



INTERNATIONAL CONFERENCE ON BUILT ENVIRONMENT AND SUSTAINABILITY: Decarbonization with Energy Efficiency



**Connexion Conference & Event
Centre, Bangsar South,
Kuala Lumpur.**



**25 October 2024
8:30AM – 5:30PM**

Jointly Organised with



More Information:
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Clean Operations

Energy Saving Initiatives

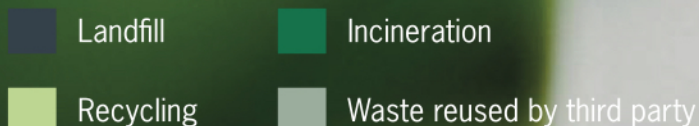
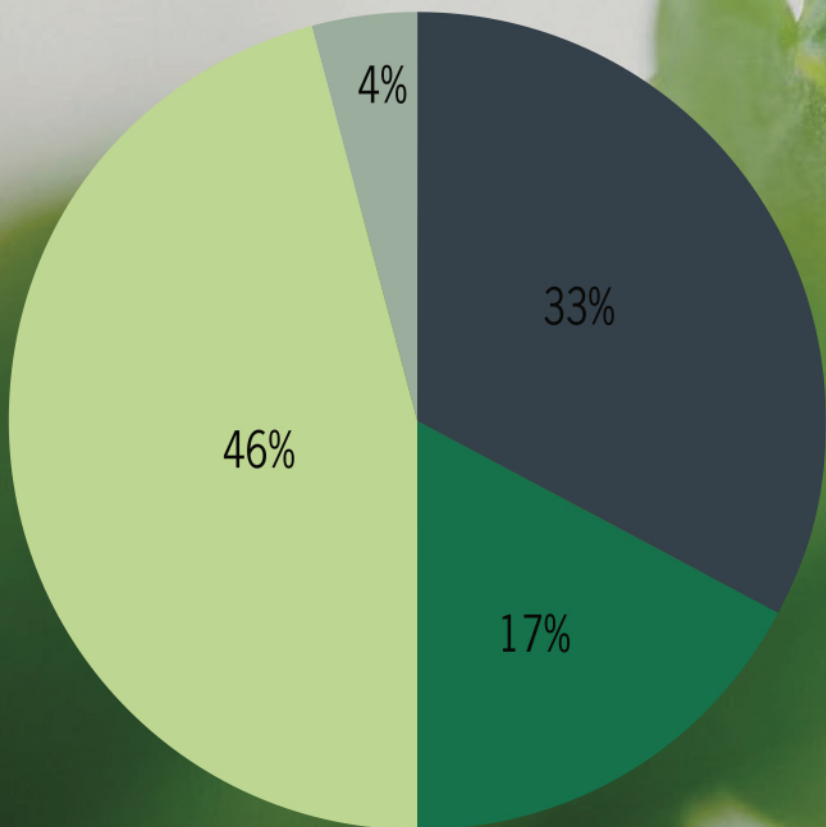
Geo-Exchange Cooling System in Ipoh, Malaysia:

In Ipoh, Malaysia, we have new production lines for media lamination that needs cooling. Instead of using a traditional electricity-powered water cooler, a geo-exchange cooling system has been installed, designed with several joined pipelines in the underground. This innovative system, utilising underground water sources, circulates naturally flowing water to cool the hot water from the production lines. The result is a substantial annual electricity saving of around 840 MWh compared to a traditional electricity-powered water cooler.

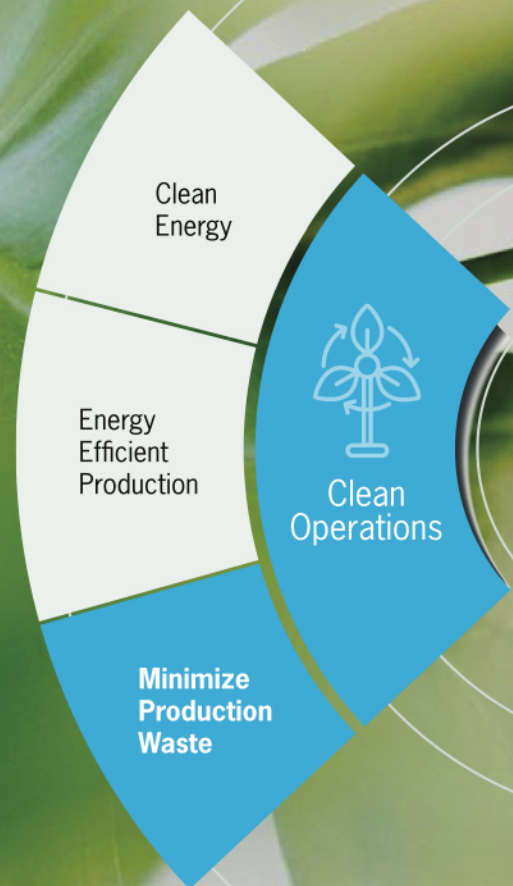


Minimise Production Waste

2023 factory waste destination



The amounts of waste reused by third party consist of coconut shell charcoal dust which is used by third party to produce e.g. briquettes.



