of Air-Conditioning And Mechanical Ventilation (ACMV) Competency Course – 24-25 June 2023

EVENTS & NEWS



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:



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:



EVENTS & NEWS



Chapter Technology Transfer Committee has had a hectic schedule organising the following courses and seminars:

1. SEDA ACMV course on 5-6 July 2023.
2. Construction Law on 28 August 2023.
3. Conference at ENGINEERS 2023 on 7 September 2023.
4. SEDA ACMV course on 19-20 September 2023.
5. SEDA ACMV course on 8-9 November 2023.



2023 26th ASHRAE Region XIII CRC @ Taichung, Taiwan

ASHRAE Region XIII held the 26th Chapters Regional Conference (CRC) 2023 on 18-19 August 2023 in Taichung, Taiwan. Regional Officers, Delegates and fellow participants from Region XIII attended this first face-to-face event after the pandemic period. ASHRAE Taiwan Chapter as the host of this event planned the conference agenda inclusive of: CRC Business Session 1 and 2, Committee Workshops, technical seminar, banquet dinner and Regional Planning Meeting 1. ASHRAE Taiwan Chapter also planned various programs for fellow participants inclusive of Welcome Reception, spouse tour program, student technical visit tours and golfing outing.

ASHRAE Malaysia Chapter won the best Historian Poster design award. The poster was prepared by Ms. Irin Kang, Chapter Historian Chair.



2023 26th ASHRAE Region XIII CRC @Taichung, Taiwan

EVENTS & NEWS



2023 26th ASHRAE Region XIII CRC @Taichung, Taiwan

EVENTS & NEWS



YEA Chair, Denise Lim reported the YEA workshop conducted by Lucas Lam at the CRC on 19/08/2023.



Denise Lim reported the SA workshop conducted by Prof. Fu-Jen Wang at the CRC on 19/08/2023.



Keith Leow reported the workshop conducted by Sivakumar Gadam, RVC-CTTC at the CRC on 19/08/2023.



Alvin Chan reported the RP workshop conducted by Chea Suei Keong, RVC-RP at the CRC on 19/08/2023.

Conference on Building a Sustainable World : Towards Net-Zero Energy & IAQ Advancement

EVENTS & NEWS



ASHRAE Malaysia Chapter Conference

**Building a Sustainable World:
Towards Net-Zero Energy
& IAQ Advancement**

Topic 1:
ASHRAE Standard 241 to
Reduce the Risk of Disease
Transmission in Indoor Spaces

Topic 2:
V in HVAC – Energy
Efficient HVAC
Systems Design

Topic:
Net zero by 2050

TANG CHEE KHOAY
Principal, CK at Work Sdn Bhd

DR. MARWA ZAATARI, PH.D.
Chief Science Officer at D ZINE Partners;
co-Chair of Environments Systems Advisory Board;
A Great Distinguished Lecturer

7 SEPT 2023 (THURS) **9AM – 5PM**

**CONFERENCE HALL 1,
KUALA LUMPUR CONVENTION CENTRE**

SIGN UP TODAY

Held Concurrently with:
ENGINEER
An Event of **SIEM CONVENTION**

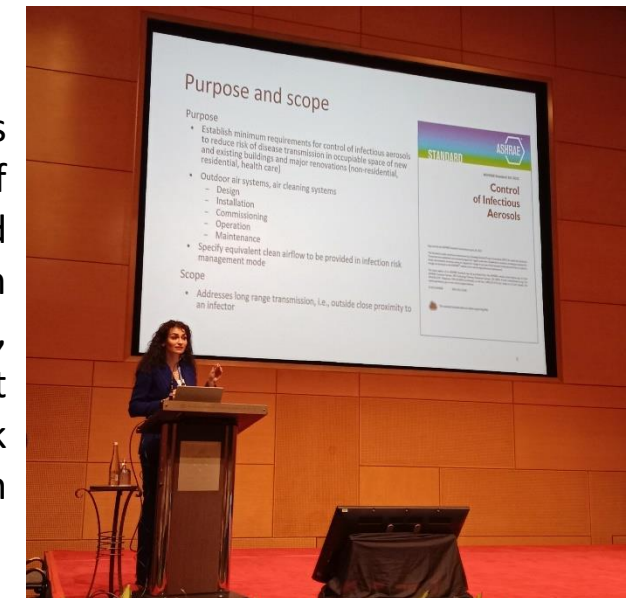
6 > 9 KLCC
SEPT 2023
10AM > 6PM
KL CONVENTION
CENTRE, MALAYSIA

REGISTER HERE
This conference is
BEM CPD Hours applicable

In conjunction with the ENGINEER and MARVEX 2023 which held at the KL Convention Centre (KLCC), ASHRAE Malaysia organized a conference entitled *Building a Sustainable World: Towards Net-Zero Energy & IAQ Advancement* on 7 September 2023.

