

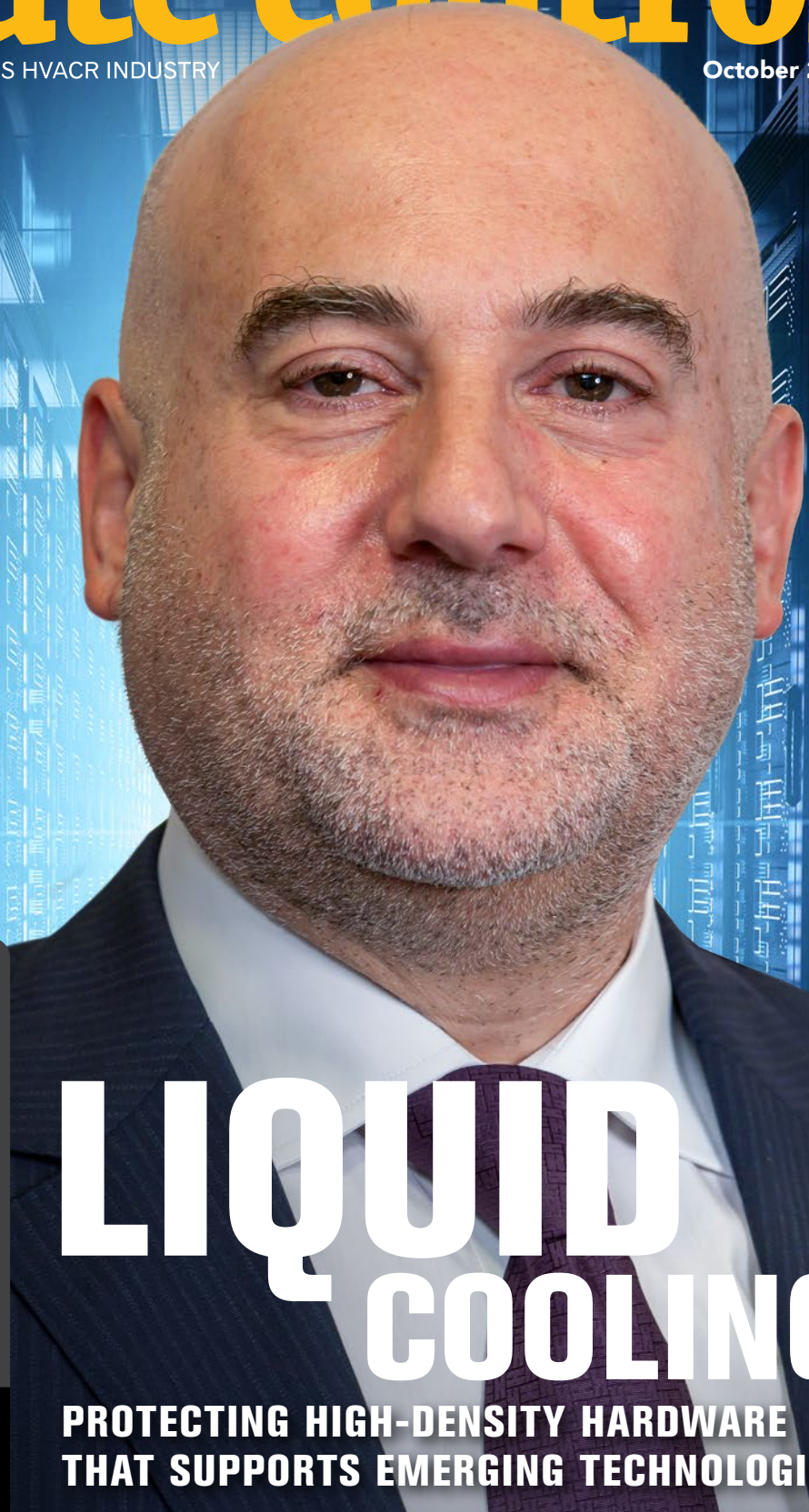
UAE COUNCIL FOR CLIMATE ACTION REVIEWS PROGRESS AND PREPARES FOR COP29

ASHRAE INTRODUCES FIRST BATCH OF CERTIFIED DECARBONIZATION PROFESSIONALS

# climate control MIDDLE EAST

KEY PERSPECTIVES ON THE REGION'S HVACR INDUSTRY

October 2024



## NEWS

- Tabreed showcases its geothermal plant at World Utilities Congress
- Empower signs agreement with Mitsubishi Heavy Industries Thermal Systems
- Aeroseal acquires AWT, in Saudi Arabia
- Ziehl-Abegg appoints new CEO
- BAC releases its ESG report

## REGULATION ROUNDUP

SEASONAL ENERGY EFFICIENCY MEPS

*Nabil Shahin, AHRI MENA*

## REPORT

The intrinsic value of certification

# LIQUID COOLING

PROTECTING HIGH-DENSITY HARDWARE THAT SUPPORTS EMERGING TECHNOLOGIES

## PERSPECTIVE

COLD CHAIN LOGISTICS  
*Brent Melvin, RSA Global*

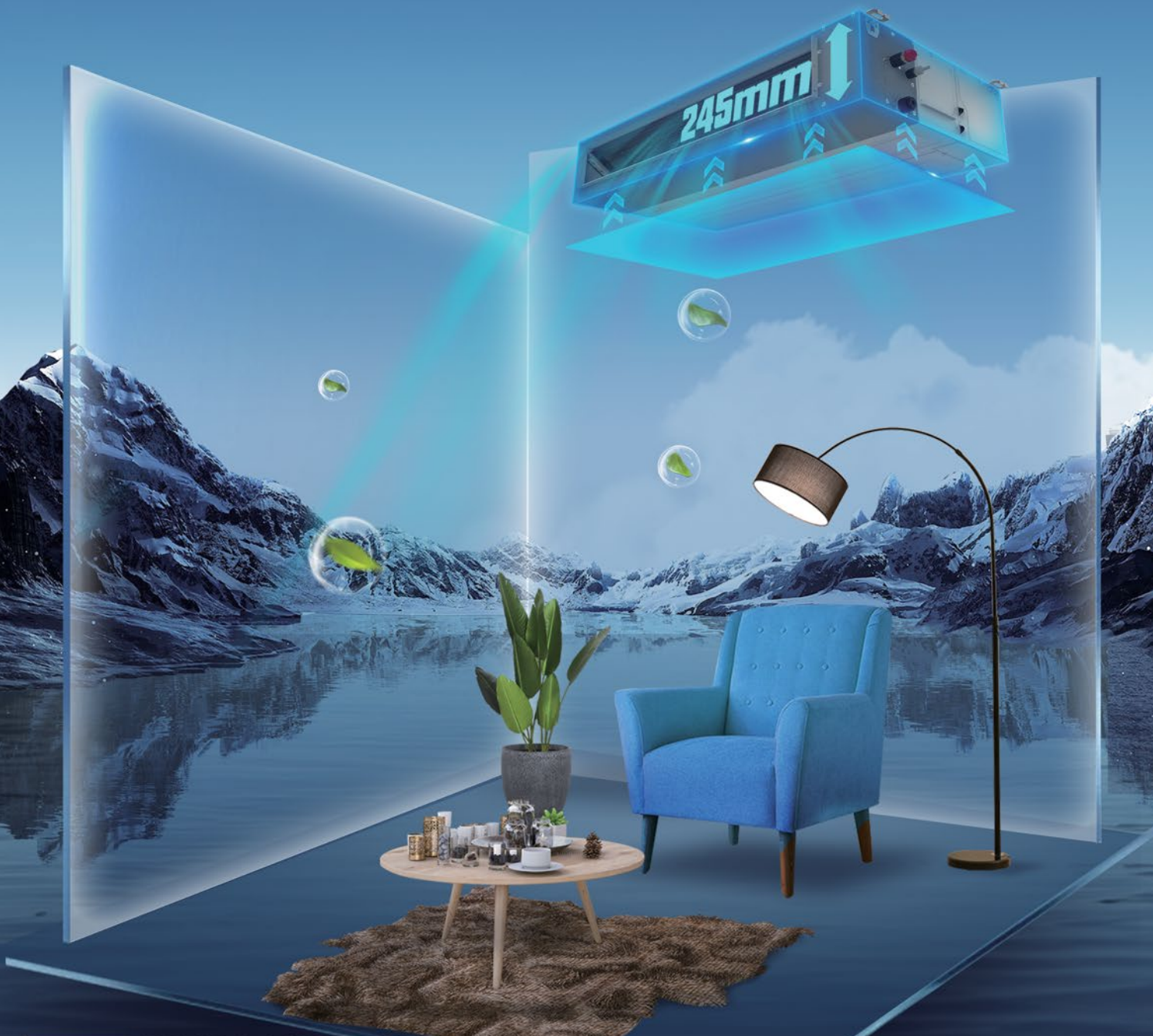
## LICENCE TO CHILL

CHILLER RETROFIT VERSUS REPLACEMENT  
*Dan Mizesko, Dalkia US Chiller Services*



## Duct M Type

245mm Ultra-thin design, suitable for a variety of installation site



**NINGBO AUX ELECTRIC CO., LTD.**

Add: No.1517, East of Yincheng Ave., Ningbo, Zhejiang, China

Tel: +86 574 8822 0647

E-mail: sztgz@auxgroup.com

Http://www.auxcac.cn



AUX CAC



@aux\_cac\_china

## Liquid cooling...

is revolutionising how data centres cool powerful, high-density hardware that supports emerging technologies

page **12**  
COVER STORY



### GUEST COLUMNS

#### REGULATION ROUNDUP

Nabil Shahin of AHRI MENA discusses the progress made on seasonal energy efficiency MEPS