Energy efficient solutions

Better energy rating means less energy use

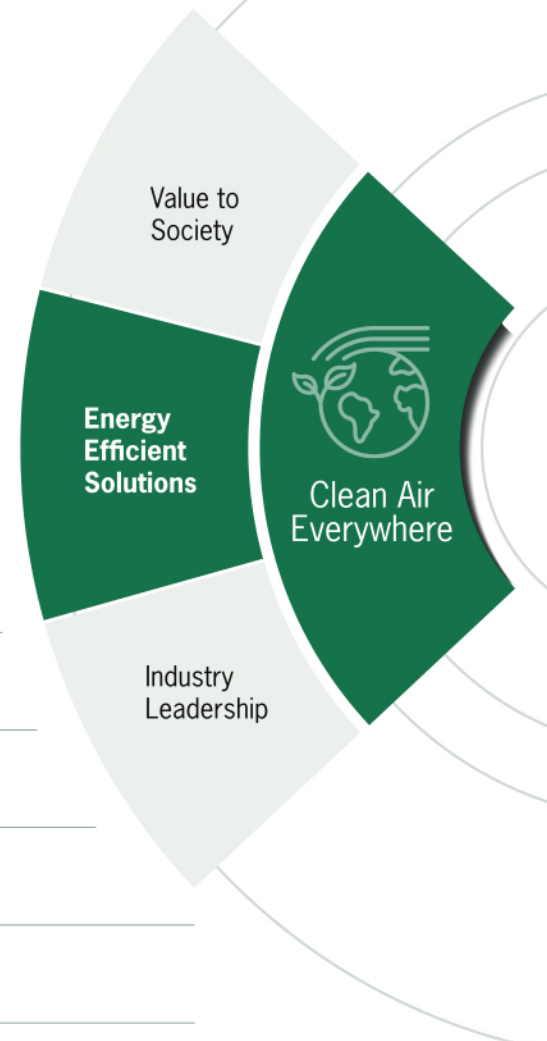
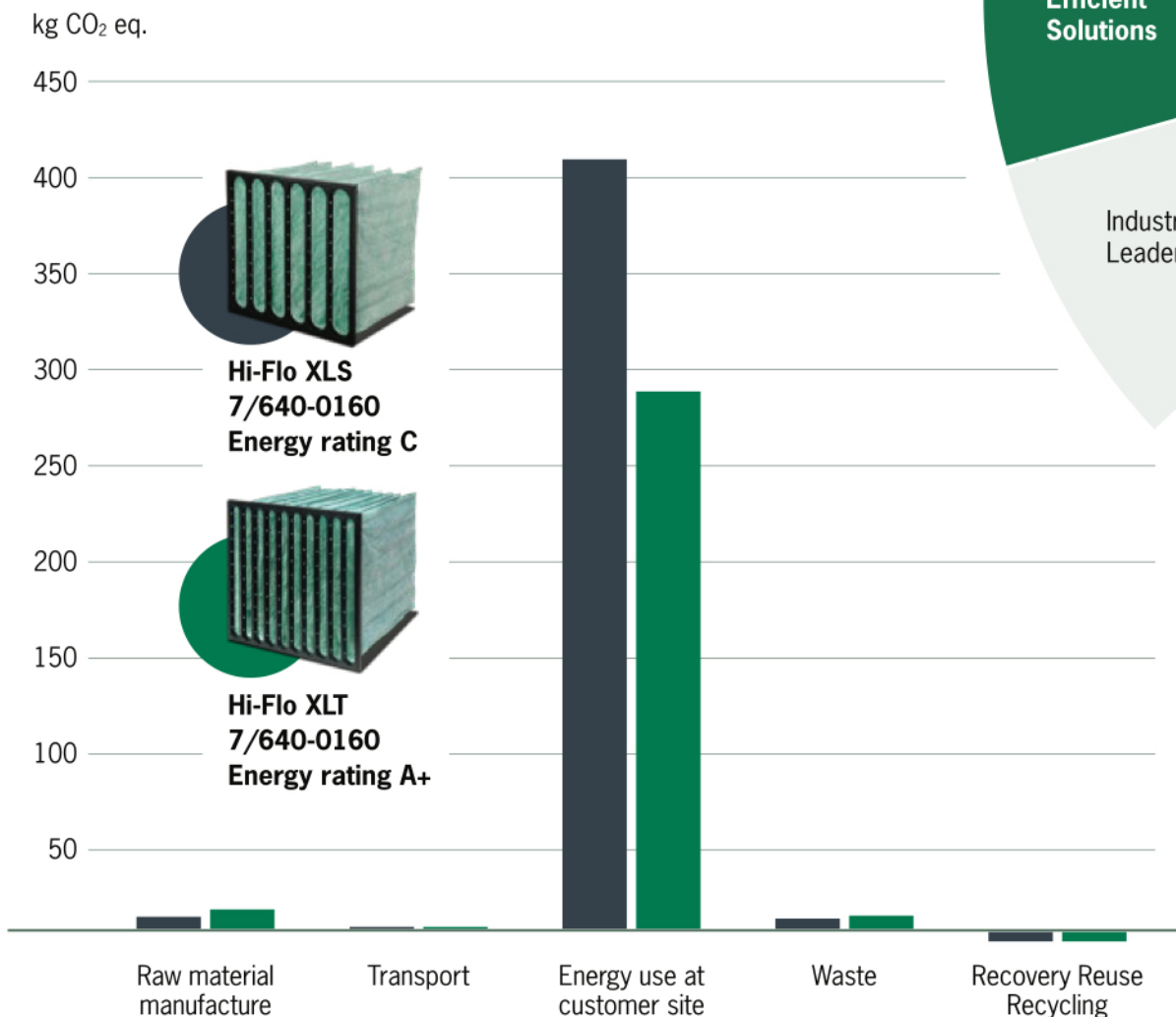
As demands to reduce CO₂ emissions get tougher, energy prices increase, and people are more aware of the effects of bad air on their health, the energy consumption of air filters in ventilation systems has drawn much attention. According to the products Life Cycle Assessment (LCA), the use phase has by far the biggest environmental impact.

30–40%

of the building energy use can be attributed to the ventilation system, thus even a small change will have a big impact. This is why everyone should use filters with better energy ratings. It is also the reason why our goal to increase the sales of highly energy efficient solutions is so important to us.



Filter Environmental Impact Comparison



Filter environmental impact comparison – results from LCA for Hi-Flo XLS and XLT with average European electricity mix applied in the use phase.

The XLS has the Eurovent energy rating C and the XLT has the best energy rating A+.

This shows that the greatest environmental impact by far is in the user phase and in this case that the A+ energy rated filter has 30 % lower environmental impact than the C rated filter.

INTERNATIONAL CONFERENCE ON BUILT ENVIRONMENT AND SUSTAINABILITY (ICBE&S) 2024

Decarbonization with Energy Efficiency

*25th October 2024, Connexion Conference & Event Centre – (CCEC), Kuala Lumpur,
Malaysia*

ABOUT OUR EVENT

The 1st International Conference on Built Environment and Sustainability (ICBE&S) will be held in conjunction with ASHRAE Malaysia Chapter's 39th Annual Dinner, at the same venue's conference room. ICBE&S conference will feature keynote speeches, technical sessions, and presentations on various topics related to the built environment, and latest updates on policy and legal framework governing large energy consumers. It will provide an opportune platform for professionals and academics to share, exchange views and discuss the latest advancements in the industry.

CONFERENCE CONTACT INFORMATION

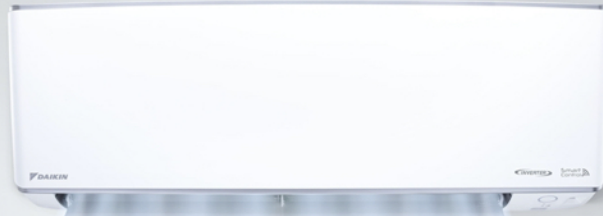
Website: <https://www.ashrae.org.my/icbes/>

Email: icbensmashrae@gmail.com

INTERNATIONAL CONFERENCE ON BUILT ENVIRONMENT AND SUSTAINABILITY (ICBE&S) 2024

Contents

Message from Chief Executive Officer Suruhanjaya Tenaga.....	11
Message from ASHRAE Malaysia Chapter President	12
Message from Senior Policy Fellow for Energy Affairs, ERIA.....	13
Message from Conference Chair	14
ICBE&S Organizing Committee	23
Program Schedule	24
Schedule of the Afternoon Parallel Sessions.....	26
Venue Layout.....	28
Acknowledgement of ICBE&S 2024 Sponsors	41



Providing Comfortable *Air*
Across Generations

Building A Sustainable Tomorrow



Efficient Cooling Solution



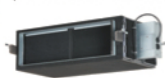
VRV HRHW
(Heat Recovery Hot Water System)



IAQ Solution



VAM
(Heat Reclaim Ventilator)



SDC
(Steamer Duct Chamber)



Smart Control Solution



RMS (Remote Monitoring System)

Daikin's aim for value creation

3 GOOD HEALTH AND WELL-BEING



7 AFFORDABLE AND CLEAN ENERGY



9 INDUSTRY, INNOVATION AND INFRASTRUCTURE



11 SUSTAINABLE CITIES AND COMMUNITIES



12 RESPONSIBLE CONSUMPTION AND PRODUCTION



Related SDG goals

Malaysia GBC LEADERSHIP IN SUSTAINABILITY AWARD 2024

Platinum

For Business Leadership in Sustainability



RA SERIES

R32 Inverter

R32 Non Inverter

Wall Mounted
(Flagship)



FTKM Series

Wall Mounted
(Premium)



FTKH-B Series

Wall Mounted
(Deluxe)



FTKU-B Series

Wall Mounted
(Prime)



FTKP-A Series

Wall Mounted
(Standard)