The world must achieve Net Zero by 2050 to stabilize our climate. Topic 1 discussed the areas that we could initiate a tangible roadmap that can be implemented by every one of us today and at a lower cost than business-as-usual.

ASHRAE Standard 241, Control of Infectious Aerosols establishes minimum requirements for many aspects of air system design, installation, operation, and maintenance to reduce the risk of disease transmission by exposure to infectious aerosols in new buildings, existing buildings, and major renovations. Important aspects of the standard include infection risk management mode, requirements for equivalent clean airflow rate, requirements for use of filtration and air cleaning technology, planning and commissioning.



Student Activities held by ASHRAE Malaysia Student Branch: UTAR Conventus Networking Night

STUDENT ACTIVITY



UTAR Conventus Networking Night was held on 12 July 2023.



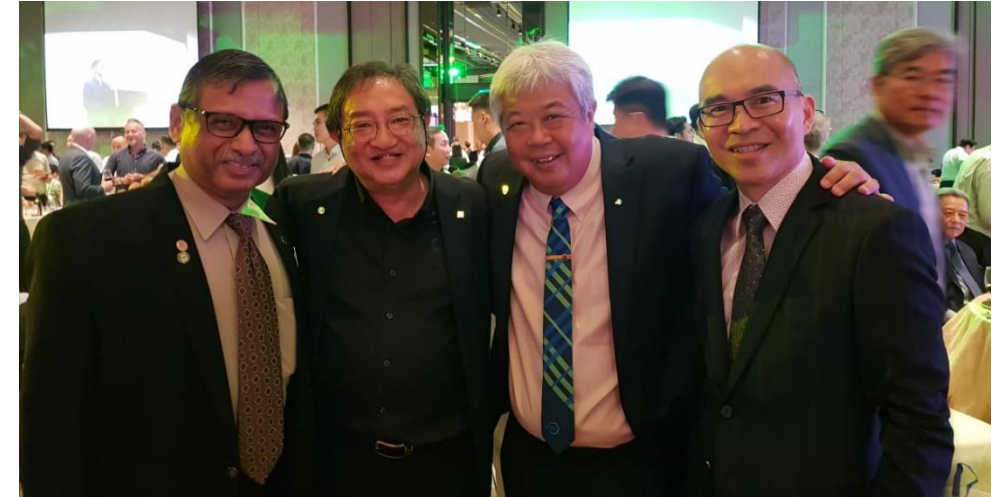
UTAR Student Branch conducted its annual meeting on 21 July 2023.

ASHRAE Singapore Chapter Annual Dinner

EVENTS & NEWS



The ASHRAE Singapore Chapter 41st Annual Dinner was a prestigious event with the theme Shanghai Night. The event was held on 3rd August 2023. It was a night of celebration, networking, and fellowship for the building engineering community.



National Energy Efficiency Action Plan (NEEAP) 2.0 Kickoff Workshop

EVENTS & NEWS



National Energy Efficiency Action Plan (NEEAP) 2.0 Kickoff Workshop was organised by Suruhanjaya Tenaga on 27 July 2023 & Focus Working Group Workshops #1 on 4-5 October 2023.





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.

- BOG Meeting #1 held on 19 July 2023
- BOG Meeting #2 held on 15 August 2023
- BOG Meeting #3 held on 20 September 2023

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



GAC Report – ACMV Training Course (Supported by SEDA)

GOVERNMENT
AFFAIRS



Event : Energy Efficiency Management For Air-Conditioning And Mechanical Ventilation (ACMV) 2-Day Training Course (Supported by SEDA)

Organisation : ASHRAE MALAYSIA CHAPTER

Date & Time : 5-7 July 2023, 8:30 a.m. – 5:30 p.m.

Venue : ASHRAE MALAYSIA CHAPTER Secretariat

MASHARE Reps: Ir. Ng Yong Kong, Ir. Chen Thiam Leong

Total : 22 participants

Report : MASHRAE team conducted a training course (supported by SEDA) and attended by 22 participants from building operators/engineers.