06

#### LICENCE TO CHILL

Dan Mizesko of Dalkia US Chiller Services says chiller modernisation with high-efficiency components will provide efficiencies close to or equal to today's new chillers for the IAQ sector

08

### REGULARS

**04** EDITOR'S NOTE  
The purpose of the Awards

**24** REGIONAL NEWS

**32** GLOBAL NEWS

**42** QUOTEYARD



### PERSPECTIVE

10

Navigating the evolving cold chain logistics landscape in the Middle East might be challenging, but there are opportunities for those willing to make the effort, says Brent Melvin of RSA Global

### REPORT

16

Navigating the HVAC industry in a country like Pakistan is about strengthening strategies for awareness and certification



**Surendar Balakrishnan**  
Editor  
@BSurendar\_HVACR



Get the next issue of *Climate Control Middle East* early!

Visit our website: [climatecontrolme.com/digital](http://climatecontrolme.com/digital)  
Also available at



# The purpose of the Awards

**I**N A little over a month's time, we shall be stepping into our 20th year of operations as a publishing house, making it a milestone for *Climate Control Middle East* magazine. In the mix, we shall also be completing 14 years of our Awards programme, which has seen 13 editions of the Climate Control Awards – the 14<sup>th</sup> is due on November 27<sup>th</sup> – and the inaugural edition of the Climate Control Saudi Awards, this month.

The Awards programme is a source of great joy and, at the same time, an event that we approach with great trepidation, for given the relative, as opposed to absolute approach of identifying the winners, there always will be more losers than winners, and understandably so, the feeling of losing does not sit easy with many. (And to hastily clarify, we, as CPI Industry, do not identify the winners; that onerous task lies with the judges. Our role is to define the framework and to facilitate the entire Awards evaluation exercise, in addition to conducting the ceremony.)

Anyway, as I was saying, losing does not sit easy with many. It never is simple enough to accept the verdict, and what often follows is ample soul-searching and questioning of the Awards exercise.

Perhaps it would help if we were to emphasise that winners are chosen on merit and nothing but merit, with a due process of verification and cross-verification, all under the stern gaze of a third-party auditing firm that monitors the process from A to Z. Perhaps it would also help to reveal that the Awards programme attracts sponsors every year and that historically speaking, more non-sponsors have walked away with trophies – even multiple trophies at the same edition – than sponsors, from its inception.

In other words, the Awards programme rests on a strong ethical ground – that's a given. It serves a higher purpose, and that is what we as CPI Industry would like to focus on. Our preoccupation is with offering a marker for the industry to measure itself against. The endeavour with every edition is to provide motivation and inspiration for the multiple stakeholders that constitute the industry to improve on performance on multiple fronts.

The spotlight is on contributing to regional and global socio-economic and sustainable development targets, including the need for improving the energy efficiency profile of buildings; strengthening Indoor Environmental Quality and fire safety; optimising the use of precious water; protecting soil, water and the atmosphere; safeguarding data centres, telecom shelters and other mission-critical facilities; ensuring cold chain reliability for better food safety, food security and vaccine integrity; lowering the Total Cost of Ownership; and ensuring fair and ethical trade practices.

It is important not to lose sight of the need to achieve outcomes that would benefit people and planet; nothing else matters. Trophies represent a validation of efforts, but at the end of the day, the Awards exercise is beyond contesting for a spot under the raining confetti; it's about a collective will and celebrating all participants that through their efforts and competitive instincts, are placing us on the pathway to greater safety and wellbeing.

*Climate Control Middle East magazine proudly supports the UAE President's initiative of extending the 'Year of Sustainability' to the whole of 2024.*

**climate control** MIDDLE EAST  
KEY PERSPECTIVES ON THE REGION'S HVACR INDUSTRY

**Co-Founder & Editorial Director**  
Surendar Balakrishnan  
[surendar@cpi-industry.com](mailto:surendar@cpi-industry.com)

**Co-Founder & Commercial Director**  
Frédéric Paillé  
[fred@cpi-industry.com](mailto:fred@cpi-industry.com)

**Editor**  
Surendar Balakrishnan  
[surendar@cpi-industry.com](mailto:surendar@cpi-industry.com)

**Deep Karani**  
Our representative in North America  
+1 365 885-6849  
[deep.karani@cpimediagroup.com](mailto:deep.karani@cpimediagroup.com)

**Online & Social Media**  
Nivedita Vijayan  
[marketing@cpi-industry.com](mailto:marketing@cpi-industry.com)

**Design Head**  
Ulysses Galgo  
[uly@cpi-industry.com](mailto:uly@cpi-industry.com)

**Advertising Enquiries**  
Frédéric Paillé  
+971 50 7147204  
[fred@cpi-industry.com](mailto:fred@cpi-industry.com)

**Webmaster**  
Chris Lopez  
[chris@cpi-industry.com](mailto:chris@cpi-industry.com)

**Judy Wang**  
Our representative in Asia  
(except India)  
+852 307 80 826  
[judywang2000@vip.126.com](mailto:judywang2000@vip.126.com)

**Database/Subscriptions Manager**  
Purwanti Srijekti  
[purwanti@cpi-industry.com](mailto:purwanti@cpi-industry.com)

**Founder, CPI Media Group**  
Dominic De Sousa (1959-2015)

**EMPANELLED COLUMNISTS**

**Dr Iyad Al-Attar**  
*Independent air filtration consultant, writes on specific science and technology issues relating to Indoor Air Quality, including airborne particles.*

**Omnia Halawani**  
*Co-Founder & Co-CEO, GRFN Global, writes on MEP consultancy-related issues.*

**Krishnan Unni Madathil**  
*Auditor, Bin Khadim, Radha & Co. Chartered Accountants, carrying out an analysis of the market, writes on business opportunities for the HVACR industry.*

**Jeremy McDonald**  
*Principal of Guth DeConzo Consulting Engineers, in New York, writes on IAQ and building tracing. He served as the technical consultant to the New York State Energy Research and Development Authority in development of an IAQ guideline for Higher Education in NY: "Covid-19 Response Guide, State University of New York".*

**Dan Mizesko**  
*Managing Partner/President, US Chiller Services International, writes on issues relating to chilled water systems, including operation & maintenance.*

**Nabil Shahin**  
*Managing Director, AHRI MENA, writes on HVACR-specific regulation issues.*

**Published by**



**Head Office**  
PO Box 13700, Dubai, UAE  
Web: [www.cpi-industry.com](http://www.cpi-industry.com)

**Printed by:**  
Jaguar Printing Press L.L.C

© Copyright 2024  
**CPI Industry.**  
**All rights reserved.**  
While the publishers have made every effort to ensure the accuracy of all information in this magazine, they will not be held responsible for any errors therein.

**Efficiency.  
Sustainability.  
Compliance.**



**LEADING HVACR AND WATER HEATING EQUIPMENT MANUFACTURERS** recognize AHRI certification programs and equipment performance standards as key to achieving energy efficiency, environmental sustainability, and regulatory compliance.

Through its extensive global network, only AHRI is positioned to provide the best solutions to help stakeholders navigate the ever-changing business environment.

**At AHRI, we make life better.  
Let us show you how.**

Learn more at [ahrinet.org](http://ahrinet.org).



# REGULATION ROUND-UP

AHRI writes a bi-monthly column on regulation-related issues in the GCC region, exclusively for *Climate Control Middle East*

## THE PROGRESS MADE ON SEASONAL ENERGY EFFICIENCY MEPS



Nabil Shahin is Managing Director of AHRI MENA. He may be reached at [NShahin@ahrinet.org](mailto:NShahin@ahrinet.org)

### Bridging gaps and building harmony: How collaboration is helping shape HVAC regulations in the GCC region

**T**HE HVACR regulatory landscape in the GCC region has evolved significantly over the past few years. These regulatory measures – though still developing, when compared to the EU and North America – have made substantial progress in reducing energy consumption and carbon emissions in the hot and arid climates of the GCC region. Recent collaborations among manufacturers, regulatory bodies and industry associations have played a crucial role in shaping these regulations and ensuring their effectiveness.