FTKF-C Series

Wall Mounted
(Entro)



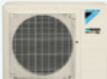
FTKE-A Series

Multi-Split S



MKS Series

Multi-Split



MKM Series

Wall Mounted
(Standard)

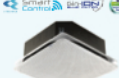


FTV-P Series

SkyAir SERIES

R32 Inverter

Ceiling Cassette
(Premium)



FCFG-A Series

Ceiling Cassette
(Standard)



FCFC-A Series

Ceiling Exposed
(Standard)



FHFC-A Series

Ceiling Concealed
(Standard)



FDMFC-A Series

Ceiling Cassette
(Premium)



FCFV-A Series

Ceiling Cassette
(Standard)



1)FFC-A Series
2)FFC-A Series

Ceiling Exposed
(Standard)



FHC-A Series

Ceiling Concealed
(Standard)



1)FDBC-A Series
2)FDMC-A Series

FLOOR STANDING PACKAGED

R32 Non-Inverter

R410A Non-Inverter

Floor Standing



FVC-A Series

Floor Standing



FVGR-P Series

AIR COOLED PACKAGED

R410A Non-Inverter

Single Skin Ducted



FBHN / FBVN Series

Double Skin Ducted



FBDHN Series

Rooftop



UATN-C Series

CONTROL SYSTEM

Control System

Intelligent Touch
Manager System



DCM601B51
* 3rd party equipment management
possible via WAGO I/O

Reiri Smart
Control Solution



OFFICE | HOME | HOTEL
Reiri for Office / Home /
Hotel Series

IAQ SOLUTION

Fresh Air

Outdoor Air
Processing
Unit (OAPU)



FXMQ-BF Series
Airflow Rate 690 - 2,160m³/h

Heat Reclaim
Ventilator with
DX-Coil (VKM)



VKM-GC Series
Airflow Rate 500 - 950m³/h

Heat Reclaim
Ventilator (VAM)



VAM-H Series
Airflow Rate 150 - 2,000m³/h

Air Handling
Unit (AHU)



Standard Series: 6.0 - 120.0hp
Outdoor Air Series: 8.0 - 60.0hp

AIR PURIFIER

Pure Air

Air Purifier



MC80ZVMM

Humidifying Air Purifier



MCK55UVMM

Air Purifier



MC55XVMM

Air Purifier



MC40XVMM

Air Purifier



MC30YVMM

Air Purifier



MCQ30ZVMM-H

IAQ SOLUTION

Pure Air

Streamer Duct
Chamber (SDC)



BDEZ-A Series
Airflow Rate 80 - 5,100m³/h

High Performance
Prefilter (MERV8)



BAF552A160

VRV SERIES

Indoor Units R410A Inverter

Ceiling Concealed
Type



FXMQ-PA Series
0.8 - 6.0hp

Ceiling Suspended
Type



FXHQ-MA Series
1.25, 2.5 & 4.0hp
FXHQ-B Series
5.0 & 6.0hp

VRV X
(High Efficiency)



RXUQ-A Series
6.0 - 60.0hp

VRV X Max
(Heavy Anti-Corrosion
High Efficiency)



RXUQ-A(W) Series
6.0 - 60.0hp

VRV A
(Space Saving)



RXQ-A Series
6.0 - 60.0hp

VRV A Max
(Heavy Anti-Corrosion
Space Saving)



RXQ-A(W) Series
6.0 - 60.0hp

VRV IV
Heat Recovery
Hot Water (HRHW)



RWHQ-T Series
6.0 - 60.0hp

VRV WS / VRV IV W
(Water Cooled System)



1)RWXQ-A Series (4.0 - 6.0hp)
2)RWYQ-T Series (6.0 - 36.0hp)

VRV IV S / VRV S
High Seasonal
Efficiency



1)RXMQ-A Series (4.0 - 6.0hp)
2)RSUQ-A Series (4.0 - 9.0hp)
* Only applicable for RSUQ-A Series

VRV IV Q
(Replacement Use)



RQQ-TIE Series
6.0 - 48.0hp

HCAC

Home Central Air Conditioning

Ceiling Mounted Cassette
(Ventilating Moisture
Control Bathroom)



FPEBQ-AV1 Series
0.8hp

Ceiling Mounted Cassette
(High Durability Moisture
Control Kitchen)



FPEKQ-AVM Series
1.25hp

Ceiling Mounted Cassette
(Moisture Control Closet)



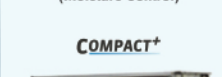
FPECQ-AVM Series
0.8hp

Ceiling Mounted Duct
Intelligent 3D Air flow
(Moisture Control)



FPRSQ-APVM Series
1.25-2.5hp

Ceiling Mounted Duct Compact
(Moisture Control)



FPRQ-APVM Series
1.25-2.5hp

VRV Home Series



RPZQ Series
4.0 - 12.0hp

Perfecting the Air

POWERING TOMORROW'S GREEN INNOVATIONS

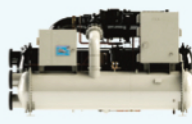
WATER COOLED CHILLER

Two Stage Centrifugal



500 - 3,000 RT

Single Stage Centrifugal



300 - 1500 RT

Magnetic Bearing Daikin



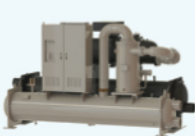
400 - 1,500 RT

Magnetic Bearing Turbocor



100 - 1,200 RT

VFD Screw



115 - 550 RT

Fixed Speed Screw



100 - 520 RT

HFO-1233zd (E)
Magnetic Bearing



300 - 900 RT

HFO-1234ze
Magnetic Bearing



100 - 550 RT

AIR COOLED CHILLER

Magnetic Bearing



90 - 440 RT

VFD Screw SV3



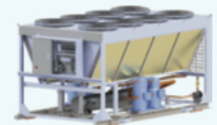
105 - 465 RT

Fixed Speed Screw



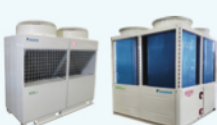
100 - 456 RT

Scroll Chiller



40 - 100 RT

Modular Chiller



19 - 80RT

Mini Chiller



2.5 - 12.5RT

Heat Pump



100 - 450 RT

High Efficiency VFD Screw



48 - 200 RT

AIR SIDE

Air Handling Units



60mm with TB1 Casting
700 - 53,000 cfm

Air Handling Units



700 - 53,000 cfm

Fan Coil Units



200 - 4,500 cfm

DIRECT EXPANSION (DX)

Water Cooled Package Unit



5 - 78 RT

DX AHU + Outdoor Unit



Refrigerant Condensing Units



Low Temp (1.75 - 8.25HP)
Med Temp (4 - 16 HP)

Message from Chief Executive Officer Suruhanjaya Tenaga

Dato' Ir. Ts. Abdul Razib Dawood
Chief Executive Officer
Suruhanjaya Tenaga



On behalf of Suruhanjaya Tenaga (ST), I would like to express my sincere thanks to ERIA and ASHRAE Malaysia for inviting us to jointly organise this conference. Malaysia is committed to low-carbon development, as comprehensively documented in the National Energy Transition Roadmap (NETR) and energy efficiency has been identified to be an important lever to optimise the use of energy. ST will play a key role in leading the execution of this energy transition lever on energy efficiency.

As you are well aware, the Energy Efficiency and Conservation Act has been approved and will be implemented soon. Therefore, this conference is timely and your deliberation on decarbonisation with energy efficiency in the conference will be useful for stakeholders and policy makers. On this note, I wish everyone attending this conference a meaningful and fruitful deliberation and I congratulate the organising committee for your fine efforts in organising this event that has attracted both local and overseas speakers. I wish all overseas visitors an enjoyable stay in Malaysia.