Reported by : Chea Swei Keong / Leow Chee Huan, Keith (CTTC Chair)



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

ORGANISED BY :



SUPPORTED BY :



HRDCorp Claimable:



GAC Report – 64th IEM Annual Dinner

GOVERNMENT
AFFAIRS



Event : 64th IEM Annual Dinner

Organisation : The Institute of Engineers, Malaysia (IEM)

Date & Time : 7:30 p.m. – 11:00 p.m.

Venue : One World Hotel

MASHRAE Reps: Tee Tone Vei, King Yeong Jin, Kozen Law, Jeffrey Lim, Tan Chooi Bin, Chen Thiam Leong, Leong Siew Meng, Alvin Chan, Khoo Chun Yong, Hui Kar Hoou, Ng Yong Kong and Irin Kang

Report : IEM Annual Dinner, an occasion where most of the NGOs mingled and touched bases with each others. The VIP guests attended were Deputy Prime Minister, YAB Dato' Sri Hj Fadillah Yusof and Minister of Works, Malaysia, YB Dato Sri Alexander Nanta Linggi.

Reported by : Chea Swei Keong



GAC Report – 6th East Asia Energy Forum at Bali

GOVERNMENT
AFFAIRS



Event : The 6th East Asia Energy Forum
- The Future of Energy: Decarbonizing the Final Consumption

Organisation : Economic Research Institute for ASEAN and East Asia (ERIA)

Date & Time : 21 August 2023, 9:00 a.m. – 4:30 p.m.

Venue : Hybrid event; the forum was held at Nusa Dua Convention Center, Bali, Indonesia

MASHRAE Reps: Ir. Leong Siew Meng

Report: This year ERIA held the 6th forum in Bali, Indonesia under the ASEAN Energy Business Forum (AEBF) in collaboration with the Minister of Energy and Mineral Resources, Indonesia. The 6th forum brought together experts from companies in industry, transport, and residential-commercial sectors focusing on the ASEAN region to discuss decarbonisation.

The 6th East Asia Energy Forum was opened by the Minister of Energy and Mineral Resources, Indonesia, and the Secretary General of ASEAN. The Minister of Natural Resources, Environment and Climate Change, Malaysia, Y.B. Mr. Nik Nazmi bin Nik Ahmad gave a keynote address to the forum.

Reported by : Leong Siew Meng / Chea Swei Keong



GAC Report – World Ozone Day

GOVERNMENT
AFFAIRS



Event : World Ozone Day

Organisation : Department of Environment, Malaysia

Date & Time : 3 October 2023, 9:00 a.m. – 4:30 p.m.

Venue : M Resort Hotel, Bukit Kiara

MASHRAE Reps: Chea Suei Keong & Ts Ng Wen Bin with MASHRAE Display Booth

Report: Department of Environment hosted the Ozone Day event at M Resort Hotel, Bukit Kiara. Opening remark by YBhg. Dato' Wan Abdul Latiff bin Wan Jaffar, Director of Department of Environment. Key Note Speech by YBhg. Dato Mohamad Razif bin Haji Abd Mubin, Deputy Secretary General of Ministry of Natural Resources, Energy and Climate Change.

Technical session addressed the theme of “Montreal Protocol: Fixing the Ozone layer and reducing Climate Change”. Three topics were presented, as follows:

1. Protecting Earth's Ozone Shield: Advances in Ozone Layer Monitoring and Preservation, presented by En Ambun Bindang, Meteorology Department of Malaysia.
2. The Role of GHGs Emissions towards Climate Change, presented by Dr Mohd Shahrul Mohd Nadzir, Universiti Kebangsaan Malaysia (UKM).
3. Efficient Management of Electrical Energy, presented by Pn Syafiqah binti Nazmi, Suruhanjaya Tenaga (ST).

Reported by : Chea Suei Keong



GAC Report – National EE Action Plan Workshops

GOVERNMENT
AFFAIRS



Event : National Energy Efficiency Action Plan 2.0 Study Focus Working Group Workshops

Organisation : Suruhanjaya Tenaga (ST)

Government Agency: Ministry of Natural Resource, Energy and Climate Change (NRECC)

Date & Time : 9:00 a.m. – 5:00 p.m.

Venue : Bangi Resort Hotel

MASHRAE Reps : Ir. Chen Thiam Leong, Chea Suei Keong, Ts. Ng Wen Bin, Ir. Ong Ching Loon, and Ir Leong Siew Meng

Report : The current National Energy Efficiency Action Plan 1.0 (NEEAP1.0) entered the last phase, and Suruhanjaya Tenaga was tasked to prepare for the next 10 years Action Plans to help Malaysia Energy Users to efficiently utilise energy.