#### MEPS and Seasonal Energy Efficiency

Recently, GCC region countries have been increasing their minimum energy performance standards (MEPS) for HVACR systems. These updates mainly aim to align commercial system MEPS with ASHRAE 90.1 2022 and raise residential MEPS by around 20%. One of the most notable shifts has been the adoption of seasonal energy efficiency MEPS, replacing the previous fixed-temperature point method. This promotes advanced technologies, like inverters, allowing systems to deliver optimal performance year-round. The shift to seasonal energy efficiency improves long-term sustainability for HVACR systems and encourages

manufacturers to develop technologies that better meet the region's unique demands.

#### International standards and the dual-path approach

To address trade barriers and increase market competition, some GCC region governments have adopted a dual-path approach to regulations. This method allows manufacturers to comply with multiple international standards and performance certifications, such as those available from AHRI and Eurovent, under the "Path A" process, which is one way to prove compliance with local MEPS – especially for complex systems such as chillers and VRFs. This method simplifies the regulatory process by eliminating the need for separate testing, streamlining market access for a wider range of HVACR brands and technologies. In addition, this method allows certification bodies to conduct annual surveillance and random testing on their behalf to ensure ongoing compliance with MEPS.

#### Strengthening government-manufacturer collaboration

Collaboration between regulatory bodies and manufacturers has significantly improved in recent years. AHRI, through its MENA Regional

Standards Technical Committee, has become a leading standards developer in the region. By working closely with regulatory authorities, AHRI ensures that manufacturers' feedback is integrated into the development of new standards and regulations. This stronger dialogue allows for smoother regulatory transitions and minimises risks, such as product recalls, shipment delays and supply chain disruptions.

The various technical committees have been working on developing standards that are tailored to the GCC region, such as those accounting for high-ambient temperatures when calculating seasonal and integrated energy efficiency for commercial and residential air conditioning systems. Another significant milestone is the recent formation of a standards working group tasked with developing a new AHRI standard on "evaporative cooling", at the request of local regulatory authorities. This reflects the growing demand for region-specific solutions and highlights the critical role of manufacturers in developing standards that meet the unique needs of the GCC region market. Governments are increasingly recognising that collaboration with industry experts, such as manufacturers, is essential to achieving their regulatory goals.



Moreover, AHRI is actively involved in committees responsible for updating building codes in the GCC region. This participation ensures that HVACR manufacturers stay informed about upcoming changes that allows them to contribute their expertise. Such collaboration is vital, as regulatory bodies work to update codes to meet modern efficiency and sustainability objectives.

### **Allowing more time for compliance**

Manufacturers in the GCC region are now seeing more flexibility in complying with new MEPS. Thanks to

improved communication among AHRI, its members and regulatory bodies, governments are offering longer lead times for compliance, particularly for local manufacturers. This development has eased the financial and logistical pressures previously faced by the industry, allowing for better planning and smoother product rollouts.

### **Advisory groups for policy and decarbonisation goals**

In addition to its work on building codes, AHRI is playing a key role in local policy advisory workgroups. These groups bring together a wide range of stakeholders – governments,

developers, green finance companies, ESCOs, NGOs, consulting engineers and others – to issue white papers advising on building efficiency, energy policies and local standards updates. The objective is to help GCC region countries achieve their decarbonisation and net-zero targets, in alignment with UN requirements and international treaties.

These advisory workgroups provide a platform for sharing knowledge and resources, driving the development of forward-thinking regulations that are critical for achieving sustainability goals in the HVACR sector.

### **Progress in standards harmonisation**

One of the ongoing challenges for manufacturers in the GCC region is the lack of harmonised standards across member countries. Although progress has been made, manufacturers still face varying requirements for energy labelling and testing conditions. AHRI's collaboration with the GCC Standardization Organization (GSO) is helping bridge this gap. Together, they are working on developing voluntary performance and labelling standards that all GCC region countries can adopt, which would significantly reduce the regulatory burden on manufacturers.

### **Conclusion: A collaborative future for HVACR in the GCC region**

The HVACR industry in the GCC region is entering a new era of collaboration among manufacturers, regulatory bodies and industry associations. Together, these stakeholders are driving regulatory changes that not only enhance energy efficiency but also support the region's broader decarbonisation and sustainability goals. By working together, they are helping shape the future of HVACR in the GCC region, ensuring that new standards and regulations are specific, effective, and achievable. [ccme](#)

*CPI Industry accepts no liability for the views or opinions expressed in this column, or for the consequences of any actions taken on the basis of the information provided here.*

## CHILLER RETROFIT VERSUS REPLACEMENT

Chiller modernisation with high-efficiency components, such as VFDs and OMB compressors, will provide efficiencies close to or equal to today's new chillers, says Dan Mizesko



Dan Mizesko is President, Dalkia US Chillers, USA. He may be contacted at [dan.mizesko@dalkiasolutions.com](mailto:dan.mizesko@dalkiasolutions.com)

**W**ITH a substantial number of water-cooled chillers in the GCC region now starting to reach maturity, including those in District Cooling plants, as well as ageing chillers and electrification in the large cities throughout the United States, I thought I would suggest the benefits of chiller modernisation or retrofit versus replacement. I am sure the chiller OEMs will not be recommending modernisation; nevertheless, let me plunge straight into the topic...

The first fact is that a chiller modernisation retrofit – with high-efficiency components, such as a VFD, updated control system, OMB compressor, as well as other technologies – will provide efficiencies close to or equal to today's new chillers. Many of the technological advances new chillers offer can be available with a modernisation retrofit.

Retrofitting is much cheaper than replacement, and capital expenditure associated with purchasing new chillers can be redirected to optimising the performance of the existing chillers. On average, a retrofit will cost 40-60% what a new chiller will cost, and that is without the installation cost of new chillers. And that is why I would like to assert that capex funds can be redirected towards optimising and modernising the existing chillers with upgrades.

Retrofitting can also save the substantial cost of rigging new chillers into place as well as temporally relocating equipment that will impede chiller positioning in the plantroom. And broadly speaking, retrofitting takes less time than replacing an entire chiller, minimising disruptions to operations.

Manufacturing new chillers requires raw materials, energy and water, whereas keeping and retrofitting existing chillers minimise the need for these resources, which is true sustainability.

Manufacturing-related emissions is another aspect that needs to be considered. The production of new chillers emits greenhouse gases and pollutants, whereas retrofitting existing chillers avoids these emissions, which is again treading the sustainability pathway.

Waste reduction is yet another feature in optimising existing chillers. Reusing existing chillers extends their lifespan, reducing waste and lowering the environmental impact of disposal.

Embedded carbon savings is yet another feature. Existing chillers have already expended their embedded carbon during production. New chillers come with a significant initial carbon footprint that can be avoided by keeping and retrofitting the current chiller.

So, it is all systems go for holding on to existing chillers, especially

if existing chillers meet regulatory standards.

In New York City, many building owners are planning on or are currently replacing their steam-driven centrifugal chillers to electric-driven centrifugal chillers. This transition can be very costly, as many chillers are located floors below street level and the cost of digging up the street or of re-engineering the freight car elevator and of rigging the chiller down the shaft can cost well over USD 1,000,000. A chiller-retrofit from steam to electric can save not only the construction and installation costs but also the cost of a new chiller and provide the same energy efficiencies.

To sum up, it makes sense to save on new chiller costs through retrofits, which can ensure close to or equal to efficiencies of a new chiller. Saving on installation and construction costs, minimising resource consumption, extending the lifespan of existing chillers and managing the embedded carbon footprint of the existing chillers are distinct possibilities. In addition, retrofit and modernisation initiatives involving existing chillers usually make them eligible for obtaining utility rebates to help offset the cost of the project. [ccme](#)

*CPI Industry accepts no liability for the views or opinions expressed in this column, or for the consequences of any actions taken on the basis of the information provided here.*





INDUSTRY

PRESENTS



# 14TH ANNUAL CLIMATE CONTROL AWARDS 2024

27<sup>TH</sup> NOVEMBER 2024  
DUBAI UAE

OFFICIAL PUBLICATION

**climate control** MIDDLE EAST

KEY PERSPECTIVES ON THE REGION'S HVACR INDUSTRY

#### BRONZE SPONSORS



#### CATEGORY SPONSORS



#### ASSOCIATE SPONSOR



#### MONITORED BY

بن خاديم و رادھا و شركائهم  
التصنيف المحاسبى  
**Bin Khadim, Radha & Co.**  
Chartered Accountants  
Since 1988

#### STRATEGIC RECRUITMENT PARTNER



WWW.CAREERSBAY.COM

[climatecontrolawards.com/uae](http://climatecontrolawards.com/uae)

# COLD CHAIN LOGISTICS: AT THE FOREFRONT OF THE REGION'S MINDSCAPE

Navigating the evolving cold chain logistics landscape in the Middle East might be challenging, but there are opportunities aplenty for those that are willing to make the effort, says Brent Melvin of RSA Global



**T**HE Middle East region's cold chain logistics sector is experiencing a rapid transformation, driven by a combination of market forces, growing consumer demand and the imperative of sustainability, not to mention geopolitical influences disrupting the supply chain. As nations across the region focus on economic diversification, food security and technological advancement, cold chain logistics is emerging as a crucial industry that underpins the seamless delivery of perishable goods, pharmaceuticals, and other temperature-sensitive products. This sector, once seen as a niche, is now the front and centre of the region's efforts to strengthen its supply chain resilience, bolster food security initiatives and enhance trade capabilities.