Dato' Ir. Ts. Abdul Razib Dawood
Chief Executive Officer
Suruhanjaya Tenaga

Message from ASHRAE Malaysia Chapter President

Tee Tone Vei
President 2023-2025
ASHRAE Malaysia Chapter



Good morning to all esteemed dignitaries and audiences,

It is my great pleasure to welcome you all to the First International Conference on Built Environment and Sustainability (ICBE&S), jointly organised by ASHRAE Malaysia Chapter, Suruhanjaya Tenaga, and Economic Research Institute for ASEAN and East Asia (ERIA). This landmark event signifies a pivotal moment for ASHRAE Malaysia Chapter as we convene to deliberate and delve into the crucial nexus of the built environment and sustainability.

Addressing the imperative of energy efficiency and renewable energy adoption, we advocate for a multifaceted approach. Firstly, we urge decision-makers and consumers to prioritize clean energy sources. Secondly, we emphasize the importance of reducing energy consumption. This can be achieved through two complementary strategies: forgoing unnecessary energy-intensive practices and optimizing energy usage while maintaining comfort levels. To incentivize energy efficiency, we propose implementing policies that encourage the adoption of energy-efficient products and practices. This could involve tax incentives, grants, and subsidized loans for energy-efficient technologies. Moreover, government agencies play a crucial role in enforcing energy efficiency regulations and promoting best practices and innovative technologies in this field.

We are heartened by the presence of policymakers, users, and researchers at this conference. Your collective expertise and commitment are essential to accelerating progress towards our shared goal of net-zero emissions. By fostering dialogue, collaboration, and knowledge exchange, we can develop and implement effective strategies to transition to a sustainable and resilient built environment. Let us seize this opportunity to unite our efforts and drive meaningful change towards a net-zero future.

I would like to, again, extend a special thanks to YBhg. Dato' Haji Mad Zaidi Bin Mohd Karli, Ketua Setiausaha Kementerian Peralihan Tenaga Dan Transformasi Air (PETRA), Ir. Dr. Sanjayan Velautham, Chief Operating Officer of Suruhanjaya Tenaga (ST), and Mr. Shigeru Kimura, Senior Policy Fellow for the Economic Research Institute for ASEAN and East Asia (ERIA), and of course our distinguished speakers, panelists, and attendees for their participation. Your contributions will undoubtedly enrich this conference and contribute to the advancement of sustainable built environments.

Warm regards,
Tee Tone Vei
President 2023-2025
ASHRAE Malaysia Chapter

Message from Senior Policy Fellow for Energy Affairs, ERIA

Shigeru Kimura
Senior Policy Fellow on Energy Affairs
Economic Research Institute for ASEAN and East Asia (ERIA)



To achieve decarbonization in the Final Energy Consumption (FEC) in industry and commercial sectors, EEC (Energy Consumption and Conservation) is the priority measure, followed by electrification such as heat pumps and fuel switching from fossil fuel to hydrogen or ammonia. This conference is timely and relevant for discussing the decarbonization measures with two aspects: policy and regulation including incentives, and technology development. Using this opportunity, I would like to express my sincere thanks to MASHRAE for sharing this conference's morning session with ERIA and wish everyone a fruitful conference.

Warm regards,

Shigeru Kimura

Senior Policy Fellow on Energy Affairs

Economic Research Institute for ASEAN and East Asia (ERIA)

Message from Conference Chair

Ts. NG Wen Bin

Organising Chair

International Conference on Built Environment & Sustainability
(ICBE&S) 2024
ASHRAE Malaysia Chapter



Dear Honoured VIPs, Sponsors, Colleagues, and Friends,

It is with great pleasure and honour that I extend a warm welcome to each of you to the International Conference on Built Environment & Sustainability (ICBE&S) 2024, proudly hosted by the ASHRAE Malaysia Chapter.

This year's event brings together a diverse array of experts, academics, and industry professionals from across the globe, unified by a shared passion for advancing sustainable solutions in the built environment. The conference's focus on innovation, sustainability, and energy efficiency could not be timelier, as we strive to meet the challenges of climate change and a rapidly urbanizing world.

Your participation enriches the dialogue and collaboration necessary for creating a sustainable future. We are excited to share insights, ideas, and best practices that will undoubtedly push the boundaries of our knowledge and practices in the field.

To our international delegates, thank you for travelling from afar to join us here in Malaysia. To our local participants, your presence and contributions help shape the future of our nation's sustainable development. Together, I believe we can make this conference a remarkable milestone in building a better, greener, and more sustainable future.

On behalf of the ASHRAE Malaysia Chapter, I would like to express my deepest gratitude to all attendees, speakers, and sponsors for making this event possible. I hope you find this conference insightful, inspiring, and a valuable opportunity for networking and collaboration.

Enjoy the conference, and I look forward to our continued progress toward a sustainable built environment!

Warm regards,

Ts. NG Wen Bin

Organising Chair

International Conference on Built Environment & Sustainability (ICBE&S) 2024
ASHRAE Malaysia Chapter



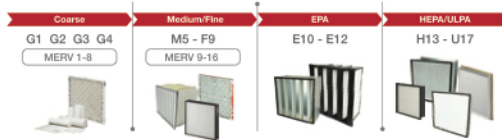
TOTAL CLEAN AIR SOLUTION

AHU FILTRATION SOLUTIONS

AAF is able to provide particulate and gaseous filters of various grades and specifications to be installed in your AHU, ranging from primary filters to ULPA filters.



PARTICULATE FILTERS



GASEOUS FILTERS

2-IN-1 PARTICULATE & GASEOUS FILTRATION SOLUTION



NUCLEAR GRADE CONTAINMENT SYSTEMS

AAF offers multiple Bag-in/Bag-out containment systems which are meticulously designed to minimize exposure risk, improved accessibility, and optimized quality and performance. AAF also offers High Efficiency Gas Adsorber (HEGA) filtration to filter gaseous contaminants from airstreams through a process of adsorption.



CLEANROOM MODULES

AAF offers a broad range of matching cleanroom modules and components installed with HEPA/ULPA filters that controls air flow, remove particles from the room, and keep external pollutants out to prevent contamination of manufacturing processes, critical research or other projects



HEALTHCARE SOLUTIONS

AAF offers various measures to mitigate the risk of airborne transmissions, including the use of antimicrobial filters, implementing laminar airflow in operating theaters, and designing room pressure positively or negatively. These measures aim to safeguard the well-being of both medical staff and patients.



COMMERCIAL & KITCHEN SOLUTIONS

AAF fresh air and purification system offers plug and play solution to improve indoor air quality. Kitchen Ecology solution offers 3 in 1 solution to remove smoke, grease and odour.



GAS PHASE SOLUTIONS

AAF has a wide range of gas-phase filtration solutions and products that are efficient in removal of almost all types of indoor and outdoor gaseous contaminants to improve indoor air quality and reduce risk of corrosion



DUST COLLECTOR SOLUTIONS

AAF provides dry and wet dust collectors specifically designed to meet the demands of applications where controlling dust emissions can be particularly challenging.