Under the Development and Study of National Energy Efficiency Action Plan 2.0 (NEEAP2.0), Suruhanjaya Tenaga (ST) commenced the series of Focus Working Group for Industrial, Commercial and Residential Sectors. The purpose was to get Stakeholders, identified by ST, to propose Initiatives and Action Plans to be implemented during the period of 2026 to 2035.

Focus Working Group (FWG-1) Industrial Sector held the first workshop on 4 October 2023 at Bangi Resort Hotel. 20 Stakeholders were invited by ST and a total of 18 Stakeholders attended. FWG-2 Commercial Sector had their first workshop on 5 October at Bangi Resort Hotel. 24 Stakeholders were invited by ST and a total of 21 Stakeholders attended.

The tasks of the Focus Working Groups for both the industrial and commercial sectors are as follows:

1. To identify the gaps and barriers in implementing the NEEAP 1.0.
2. To review the estimated impact of mandatory requirements under the EECA which encompass electrical and thermal energy consumption.

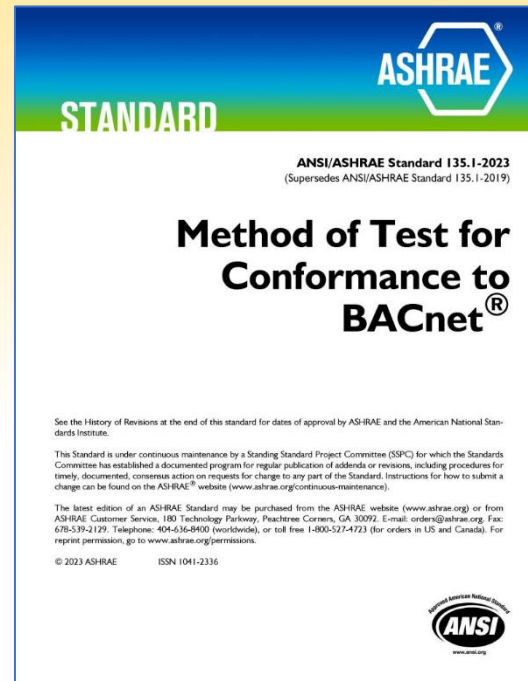
Reported by : Chea Suei Keong



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.

ASHRAE Announces 2023 Update to BACnet Method of Test! ANSI/ASHRAE Standard 135.1-2023 provides procedures and tools for validating equipment for conformance with ASHRAE Standard 135 (BACnet). Learn more and grab your copy at <https://bit.ly/3FEpmhe>!

#myashrae



Hey there HVAC enthusiasts! ASHRAE has some thrilling news to share! ASHRAE eLearning is launching its newly updated Fundamentals: HVAC Systems IP eLearning course package – your ticket to mastering the art of HVAC design, indoor air quality, ethics for professional engineers, and much more.

Ready to kickstart this HVAC adventure? Enroll at <https://bit.ly/3rUtK8m>!



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

New Publication from ASHRAE

EVENTS & NEWS



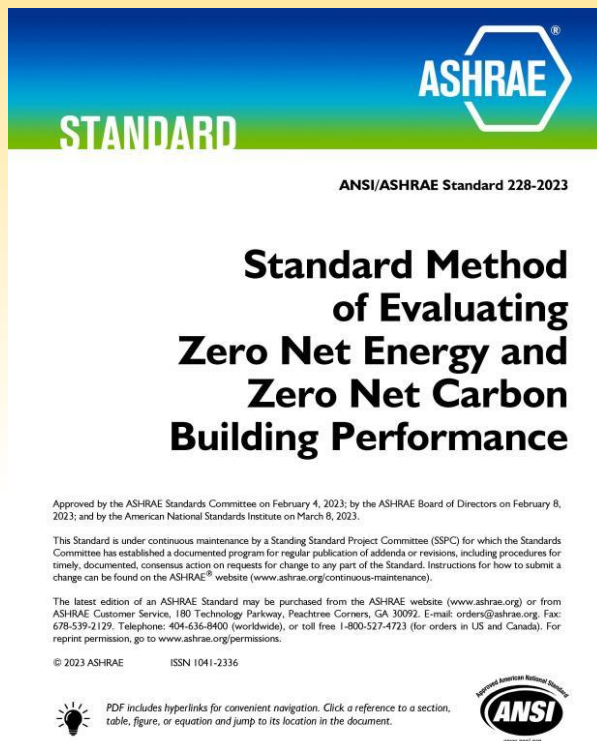
Exciting news! ASHRAE has just published the first net zero energy and net zero carbon standard, providing much-needed guidance on how buildings can achieve net zero carbon or net zero energy operations.