The region's cold chain logistics market has been on an upward trajectory, with the region's GDP growth, urbanisation and rising disposable incomes fuelling demand for fresh, chilled and frozen products. GCC region countries have been at the forefront of this growth with investments in infrastructure, partnerships between public and

private sectors and advancements in technology all having contributed to this growing market.

The industry, however, faces several challenges that includes extreme weather conditions, high energy costs and the need for specialised infrastructure that can handle temperature-sensitive goods effectively, efficiently and sustainably. The UAE's geographic location remains advantageous in terms of being a gateway for Africa, Asia, Europe and other GCC region countries, while Saudi Arabia remains the largest consumer market in the region. Saudi Arabia continues its policy of attracting food manufacturers to set up factories in the Kingdom to serve local market consumption, driving the need for advanced cold store infrastructure across the country.

The sector is poised for continued growth, with the cold chain logistics market in the Middle East expected to grow at a compound annual growth rate (CAGR) of around 8.5% between 2023 and 2028, driven largely by increasing demand for temperature-controlled logistics solutions in the pharmaceutical, food and beverage, and e-commerce sectors.

One of the key drivers of the cold

chain industry is the region's reliance on imported food products. Due to its arid climate, the Middle East is heavily dependent on imported fresh produce, dairy, meat and seafood.

The COVID-19 pandemic and the subsequent global supply chain disruptions brought the issue of food security to the forefront, prompting governments across the region to invest in improving their cold storage infrastructure. At the same time, as part of the UAE's National Food Security Strategy, there have been huge developments in the local agricultural scene that have brought a wide range of fresh produce to market, helping reduce dependency on imports.

Modern cold storage facilities are being constructed to improve the storage and handling of goods imported and locally produced, increasing the shelf life while minimising spoilage and waste.

The digital revolution sweeping across the Middle East has been further accelerated by the pandemic, and e-commerce has seen exponential growth. The rise of online grocery shopping has created a surge in demand for cold chain logistics services, as customers now expect fast and efficient delivery of perishable goods directly to



footprint. Refrigeration and cooling systems are notorious for being energy-intensive, and the Middle East's extreme temperatures exacerbate this challenge. Governments and businesses in the Middle East are increasingly adopting sustainable practices within the cold chain sector. Solar-powered cold storage facilities, energy-efficient refrigeration systems and eco-friendly packaging solutions are just a few of the innovations that are being implemented to reduce the carbon footprint while maintaining the integrity of the cold chain.

The UAE, for example, has been a pioneer in sustainability initiatives, with many logistics companies adopting green technologies. The focus is not only on reducing greenhouse gas emissions but also on minimising food loss through more efficient cold storage and transportation methods.

Looking ahead, the cold chain logistics market presents significant opportunities for growth, particularly in the food and pharmaceutical sectors. The region's strategic location, coupled with government initiatives aimed at improving infrastructure and food security, makes it an attractive destination for cold chain investments; however, the industry must overcome challenges related to the region to achieve its full potential. Rising costs, the availability of skilled labour and shortage of drivers are some of the issues that could impede progress. New technologies – in automation and visibility of product across the cold chain – will continue to emerge as business enablers and drivers of efficiency.

The Middle East continues to emerge as a global hub for cold chain logistics with a strong focus on innovation, sustainability and the development of world class infrastructure and facilities, to ensure food safety and security are prioritised. This journey of growth and transformation will not be without its challenges, but the opportunities are immense for those willing to invest. [ccme](#)

*CPI Industry accepts no liability for the views or opinions expressed in this article, or for the consequences of any actions taken on the basis of the information provided here.*

their homes. Retailers and e-commerce platforms are investing in robust cold storage facilities and transportation networks to meet this demand.

Many companies in the region have launched dedicated e-commerce platforms that cater to the growing demand for fresh food delivery. With a high emphasis on quality and freshness, cold chain logistics providers are partnering with e-commerce companies to ensure that goods remain at the optimal temperature throughout the supply chain. The rapid expansion of the online grocery segment is expected to play a pivotal role in the future growth of the sector.

The pharmaceutical sector represents another major growth area for cold chain logistics in the Middle East. The region's healthcare industry has been growing rapidly, with increasing demand for life-saving drugs, vaccines

and medical equipment. The need to safely transport temperature-sensitive pharmaceuticals, particularly in light of the COVID-19 vaccine distribution, has highlighted the critical role of cold chain logistics. This brought about collaborations with pharmaceutical giants and the logistics industry to pioneer solutions in the region.

The region's cold chain logistics infrastructure is evolving rapidly, with major investments pouring into the construction of state-of-the-art cold storage facilities and distribution centres. Both the UAE and Saudi Arabia are leading the charge with initiatives to develop food manufacturing and trading hubs in the region to support local consumer demand and export of locally produced goods, with each country striving to be the region's leader.

As the cold chain logistics industry grows, so, too, does its environmental



# 'AI IS PUSHING THE DEMANDS ON DATA CENTRE HARDWARE'

Liquid cooling is revolutionising how data centres cool powerful, high-density hardware that supports emerging technologies, says **Kamel Tawil**, Managing Director MENA, Equinix

**What are the primary cooling technologies used in Equinix data centres, and how do they enhance energy efficiency? How do you monitor and manage the cooling efficiency across your global network of data centres?**

Compute-intensive applications, like AI, are pushing the demands on data centre hardware. As the world's largest digital infrastructure company – we have 260 data centres across 71 metropolitan areas in 33 countries – Equinix has experience and expertise in helping organisations innovate data centre capacity to support the complex, modern IT deployments that applications like AI require.

By embracing new standards, such as ASHRAE A1 Allowable (A1A), we continue to deliver air-cooled data centres that efficiently and effectively meet the demands of today's workloads.



*Kamel Tawil*

And given our focus on the future, we are simultaneously rolling out liquid cooling at our facilities.

Liquid cooling is revolutionising how data centres cool powerful, high-density hardware that supports emerging technologies, and Equinix is at the heart of that innovation. We support major liquid-cooling technologies, including direct-to-chip and rear-door heat exchangers, so that customers can take advantage of the most efficient solutions. Additionally, by offering a vendor-neutral approach, we enable our customers to use their preferred hardware provider in their deployments.

Today, we have expanded support for advanced liquid-cooling technologies – like direct-to-chip – to more than 100 of our proprietary International Business Exchange (IBX) data centres in more than 45 metros around the world.



## What sustainability goals has Equinix set, and how do you ensure that your data centres remain environmentally friendly while maintaining high performance?

Our facilities in the EMEA are already covered by 100% renewable energy, and our goal is to extend the reach of this to cover our entire global footprint by 2030. To achieve this, we have executed power-purchase agreements (PPAs) that create long-term financial stability for developers of wind, solar and other clean energy resources. With a guaranteed price paid to clean energy providers over the life of the agreement, PPAs can provide financial certainty to facilitate the construction and operations of renewable energy projects.

We also continue evaluating on-site solar opportunities, on-site generation from fuel cells and any other distributed low-carbon technology that fits with our overall strategy. Our journey towards this goal has already yielded significant success, as today we enjoy a position of industry leadership with 96% renewable energy coverage. To date, Equinix has issued USD 4.9 billion in green bonds to drive investment across multiple areas of innovation: Green buildings, renewable energy, energy efficiency, water efficiency, waste reduction and clean transportation.

An interesting and particularly topical example of our environmentally friendly

approach is the heat export programme at our new Paris 10 IBX, which helped heat a portion of the Aquatic Centre at the Paris Olympics.

## What role do you see emerging technologies like AI and Machine Learning playing in the future of data centre cooling and management?

While emerging technologies like AI and Machine Learning are more demanding of compute, they are also playing a transformative role in the future of data centre cooling and management.

This is already happening at Equinix, where we've improved the energy efficiency of our data centre in Frankfurt, Germany by nine per cent using AI. The software we use enables companies to reduce the energy consumption of their cooling systems by making them more efficient. Specifically, the software, from a provider called Eталytics, models the operating characteristics of the cooling system using telemetry data and creates a digital twin. The twin is then used to dynamically calculate optimum operating strategies in real-time, considering factors such as temperature, humidity and cooling requirements.