CONTACT US

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AAF Asia HQ
Lot 6, Jalan Pengapit 15/19, Seksyen 15,
40000 Shah Alam, Selangor
+603 5039 7777

📍 American Air Filter Manufacturing Sdn. Bhd.
Penang Sales Office
1-2-43, Elit Avenue, Jin Mayang Pasir 3,
Bayan Baru, 11950, Pulau Pinang

SCAN ME

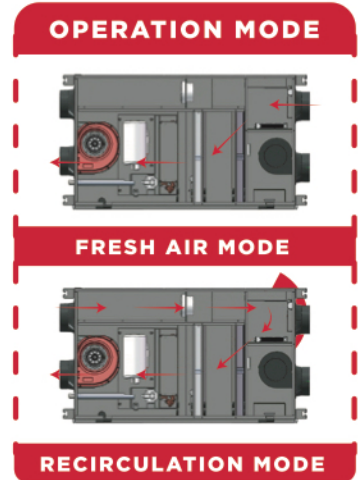
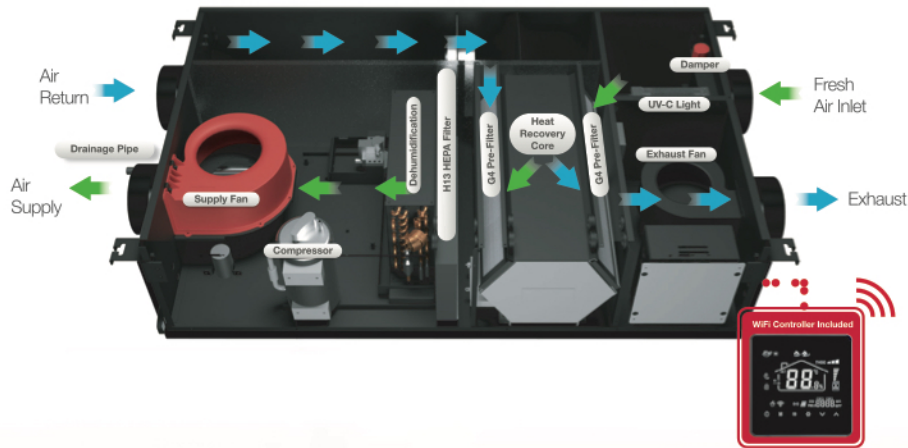


ASTROPURE CCXD

Dehumidification & Purification Solution

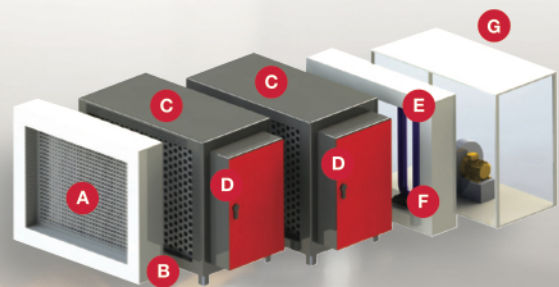
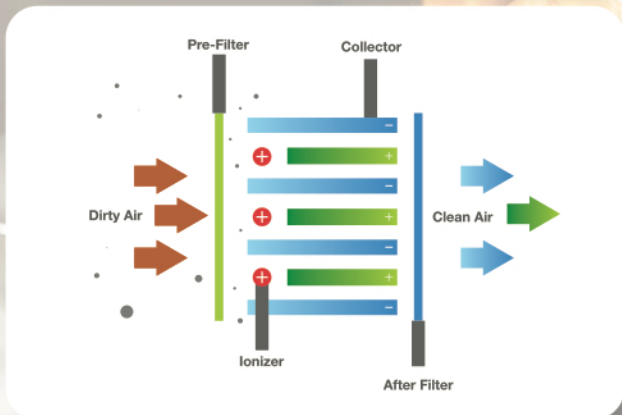
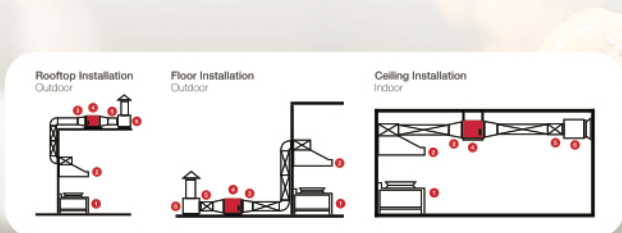
DID YOU KNOW WHY FRESH AIR AND HUMIDITY CONTROL ARE IMPORTANT TO HUMAN HEALTH ?

- Safeguards respiratory health by purging pollutants and inhibiting mold growth
- Ensure a comfortable indoor environment
- Reduce the risk of illness transmission



- Heat Recovery**
Save energy by reducing the workload of A/C
- Dehumidification**
Reduce excess moisture to ensure a controlled indoor environment
- Outdoor Fresh Air**
Reduce indoor CO₂ concentration level
- HEPA Filters**
Removes up to 99.95% ultra-fine particles with 3 stages filtration
- Smart Control**
Remote control and monitor from anytime, anywhere via AAF Connect
- Airflow**
Up to 550 CMH of fresh air supply
- Built-in Indoor Air Quality Sensors**
Visualise real-time and monitor Indoor Air Quality
- Increased Ventilation**
Improve ventilation and increase air change rate in buildings
- 3 Operation Modes**
Able to switch from Fresh Air, Dehumidification, Recirculation, or Auto Mode

ELECTROSTATIC PRECIPITATORS (ESP) Kitchen Emission Control System



- A Initial Filtration Stage**
Grease, Oil & Moisture Separation
- B Prefilters** such as permanent metal air filter
- C Second and Third Filtration Stage**
High Efficiency Removal of Grease, Oil & Moisture
- D Collector Cell**
- E UV Light**
- F Carbon Filter**
- G Last Stage**
Fan section (Optional)

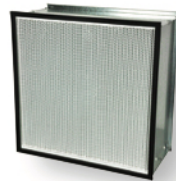
- Collector Cell**
Collect & remove charged fine particles
- UV Light**
Remove odours or inactivate Fungal, Bacterial & Viral Organisms
- Carbon Filter**
Remove gaseous contaminant & corrosion control protection.

ASTROSAFE BIBO

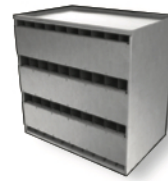
High Purity Filtration Solution



High Efficiency Filters



AstroCel I



HEGA Filter Type IV -
CineSorb



HEGA Filter Type IV -
Stainless Steel

AstroSafe is compatible with HEPA filters and HEGA filters. HEGA filters are meant for gas phase filtration. These adsorbers are optional and typically used in when high removal efficiency of dangerous contaminants is required.



Bag-In/Bag-out System

Safe & Reliable filter change



Bubble Tight Isolation Dampers

Top-of-the-line dampers to control the airflow



Manufactured under stringent quality assurance controls

Guaranteed to pass DOP and Freon in-place tests



Quick Connect Ports

For automated upstream and downstream scanning

Biosafety Levels



BSL-1

No containment
Defined organisms
Unlikely to cause disease

Sample : E.Coli



BSL-3

High containment
Aerosol transmission
Serious / Potentially lethal disease

Sample : Tuberculosis



BSL-2

Containment
Moderate risk
Disease of varying severity

Sample : Influenza, HIV, Lyme Disease



BSL-4

Max containment
Exotic and High-Risk Agents
Life-threatening disease

Sample : Ebola Virus

CRU - II

Operating Theatre Ceiling Module

Air Inlet

Air Inlet

LAMINAR AIRFLOW

Provides Unidirectional airflow to the patient to reduce the risk of surgical site infection



Hassle-free Transport and Convenient Installation



Seamless Surgical Light Path Integration



Quick and Easy Maintenance with Room Side Access



Remove up to 99.995% of ultra fine particles with HEPA Filters



Reliable Air Distribution to ensure Laminar Airflow

LAMINAR PASS BOX CROSS CONTAMINATION SOLUTION



Ensure aseptic transfer of material between two cleanrooms or between a cleanroom & non-cleanroom area.