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

What do we have at ASHRAE The 90.1 Portal?

LIBRARY &
RESOURCES

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 \(dual units\)](#)



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

LIBRARY &
RESOURCES



[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)





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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

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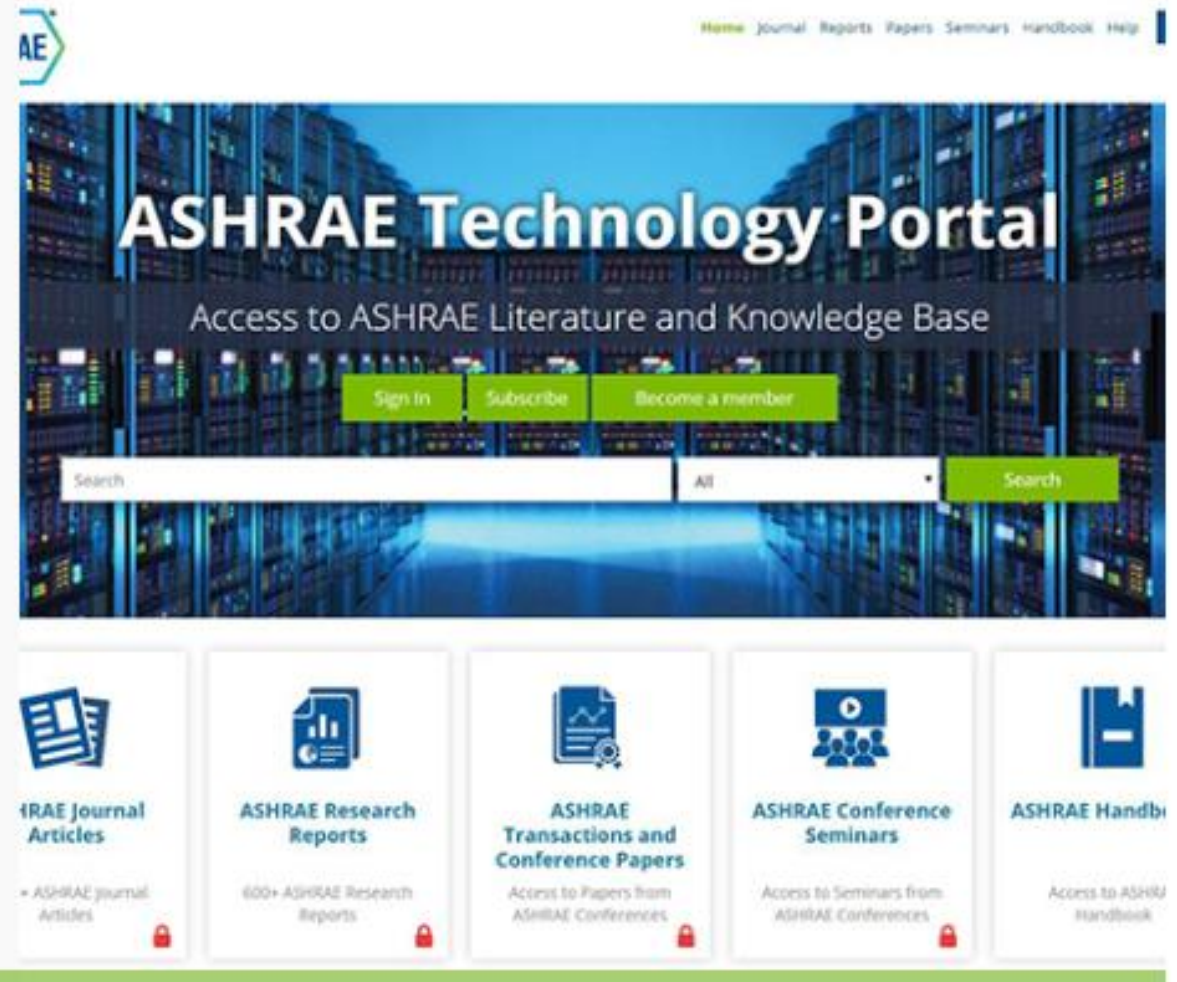
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Design Guidance for Education Facilities: Prioritization for Advanced Indoor Air Quality, Version 2.0

Newly Added

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

Developed for ASHRAE Education Facilities Committee



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).

LEARN MORE

Healthier Homes During Epidemics

Healthier Homes During Epidemics

White Paper Developed by the ASHRAE Education Facilities Committee



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.

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Resources Free to Members Only

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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.

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



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(Continued to next page)

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