## Could you describe any improvements that could be made to the performance of data centres, say in terms of PUE?

You've mentioned efficiency measurement, and I think this brings up a point worth discussing. One early improvement the data centre industry needs is a better way to measure the efficiency of our computing facilities. PUE, the data centre energy efficiency metric that was created largely with the assumption that air cooling and fans were a necessary part of servers, switches and routers, doesn't really capture the benefits of liquid cooling. The number is a simple calculation for the total power a data centre receives from the utility divided by the power consumed by IT. The smaller the divisor, the higher the PUE, but the divisor includes the power consumed by server fans, which are responsible for a substantial portion of the total IT power consumption. Direct-to-chip liquid cooling mostly removes the need for server fans, making PUE higher while lowering total power use. So, the newly intensified focus on sustainability and the efficiency with which the total power is used requires a much more holistic measuring stick for efficiency. [ccme](#)

*CPI Industry accepts no liability for the views or opinions expressed in this article, or for the consequences of any actions taken on the basis of the information provided here.*

Join 750+ of suppliers listed in

# Climate Control Guide & Directory 2025

A READY REFERENCE ON HVACR MANUFACTURERS IN THE MIDDLE EAST

BROUGHT TO YOU BY *CLIMATE CONTROL MIDDLE EAST*

Submit or edit a FREE\* listing for the  
17<sup>th</sup> Edition of our popular and much-anticipated  
Climate Control Guide & Directory (CCG&D) 2025,  
a ready reference on HVACR manufacturers  
in the Middle East!

\*Limited to 15 categories

**Entries Deadline: 07 November 2024**  
**Advertising Deadline: 12 November 2024**

[climatecontroldirectory.com/new/register](https://climatecontroldirectory.com/new/register)



INDUSTRY

FOR ADVERTISING OPPORTUNITIES, EMAIL: [advertising@cpu-industry.com](mailto:advertising@cpu-industry.com)

# THE INTRINSIC VALUE OF CERTIFICATION

Navigating Pakistan's HVAC industry is about strengthening strategies for awareness and certification





*Khalil Rabbani*

**A**s an emerging economy, Pakistan is on the brink of significant change, with shifting political and economic landscapes impacting the construction sector. Khalil Rabbani, Director of Fahim, Nanji & deSouza (Pvt.) Limited, an engineering consultancy with experience across a broad spectrum of projects in the country, highlights the critical importance of macroeconomic stability in driving industry growth—a challenge stakeholders in Pakistan are acutely aware of. “The growth of the industrial sector has been somewhat stunted due to high utility rates and higher profits in other sectors, such as real estate,” he says. “However, in recent years, there have been advancements, particularly in the healthcare sector, due to service demands.”

Amjad Iqbal, Chief Executive Officer of Welkin Solutions, one of the major HVAC players in the market, also



*Amjad Iqbal*



notes the positive developments and resilience of Pakistan's industrial and healthcare sectors despite economic uncertainties affecting investment and development across various sectors. He says: "Industrial growth continues to be driven by urbanisation, government incentives and consumer demand, while population growth, infrastructure improvements and increased awareness of healthcare needs fuel the healthcare sector's expansion. Government regulations mandating compliance with international and environmental standards have also played a crucial role in shaping these sectors' growth trajectories."

### **The challenges of designing according to local needs: redundancy and resilience**

Iqbal says that in this context, there is a growing demand for HVAC solutions tailored to critical applications. "Industries require efficient HVAC systems to maintain optimal operational conditions, ensure worker comfort and comply with environmental regulations," he says. "Healthcare facilities demand precise temperature and humidity control to maintain sterile environments and safeguard patient health. It is also important to have reliable and efficient systems that adapt to changing circumstances. With ongoing

sectoral expansions and infrastructure developments, we anticipate a continued rise in demand for advanced HVAC solutions in the coming years."

Rabbani points out that designing MEP systems for healthcare and industrial facilities in Pakistan presents unique challenges, noting that the harsh climatic conditions, including extreme temperatures and humidity, demand robust and resilient MEP designs. "The availability of skilled labour and advanced technology can also be limited, impacting project execution and performance," he says. "Budgetary constraints, aggressive project timelines and a mindset focused on immediate returns often hinder the implementation of optimal solutions. Lastly, the lack of stringent minimum standards in certain areas can compromise the quality and efficiency of these systems."

Overcoming these obstacles, Rabbani argues, requires innovative design strategies, cost-effective solutions and a strong emphasis on quality control and certifications. In this regard, Rabbani emphasises the importance of resilience, maintainability and flexibility in system design. "These elements contribute to MEP systems' long-term performance and adaptability to evolving operational needs and technological advancements," he says. "For instance, a healthcare facility might prioritise redundancy and

fail-safe mechanisms for uninterrupted operations, while an industrial plant may focus on modularity and scalability for future expansion."

Efficiency, compliance and certification are critical considerations for customers designing MEP systems and equipment in healthcare and industrial settings, Rabbani says. "High energy costs and the imperative to reduce environmental impact make energy efficiency a top priority," he says. "Adherence to stringent regulations and industry standards is essential to ensure safety, performance and legal compliance. Additionally, certifications, such as Eurovent and AMCA, provide a benchmark for quality and reliability."

### **The story of standards and regulations**

Iqbal adds that regulations, such as those stipulated by the Pakistan Engineering Council (PEC), ASHRAE standards, and local environmental regulations, have driven the improvement of standards in the market. These regulations mandate adherence to specific energy efficiency criteria, IAQ standards and safety.

However, Iqbal notes that macroeconomic uncertainties in the country have prompted a re-evaluation of regulatory compliance to ensure

# 10<sup>TH</sup>

EDITION

**GULFOOD**  
MANUFACTURING

5-7 NOV 2024  
DUBAI WORLD TRADE CENTRE



## A DECADE OF POWERING PROGRESS

In 2024, **Gulfood Manufacturing** proudly marks a decade since opened its doors and grew into a pivotal platform for the F&B Manufacturing industry. The story extends far beyond this milestone.

**Gulfood Manufacturing** returns bigger than ever with a powerful presence of **2,500\*** global companies spanning **72** countries across **19** halls. Expect to see groundbreaking innovations and the latest industry advancements, gain insights and visionary strategies from global experts, and build new business connections to achieve competitive advantage.

**REGISTER TO VISIT**  
[GULFOODMANUFACTURING.COM](https://gulfoodmanufacturing.com)

\*Registrations for trade professionals only

CO-LOCATED WITH

**gulhost**

ORGANISED BY



مركز دبي التجاري العالمي  
DUBAI WORLD TRADE CENTRE

that standards remain robust and enforceable, and that there is still a need to develop minimum standards to elevate market appreciation for high-quality HVAC products and solutions. “Ensuring that only high-quality, certified products enter the market is crucial for the long-term operational efficiency and sustainability of projects,” he says. “Substandard solutions compromise performance and reliability and pose risks to occupant health and safety while increasing operational costs over time due to inefficiencies and frequent maintenance needs.”

This environment has also created a demand for certifications, Iqbal says, adding that Eurovent Certified Performance holds significant sway in the Pakistani market due to its comprehensive testing and validation processes that ensure product performance and energy efficiency, confirming adherence to industry standards and performance benchmarks, such as the Eurovent Energy Label. “TUV certifications are also valued for their stringent safety and quality standards, particularly in the healthcare sector,” he says.



Morten Schmelzer

Morten Schmelzer, Head of Group Public Affairs, Systemair AB, an active contributor to many international association working groups and certification bodies, says: “As the demand for high-quality HVAC solutions grows, the role of robust certifications,

like Eurovent, becomes increasingly important. These certifications are not just a mark of quality but a testament to a product’s performance and reliability. Certification bodies must prioritise supporting emerging markets like Pakistan in better understanding the essential certification requirements. This is crucial, because even underperforming products can obtain Eurovent or AHRI certification, provided their performance data is accurate. Therefore, focusing on specific factors and values within a certification program is vital to ensure you select top-quality, high-performing products – not just a product with a sticker.”

For instance, he says, the Eurovent Energy Label offers a clear, straightforward A+, best, to E, worst, rating scale, making it easier to assess a product’s performance comprehensively. For critical application areas, such as healthcare, the Eurovent Hygienic Air Handling Unit certification adds additional value with its simple 1-3 star rating system, which aligns with internationally recognised hygiene standards.

Rabbani says while there is growing awareness among project stakeholders in Pakistan of the value of certifications, there is still a need to develop a more comprehensive understanding of their value, especially in a cost-centric culture and strict project timelines prioritising price over long-term performance and efficiency. “AHUs, fans and chillers carrying certifications like AMCA or Eurovent are undoubtedly in higher demand due to their association with quality, performance and energy efficiency,” he says. “However, there’s a clear need to enhance knowledge dissemination regarding these certifications’ significance and impact on overall system performance.”

Rabbani believes that industry associations, manufacturers, and consultants must play a crucial role in educating the market about the value proposition of certified equipment and its contribution to sustainable and efficient building operations. He also advocates for a more substantial presence of international associations

in the market. “Overall, the market situation has highlighted the importance of certified products that guarantee performance and compliance, mitigating risks associated with uncertified equipment,” he says.

Schmelzer, reiterating Rabbani’s point, says: “Education is key to bridging the gap between awareness and understanding of certification value in Pakistan and other emerging markets in the region. We must emphasise that these certifications are not mere formalities but critical components that ensure the long-term sustainability and efficiency of HVAC systems.”