- Reduce the risk of cross-contamination.
- Minimize the pollution and maintain a sterile environment.



Electromagnetic Interlocking System



Crevice Free Design



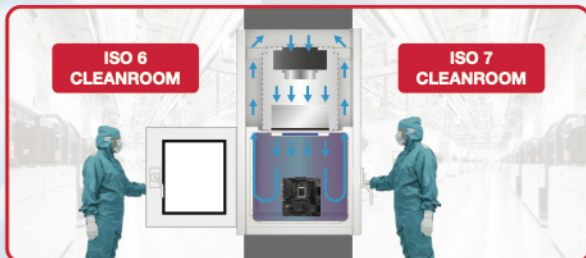
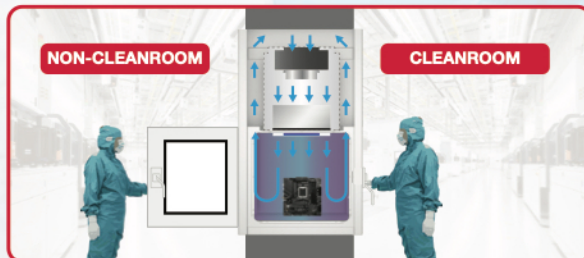
Vertical Laminar Air Flow



Ultraviolet (UV) Sterilization



HEPA/ULPA Filter



CLEAN BENCH CONTAMINATION-FREE WORKSPACE



Unidirectional Air Flow



Stainless Steel Work Surface



Ergonomic Design



Safety Features



Ultraviolet (UV) Sterilization



HEPA/ULPA Filter



Provide a controlled, particle-free environment and minimize the risk of contamination.





RELIABLE PERFORMANCE BY THE WORLD'S NO.1 INVERTER



Anti
Corrosion



Anti
Aging



Duoble
Protection

Sole Distributor:

Midea Scott & English Electronics Sdn Bhd (194517-X)

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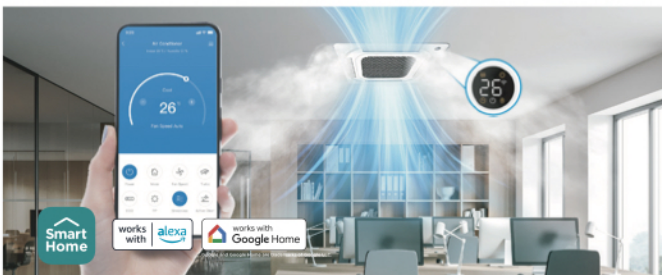
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INTERNATIONAL CONFERENCE ON BUILT ENVIRONMENT AND SUSTAINABILITY (ICBE&S) 2024

Program Schedule

- 0815 – 0900: Registration & Breakfast
- 0900 – 0905: Opening remarks by MC (ASHRAE Malaysia Chapter)
- 0905 – 0915: Welcome Speech by Mr. Tee Tone Vei, President, ASHRAE Malaysia Chapter
- 0915 – 0920: Introduction by MC (ERIA)
- 0920–0925: Opening Remarks by Ir. Dr. Sanjayan Velautham, Chief Operating Officer of Suruhanjaya Tenaga
- 0925–0930: Opening Address by Mr. Shigeru Kimura, Senior Policy Fellow for Energy Affairs, ERIA on behalf of ERIA President, Prof. Tetsuya Watanabe
- 0930 – 0945: Keynote Address by YBhg. Dato’ Haji Mad Zaidi Bin Mohd Karli, Ketua Setiausaha
- 0945 – 1000: Presentation of souvenir and photograph session
- 1000 – 1100: **Plenary Session 1: Policy and Legal Framework**
- Moderator:** Mr. Shigeru Kimura, Senior Policy Fellow for Energy Affairs, ERIA
- Panelist 1:** Mr. SAKUMA Yasuhiro, Deputy Director, International Affairs Division, Agency for Natural Resources and Energy (ANRE), Ministry of Economy, Trade and Industry (METI), Japan, presenting on the topic : “*Japan’s Energy Efficiency and Conservation Policy*” (online)
- Panelist 2:** Ir. Ts. Zulkiflee Bin Umar, Head of Energy Conservation Operations, ST, presenting on the topic: “*Energy Efficiency Initiatives in Malaysia*”
- Panelist 3:** Mr. Wisaruth Maethasith, Bureau of Energy Regulation and Conservation (BERC), Department of Alternative Energy Development and Efficiency (DEDE), Ministry of Energy (MOEN), Thailand, presenting on the topic: “*Introduction of*

ENCON ACT of Thailand and how this act contribute promotion of EEC in Thailand”

Panelist 4: Mr. MORIMOTO Soichi, Senior Researcher, Climate Change Group, Climate Change and Energy Efficiency Unit, The Institute of Energy Economics, Japan (IEEJ), Japan, presenting on the topic: *“Importance of EEC for achieving carbon neutral: Application of technology perspective model”*

11:00–12:00: Plenary Session 2: Zero Energy Buildings (ZEB)

Moderator: Ir. Dr. Sanjayan Velautham, Chief Operating Officer of Suruhanjaya Tenaga

Panelist 1: Mr. Morita Junya, Deputy General Manager, Head of Smart Building, Kajima Technical Research Institute Singapore (KaTRIS), Kajima Corporation, Singapore

Panelist 2: Mr. Steve Anthony Lojuntin, Director, SEDA, presenting on the topic: *“ZEB development program in Malaysia”*.

Panelist 3: Mr. Tee Tone Vei, President, ASHRAE Malaysia Chapter, presenting on the topic: *“The Future of Heating: Heat Pumps”*

12:00–12:05: Closing Remarks by Ts. Ng Wen Bin, Conference Organising Chairman, ASHRAE Malaysia Chapter

12:05 – 14:30 *Lunch Break*

INTERNATIONAL CONFERENCE ON BUILT ENVIRONMENT AND SUSTAINABILITY (ICBE&S) 2024

Schedule of the Afternoon Parallel Sessions

Three (3) Parallel sessions (14:30 – 17:00)

Session 1: Energy-efficient & Decarbonization	Session 2: Sustainable HVAC & Indoor Air Solution	Session 3: HPMP Phase III & Ammonia Refrigeration
Paper 1	Paper 2	Paper 3
Paper 4	Paper 5	Paper 6
Paper 7	Paper 8	Paper 9
Paper 10	Paper 11	Paper 12

Paper No.	Title
Paper 1	Innovative Techniques for On-Site Measurement of Evaporator Cooling Capacity: Enhancing Accuracy and Efficiency Presenter: Ir. Dr. Abdul Murad Bin Zainal Abidin, Ketua Makmal Penyelidikan Mekanikal, CREaTE, JKR
Paper 2	ESG Aligned HVAC Design: The Life Cycle of Air-Conditioning Presenter: Mr Chuang Kok Yang, Senior Engineer, Consulting Sales, Daikin Malaysia Sales & Service Sdn. Bhd.
Paper 3	Implementation of HPMP Phase III