## Choosing the right partner

Given the complex nature of the market, Rabbani highlights the importance of selecting the right partner and solutions for the success of any project. He stresses that the repercussions of suboptimal partner selection are far-reaching, as inefficient equipment or systems can lead to increased operational costs, reduced energy efficiency, and potential safety hazards. “Delays in procurement and installation disrupt project timelines, impacting overall project profitability,” Rabbani says, noting that a lack of technical support or after-sales service can hinder project performance. As such, he says, their criteria encompass factors such as the supplier’s financial stability, technical expertise, project management capabilities and alignment with the company’s values. “Additionally, we prioritise partners with a proven track record of delivering high-quality products and services within budget and timeline constraints,” he says.

Schmelzer says: “Selecting the right partner is not just about finding a supplier. It’s about forming a strategic alliance that aligns with your project’s goals and long-term vision. In markets like Pakistan, where challenges abound, this decision is even more crucial.” [ccme](#)

*CPI Industry accepts no liability for the views or opinions expressed in this article, or for the consequences of any actions taken on the basis of the information provided here.*

# NADCA PROMOTES HEALTHIER INDOOR ENVIRONMENTS

Clean HVAC systems reduce energy consumption, lower operational costs and improve the wellbeing of building occupants by providing cleaner air and more comfortable environments



Around the world, a death occurs **EVERY 20 SECONDS** due to **poor indoor air quality**.

**2 OUT OF 3** IAQ problems involve **INEFFICIENT HVAC SYSTEMS**.



**20% OF ALL ILLNESSES** are either caused by, or aggravated by, **polluted indoor air**.

**1 OUT OF 6** people with allergies may experience worsened symptoms due to the presence of allergens in **AIR DUCT SYSTEMS**.



RESOURCES AVAILABLE AT  
[nadca.com/commercial-consumers](http://nadca.com/commercial-consumers)

**P**oor Indoor Air Quality is a global concern, especially in the built environment, where people spend 90% of their time. Through normal occupation in a building, we generate a great deal of contaminants and air pollutants, such as dander, dust and chemicals. These contaminants are pulled into the HVAC system and re-circulated 5-7 times per day, on average. Over time, this re-circulation causes a build-up of contaminants within the system.

Sick Building Syndrome (SBS) and respiratory issues can result from inadequate HVAC system maintenance. The World Health Organization estimates that up to 30% of new or renovated buildings globally may contribute to SBS, largely due to poor IAQ.

The National Air Duct Cleaners Association (NADCA) provides resources to help facility managers, architects, engineers, specifiers and industrial hygienists tackle these issues head-on.

ACR, the NADCA Standard, is the global standard for assessing, cleaning and restoring HVAC system components, such as air-handling units, ductwork and coils. It provides clear guidelines to ensure HVAC systems are thoroughly cleaned, reducing the risk of contamination and inefficiency.

The General Specification for the Cleaning of Commercial HVAC Systems is a customisable tool for creating effective project plans. It outlines the steps to keep HVAC systems running at peak performance. It addresses project documentation, scheduling and verification to ensure compliance with NADCA standards and to optimise system performance.

Make HVAC system maintenance a central part of standard operating procedures to help prevent costly repairs, improve system performance and to create healthier environments for occupants.

To download these tools and view more information, visit [www.nadca.com/commercial-consumers](http://www.nadca.com/commercial-consumers).



# THE GREAT HVACR FAIR

## THANK YOU SPONSORS

DAY 1

SESSION ON BROAD HVAC APPROACHES

PRODUCER



THE CLIMATE CONTROL CONFERENCE 10<sup>TH</sup> EDITION RIYADH, SAUDI ARABIA TALK | EXHIBIT | NETWORK

THEME:

Getting things right from the get-go in the new wave of mega developments in the Kingdom of Saudi Arabia

OFFICIAL PUBLICATION



www.ccme.news/event/c3

### SPONSORS

DIAMOND SPONSORS



BRONZE SPONSORS



EXHIBITOR



ASSOCIATE SPONSOR



PRINCIPAL STRATEGIC KNOWLEDGE PARTNER



experts of ingenious built environments

STRATEGIC KNOWLEDGE PARTNERS



STRATEGIC HVACR RECRUITMENT PARTNER



DAY 2  
SESSION ON  
DISTRICT COOLING



Presents

# DC Dialogue

10<sup>th</sup> EDITION

THEME:

A need for transformational change in District Cooling for Saudi Arabia to raise the bar on decarbonising existing cities and to get things right from the get-go in new cities

OFFICIAL PUBLICATION



KEY PERSPECTIVES ON THE REGION'S HVACR INDUSTRY

[www.ccme.news/event/dc-dialogue](http://www.ccme.news/event/dc-dialogue)

## SPONSORS

DIAMOND SPONSORS



شركة الأخوان حسين و الحسن غاري شاكور  
HUSSEIN & AL-HASSAN G. SHAKER BROS.



SILVER SPONSOR



Possibility in every drop

BRONZE SPONSORS



EXHIBITORS



PRINCIPAL STRATEGIC KNOWLEDGE PARTNER



STRATEGIC KNOWLEDGE PARTNERS



STRATEGIC HVACR RECRUITMENT PARTNER



DAY 3



PRODUCER OF THE  
CLIMATE CONTROL AWARDS  
(13 EDITIONS TO DATE)

PRESENTS



# CLIMATE CONTROL SAUDI AWARDS 2024

[www.climatecontrolawards.com/saudi](http://www.climatecontrolawards.com/saudi)

OFFICIAL PUBLICATION



KEY PERSPECTIVES ON THE REGION'S HVACR INDUSTRY

CPI Industry has produced 13 editions of the globally renowned Climate Control Awards to date, with the 14th edition scheduled to take place in Dubai in November 2024

## SPONSORS

DIAMOND SPONSORS



شركة الأخوان حسين و الحسن غاري شاكور  
HUSSEIN & AL-HASSAN G. SHAKER BROS.



SILVER SPONSOR



The new degree of comfort™

BRONZE SPONSORS



الشركة المتحدة للسيارات والمعدات الثقيلة د.م.م  
UNITED MOTORS & HEAVY EQUIPMENT CO. LLC

CATEGORY SPONSORS



Possibility in every drop



BREATHE THE FINEST

PRINCIPAL STRATEGIC KNOWLEDGE PARTNERS



STRATEGIC KNOWLEDGE PARTNER



MONITORED BY



STRATEGIC HVACR RECRUITMENT PARTNER



[www.climatecontrolawards.com](http://www.climatecontrolawards.com)



## H.H. Sheikh Ahmed bin Saeed reviews Empower's District Cooling Project

Utility provider showcases District Cooling scheme with an ultimate cooling capacity of 451,540 refrigeration tons and consisting of nine plants, four of which are currently operational, serving 188 multi-use buildings and skyscrapers through a single pipeline network spanning 52.4 kilometres

By CCME Content Team

**E**MPOWER said H.H. Sheikh Ahmed bin Saeed Al Maktoum, Chairman of the Dubai Supreme Council of Energy, reviewed its achievements and successes as a District Cooling utility while inaugurating the 26th edition of the Water, Energy, Technology, and Environment Exhibition (WETEX 2024) at the Dubai World Trade Centre. The event is being held under the directives of His Highness Sheikh Mohammed bin Rashid Al Maktoum, Prime Minister of the UAE and Ruler of Dubai, and was organised by the Dubai Electricity and Water Authority (DEWA), Empower said in a Press Release.

During his visit to its booth, Empower said, H.H. Sheikh Ahmed, accompanied by H.E. Saeed Mohammed Al Tayer, Managing Director and CEO of DEWA, reviewed

the world's largest District Cooling project, in the Business Bay area of Dubai, implemented by Empower. The project, Empower said, is mentioned in the Guinness World Records for being the highest capacity District Cooling Plant (DCP). H.E. Ahmad Bin Shafar, CEO, Empower, briefed H.H. Sheikh Ahmed on the project, which has an ultimate cooling capacity of 451,540 refrigeration tons (RT), Empower said. The project consists of nine plants, four of which are currently operational, serving 188 multi-use buildings and skyscrapers through a single pipeline network spanning 52.4 kilometres, Empower said. H.E. Bin Shafar also highlighted the District Cooling utility's major achievements and the global awards it has won this year, Empower said.

"WETEX has earned a reputable status as one of the world's largest and leading exhibitions in the water, energy, technology, and environment sectors," H.E. Bin Shafar said. "Participants and visitors are set to experience an exciting event at this prestigious international exhibition, which serves as a unique platform fostering integration across all segments of the energy sector. In addition to offering new opportunities for cooperation in the commercial and technological sectors, WETEX 2024 enables investors, decision-makers, and local and international institutions to conclude fruitful deals, build strategic partnerships, exchange experiences, learn about the latest technologies in these vital sectors, and identify market needs."





## UAE Council for Climate Action reviews progress and prepares for COP29

H.E. Dr. Amna bint Abdullah Al Dahak, UAE Minister of Climate Change and Environment, expresses confidence in achieving the UAE's Net Zero vision across all sectors within the established timeframe

By CCME Content Team

**T**HE UAE Council for Climate Action outlined the progress in implementing national initiatives in collaboration with all relevant authorities in the UAE, and the preparation for the upcoming COP29, scheduled to take place in November in the Republic of Azerbaijan. Making the announcement through a Press Release, the UAE Ministry of Climate Change & Environment said the meeting of the UAE Council for Climate Action was chaired by Her Excellency Dr. Amna bint Abdullah Al Dahak, Minister of Climate Change and Environment (MOCCA).

The Ministry said H.E. Dr. Al Dahak expressed her gratitude to the Council members and the teams from various authorities involved in climate work for their coordination and collaborative efforts towards fostering a sustainable future in the UAE.

H.E. Dr. Al Dahak said: "This meeting is particularly significant as we actively participate in important global forums. Our goal is to showcase the UAE's vision for addressing climate change and fostering sustainability. Recent examples include our participation in the G20 Agriculture Ministers' Meeting in Brazil and our upcoming attendance at the UN General

Assembly. Through these platforms, we aim to emphasise the UAE's role in addressing climate challenges domestically and internationally, and striving for environmental sustainability.

"The UAE has set a clear vision of achieving Net Zero by 2050, aiming for a sustainable climate and environment. This vision is materializing through concrete projects and tangible accomplishments that we will seek to expand upon.

"Working together through this Council, we are confident that we will continue to implement this vision across all sectors, adhering to our established timeline. It's imperative that we demonstrate to the world, as we have consistently done, that our ambitious words translate into effective actions. Our aspiration is to build upon the UAE's historical legacy of climate and environmental action."

The Ministry said the third meeting of the UAE Council for Climate Action focused on key topics including the progress in implementing the UAE's Net Zero Strategy 2050. The Council, the Ministry said, emphasised continued collaboration with all stakeholders to ensure the successful implementation of the strategy's projects. The Ministry said it mandated the submission of an

annual report detailing the strategy's progress and outcomes, to be presented to the Cabinet in January of each year, beginning in 2025.

The Ministry said the meeting addressed the need for legislation to mitigate the societal and economic impacts of climate change, with the goal to foster sustainable economic growth and social well-being. MOCCA said the Council discussed the latest advancements in the carbon market project and Carbon Pricing Study. The Ministry said the discussions also addressed the progress made on the National Dialogue for Climate Ambition (NDCA), which has so far held 14 sessions across various sectors and has seen 138 companies sign the MOCCA's Climate Responsible Companies Pledge.

The meeting, the Ministry said, examined the second phase of the National Measurement, Reporting, and Verification (MRV) System, in addition to the progress in the UAE's Nationally Determined Contributions in the coming period. The Ministry said the meeting discussed preparations for the UAE's national participation in COP29, working on developing a strategic plan to build on the success of last year's COP28 in the UAE, coordinating with all stakeholders involved in the UAE delegation to identify and align on the initiatives that will be presented at COP29, under the guidance of the Supreme Committee for COP29 in Azerbaijan.

The Ministry said the third meeting of the UAE Council for Climate Action 2024 was attended by representatives from the Ministry of Climate Change and Environment, Ministry of Foreign Affairs, Ministry of Energy and Infrastructure, Ministry of Industry and Advanced Technology, Ministry of Economy, Ministry of Education, General Civil Aviation authority, and Office of The UAE Special Envoy For Climate Change. The meeting, MOCCA said, was attended by representatives of Abu Dhabi National Energy Company (TAQA); Dubai Supreme Council of Energy; Ajman Municipality; the Planning Department, Environment Protection and Development Authority in Ras Al Khaimah; and Department of Umm Al Quwain Municipality.



## Abu Dhabi DoE introduces first edition of Foresight Reports

Government department says the series of reports reflect a proactive approach to managing rapid energy sector developments

By CCME Content Team

**T**HE Abu Dhabi Department of Energy (DoE) has launched a series of "Foresight Reports" in line with adopting a proactive approach to efficiently address the rapid developments in the energy sector. Making the announcement through a Press Release, the DoE said the reports are aligned with its institutional strategy by adopting foresight practices to anticipate future trends and potential scenarios and to understand their implications.

The DoE said the primary objective of the reports is to conduct a systematic analysis of possible future scenarios, such as technological advancements, policy shifts and market dynamics that may impact the energy sector to make well-informed decisions that foster innovation and sustainability. The series of reports also serves as a strategic tool guiding the DoE towards achieving its long-term goals, helping mitigate risks and enabling the DoE to seize new opportunities.

The DoE said it has issued four reports, addressing significant and timely topics. It said the first report, titled *The Ammonia Economy – Ammonia-based Fuel and the Use of Ammonia for Energy Storage and Delivery*, explores the future potential of the ammonia economy, focusing on its role in hydrogen energy production, global trade and the transition to sustainable ammonia technologies. The second report, titled *The Future of Water Sustainability through the Graphene Revolution*, explores the future potential of graphene-based technologies in various water-related applications, including desalination, purification and treatment, while improving the efficiency of these processes, the DoE said.

The DoE said the third report, titled *The Race to Harness Space Solar Power – New Horizons for Energy*, assesses the strategic feasibility of space solar power technology

and its alignment with the UAE's renewable energy goals, alongside its vision of achieving a future free from carbon emissions. The fourth report, titled *The Future of Enhancing Renewable Energy through Smart Grids and Artificial Intelligence*, focuses on the advancement of smart grid technologies in the UAE, their connection to the artificial intelligence revolution and their applications in energy management, the DoE said.

Dr. Shamma Al Malik, Director, Strategy Development, DoE, said: "*The Foresight Reports* aim to inspire the forward-looking visions of our wise leadership and the ambitious aspirations of the UAE government while addressing the challenges facing energy transition, sustainability, water security and the development of energy efficiency technologies. Through these reports, we strive to build a deep knowledge base and extract precise information that enables us to ensure full readiness to face future challenges.

"The issuance of these four reports reaffirms the Department of Energy's commitment to achieving an effective transformation in the energy sector by promoting the use of clean and renewable energy and anticipating the future needs of the industry. These reports will undoubtedly form a fundamental basis for decision-making, further enhancing Abu Dhabi's leadership position in the global energy transition journey and driving sustainable growth toward a prosperous future."

The DoE said she also highlighted the importance of the DoE continuing to collaborate with all partners and stakeholders, leveraging all its capabilities, and delivering advanced solutions and innovations in the field of clean and renewable energy.



## Empower achieves entry into Guinness World Records for its Business Bay District Cooling project

The project has a total connected capacity of 241,272 Refrigeration Tons, District Cooling utility company says

By CCME Content Team



Empower, the project includes nine District Cooling Plants (DCPs), four of which are currently operational, serving 188 multi-use buildings and skyscrapers across Business Bay, Sheikh Zayed Road, and the Dubai Water Canal through a single distribution pipeline network spanning 52.4 kilometres. The project is equipped with advanced Thermal Energy Storage (TES) technologies and uses treated sewage effluent (TSE) in its operations, in addition to other advanced technologies, Empower said.

**E**MIRATES Central Cooling Systems Corporation (Empower) has entered the Guinness World Records for the highest capacity District Cooling Plant for its Business Bay District Cooling project in Dubai. In a ceremony held at Empower's booth on the second day of the WETEX 2024 exhibition, from October 1 to 3, in Dubai, the company's CEO, H.E. Ahmad Bin Shafar received the Guinness World Records certificate from a Guinness World Records official in the presence of prominent figures and industry leaders.

H.E. Bin Shafar expressed his pride, saying: "We are overjoyed to inscribe our name into the Guinness World Records under a brand-new global benchmark, 'The Highest Cooling Capacity for a District Cooling System'. With an astonishing total connected capacity of 241,272 Refrigeration Tons (RT), this achievement marks a groundbreaking milestone for Empower on the world stage. It reflects our deep commitment to develop high-value assets that not only deliver environmentally friendly District Cooling services to Dubai's residents but also generate long-term sustainable returns for the company and its stakeholders."

H.E. Bin Shafar further emphasised that the record solidifies Dubai's position as a global leader in environmental preservation and resource sustainability, paying tribute to the city's pioneering role in offering cutting-edge District Cooling solutions.

Empower said its Business Bay District Cooling project is one of the largest projects, globally, with an ultimate capacity of 451,540 RT. According to

## Sustainable Heat Transfer





Discover more on  
[SonFlow.eu](https://www.sonflow.eu)

At SonFlow, we are not just another brand; we are the result of 40 years of expertise and a passion for revolutionizing the world of Heat Transfer.

Our plate heat exchangers are designed with the latest technology and engineered to provide optimal thermal performance, efficiency, and reliability.