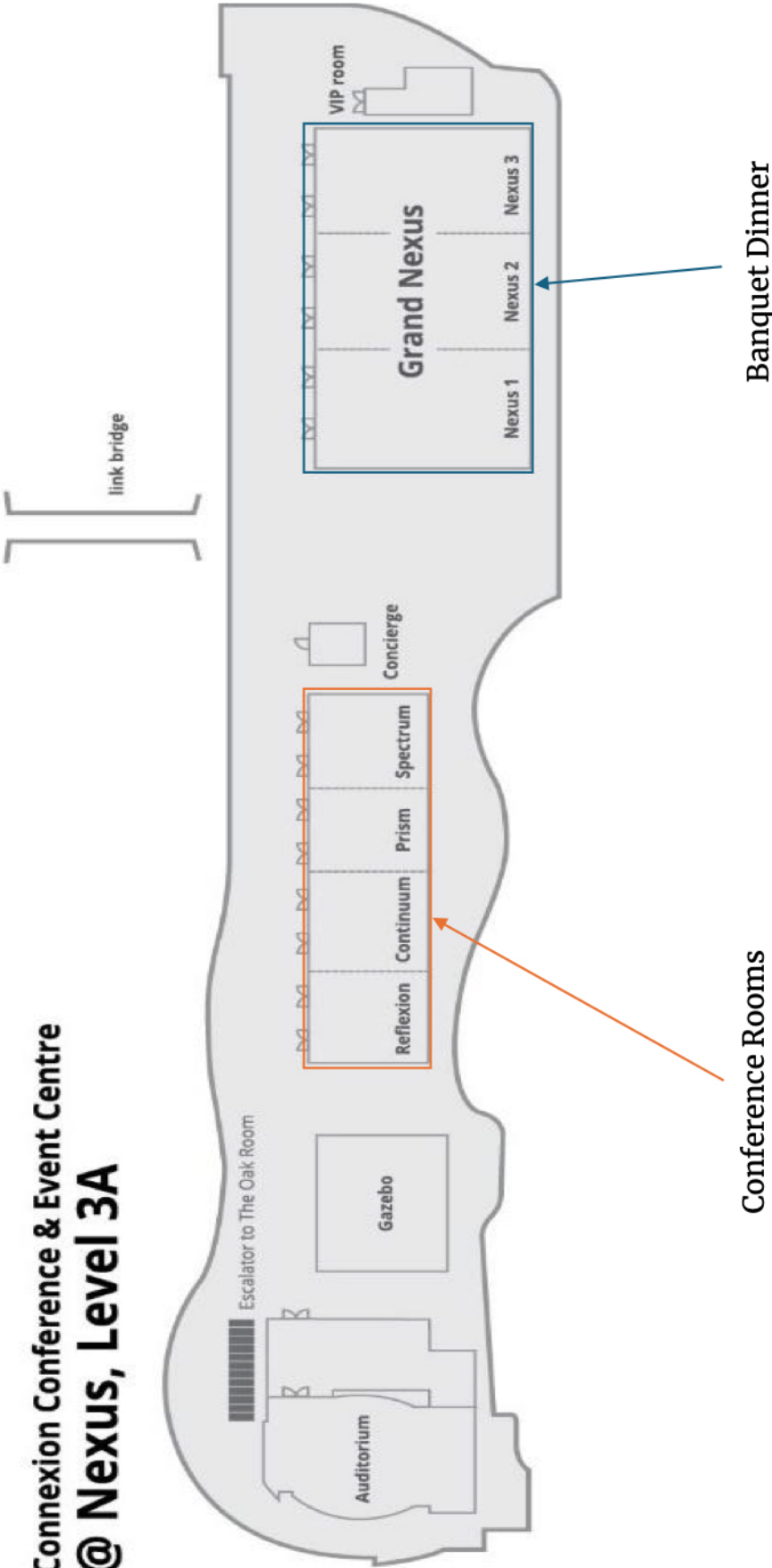
	Presenter: Ryan Ooi Chean Weai, Principal Assistant Director Department of Environment Malaysia
Paper 4	CCUS Role in ASEAN Decarbonization Presenter: Dr. I Gusti Suarnaya Sideman, CCS-CCUS Expert, Energy Unit, Research Department, ERIA
Paper 5	Sustainability and Environmental Product Declarations in the Air Filtration Industry Presenter: Nurul Umairah Mohd Nizam, Camfil Malaysia Sdn Bhd
Paper 6	Guidelines On Safe Management of Ammonia Refrigeration System Presenter: Ir Tajul Ariffin Mohamed Nori, Jabatan Keselamatan dan Kesihatan Pekerjaan (JKKP) Malaysia
Paper 7	MEPS-CSPF Implementation Plan Presenter: Pn. Nur Hamiza binti Mirsa Hussain, ST
Paper 8	Building Ventilation and Indoor Air Quality: Based on ASHRAE Standard 62.1 2019 Presenter: Mr. Tih Kahhui, Senior Business Development Engineer, American Air Filter Manufacturing Sdn. Bhd
Paper 9	Redundancy, High Efficiency and Low Charge Ammonia System Presenter: Mr Kwan Chee Wei, General Manager · Bitzer (South East Asia) Sdn Bhd
Paper 10	Energy Efficiency Scenarios & Initiatives in Malaysia Presenter: Ir. Leong Siew Meng
Paper 11	An Application of Smart Control in a Building Presenter: Muhamad Nurshafiq Bin Mohd Yunos, Application Engineer, Midea Scott & English Electronics Sdn Bhd
Paper 12	Transitioning to Alternative Refrigerants: Industry Best Practices Presenter: Ts. NG Wen Bin, Senior Lecturer, UNIKL MFI

Venue Layout

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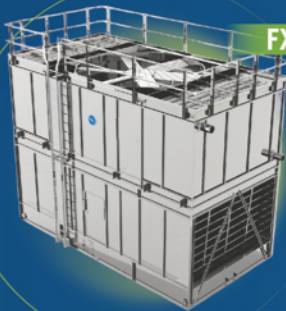
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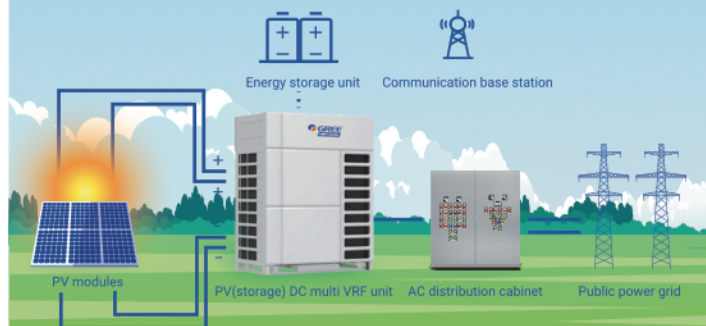
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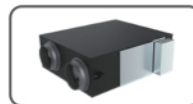
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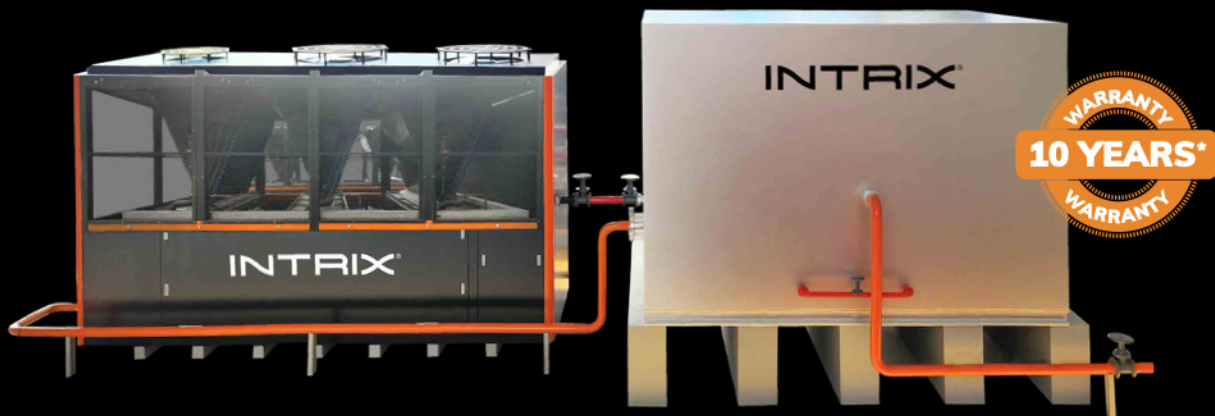
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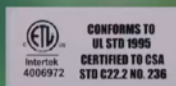


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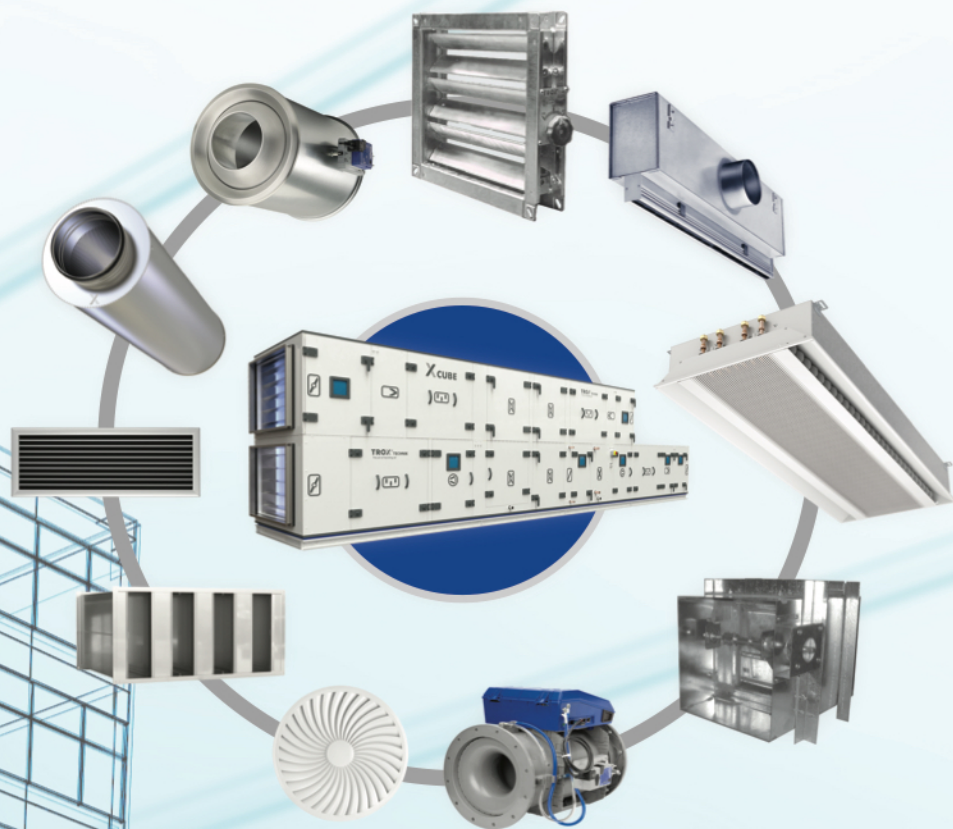


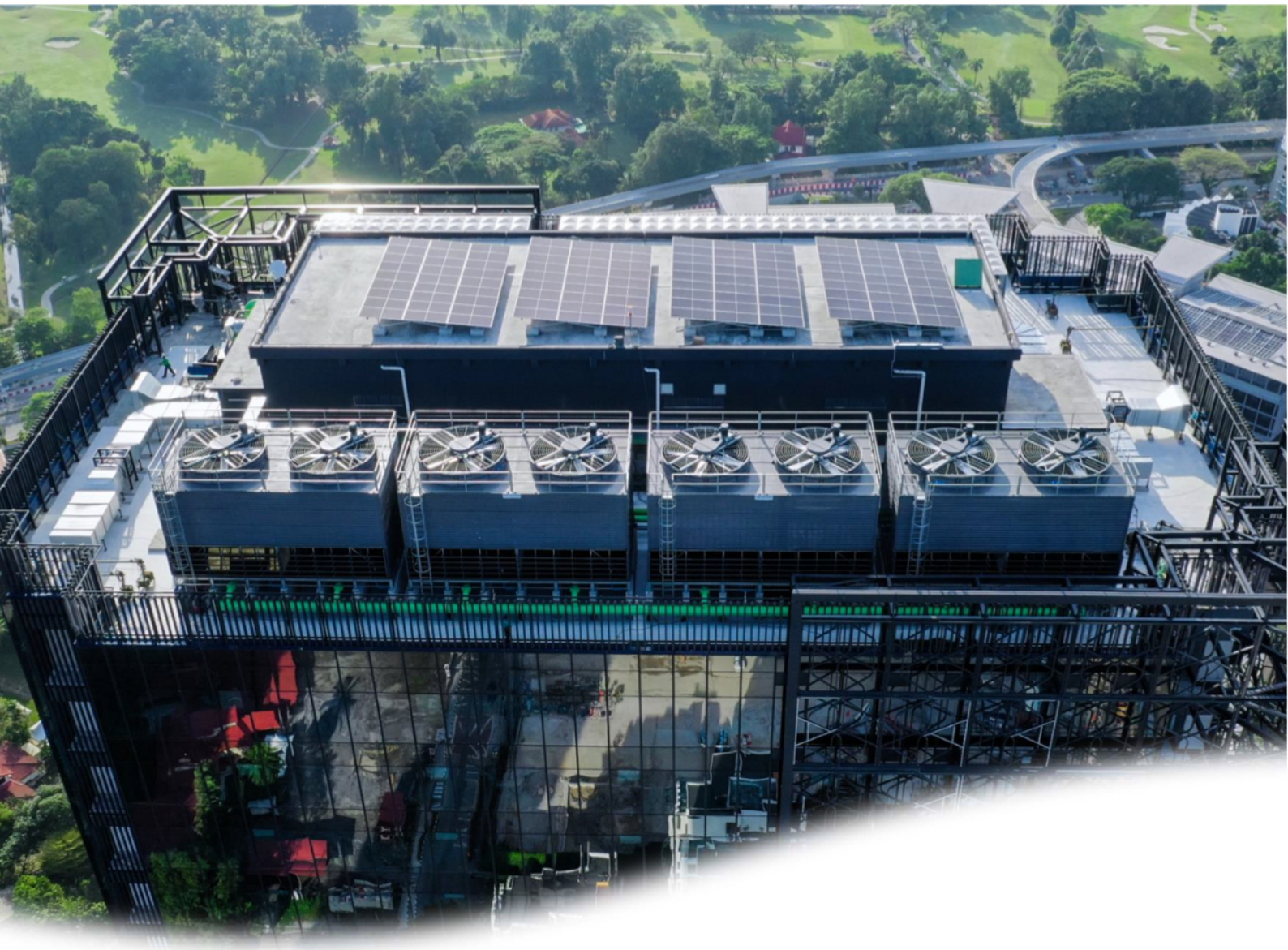
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