SonFlow FZCO | Jafza South - BJ 01 | Dubai

Tel. +971 4 329 4647 | [info@sonflowmea.com](mailto:info@sonflowmea.com) | [www.sonflow.eu](https://www.sonflow.eu)



## Empower signs agreement with Mitsubishi Heavy Industries Thermal Systems

CEO says the deal accelerates efforts towards a carbon-free future through energy-efficient solutions

By CCME Content Team

**E**MIRATES Central Cooling Systems Corporation (Empower) has signed a new agreement with Mitsubishi Heavy Industries Thermal Systems (MHI Thermal Systems), a part of Mitsubishi Heavy Industries (MHI) Group. Making the announcement through a Press Release Empower said H.E. Ahmad Bin Shafar, CEO, Empower and Yoshihiro Ito, President, MHI Thermal Systems, signed the agreement on October 8 in Dubai, in the presence of officials from the two companies. Empower said the agreement states the supply of advanced chillers with a total capacity up to 100,000 Refrigeration Tons (RT).

Empower said that under the agreement, MHI Thermal Systems will

supply 18 water-cooled centrifugal chillers with a total capacity of 56,250 RT starting from 2025, for various District Cooling projects, including the Deira Waterfront Development (DWD), Jumeirah Village and Al Sufouh. Empower said the agreement also includes a provision allowing Empower to increase the order up to December 31, potentially increasing the total capacity to 100,000 RT.

Empower said the latest development marks the second agreement between the two companies, following the 2021 deal to supply water-cooled centrifugal chillers with a total capacity of 100,000 RT. The chillers were installed in Empower's Za'abeel, DLRC,

JBH and Business Bay 05 cooling plants. Empower said it is committed to continuously improve its 87 plants by adopting the latest technologies to better serve the customers in residential, commercial, healthcare, educational and multi-use projects across Dubai.

Empower said H.E. Bin Shafar emphasised that the deal offers the two companies a significant opportunity to advance the District Cooling sector and accelerate efforts towards a carbon-free future through energy-efficient solutions. Empower said the solutions reduce environmental impact and pave the way for a more sustainable tomorrow. Empower said H.E. Bin Shafar also highlighted that the agreement supports Empower's goal of upgrading its plants with innovative technologies that promote efficient, energy-saving production processes, aligning with the company's environmental and societal objectives and its commitment to safeguarding resources for future generations.

Empower said H.E. Bin Shafar reaffirmed the company's dedication to developing valuable modern infrastructure, maintaining its leadership in the global District Cooling market and enhancing the quality of environmentally friendly District Cooling services to customers, in line with the highest global standards.

Empower said Ito expressed pride in providing advanced solutions to support Empower's goals. He emphasised MHI Thermal Systems' commitment to maximising energy efficiency while continuously enhancing operational and production effectiveness, Empower said. Ito said MHI Thermal Systems is honoured to collaborate with Empower in implementing solutions that align with the Dubai Government's long-term strategies, aiming to reduce energy and water consumption by 30% by 2030 and support the UAE's carbon emissions reduction strategy.

Following the signing, Empower said, it hosted the MHI Thermal Systems' team for a field tour of the Business Bay District Cooling plant, which has entered into the Guinness World Records for achieving the highest capacity District Cooling Plant.



## Tabreed celebrates participating in 3rd edition of World Utilities Congress

District Cooling provider said the event was held under the patronage of H.H. Sheikh Khaled Bin Mohamed Bin Zayed Al Nahyan, Crown Prince of Abu Dhabi and Chairman of the Abu Dhabi Executive Council

By CCME Content Team

**T**ABREED was a specialised sponsor, exhibitor and participant in the third edition of the World Utilities Congress, from September 16 to 18 at the Abu Dhabi National Exhibition Centre (ADNEC). Making the announcement through a Press Release, Tabreed said it has played a central role as sponsor and exhibitor from the inception of the event, with this year's edition attracting a record number of delegates, visitors, exhibitors, industry leaders, innovators and government officials from the world over.

Khalid Al Marzooqi, Chief Executive Officer, Tabreed, said: "For 26 years, Tabreed has been a pillar of the UAE's business community and has grown to become one of the major utility providers, both at home and internationally. So, the World Utilities Congress is a perfect fit for us, and we are proud to have been the Exclusive Cooling Partner again, this year.

"It's an ideal platform for us to share our world-leading industry know-how,

showcase our latest innovations – our new geothermal plant, for instance, stirred enormous interest with anyone who visited our stand – and interact with stakeholders, policymakers, legislators and government leaders from all over the world. We're already operating in six countries and have further international expansion in our sights, and being active in leading industry events, such as the World Utilities Congress, means we're able to increase awareness of the undeniable benefits of District Cooling to the widest, most diverse audience possible."

Tabreed said its senior management took part in numerous high-level panel discussions and technical presentations throughout the three days, addressing topics including policy and regulation, the need for a customer-centric approach, carbon pricing, water desalination, operational excellence and empowering the next generation of talent through effective human capital practices. Tabreed said its exhibition stand featured dedicated display areas for the company's new geothermal plant, detailing the application of renewable energy in the first project of its kind in the Middle East, as well as an immersive virtual reality tour of a District Cooling facility and an interactive game in which participants worked against the clock to construct a chilled water supply network.



**"For 26 years, Tabreed has been a pillar of the UAE's business community and has grown to become one of the major utility providers, both at home and internationally. So, the World Utilities Congress is a perfect fit for us, and we are proud to have been the Exclusive Cooling Partner again, this year."**



## Aeroseal acquires Advanced World Trading (AWT)

Says the Saudi Arabia-based company will be rebranded as Aeroseal Arabia

By CCME Content Team

**A**EROSEAL, manufacturer of building energy efficiency and air-sealing technologies for HVAC ductwork and building envelopes, announced its acquisition of Advanced World Trading (AWT), which operates in the Saudi Arabian energy-saving and air duct-sealing market.

Making the announcement through a Press Release, Aeroseal said the strategic move marks a significant milestone in its global expansion, solidifying its presence in the Middle East and reinforcing its commitment to providing innovative and sustainable energy solutions across the region. Following the acquisition, AWT will be rebranded as Aeroseal Arabia, reflecting the integration of the company's products and services under the Aeroseal brand.

According to Aeroseal, the acquisition of AWT is a crucial next step in its broader strategy to expand its footprint in high-growth markets, worldwide. With its rapidly growing construction sector, ambitious Vision 2030 initiatives, and increasing emphasis on energy efficiency and sustainability, Saudi Arabia represents a pivotal market for Aeroseal, the Miamisburg, Ohio-based company said. By acquiring AWT, it added, it not only gains immediate access to an established customer base and local market expertise but also enhanced capacity to deliver world-

class energy-saving solutions, tailored to the specific needs of the Saudi Arabian market and the wider Middle East region.

"We are thrilled to welcome AWT into the Aeroseal network, especially as this acquisition aligns perfectly with our vision to lead the global movement toward energy efficiency and environmental stewardship," said Amit Gupta, CEO, Aeroseal. "Aeroseal's entry into Saudi Arabia speaks not only to our continued business expansion but also our role in Saudi Arabia's broader journey toward a more sustainable future. We look forward to working closely with local partners and contributing to the Kingdom's ambitious goals. Through Aeroseal Arabia, we are committed to delivering world-class products and services, driving meaningful contributions to the communities we serve."

As Aeroseal Arabia, the company will continue to serve its existing clients while expanding offerings to include the full suite of Aeroseal products and services, Aeroseal said.

Fadi Shoura, former CEO of AWT and now CEO of Aeroseal Arabia, said: "We are proud to become part of Aeroseal's global network and join the company's mission to drive building decarbonization and energy efficiency through pioneering technology that greatly outperforms traditional solutions.



Amit Gupta

This transition marks a new chapter in our journey, highlighting emerging opportunities to leverage Aeroseal's cutting-edge technologies and global expertise. Our customers in Saudi Arabia can expect the same dedication to quality and service they have come to trust, now enhanced by Aeroseal's industry-leading solutions."

The successful acquisition of AWT by Aeroseal was facilitated by the strategic advisory services of Ollen Group, a consulting and design firm. Ollen Group, Aeroseal said, provided comprehensive sell-side advisory support throughout the transaction, including market analysis, due diligence and negotiations, ensuring a smooth and successful transaction for both companies.

Oliver Elirani, Managing Partner, Ollen Group, said: "The acquisition of AWT by Aeroseal is a testament to the growing importance of energy efficiency solutions and the sustainability agenda in the Middle East, and we are confident that Aeroseal Arabia will play a crucial role in advancing these goals in Saudi Arabia and the Middle East. This partnership is a win-win for both companies and, more importantly, for the communities and businesses they will serve."



The Aeroseal facility in Miamisburg, Ohio

# AESG reports 100% year-on-year growth

Says sustainability and extreme weather resilience solutions it is providing have driven business

By CCME Content Team

**A**S Middle East governments continue to advance their sustainability agendas, and concerns around the impact of extreme weather events continue to mount, public sector entities, corporates, and hospitality brands are increasingly seeking robust, energy-efficient MEPF (Mechanical, Electrical, Plumbing and Fire) solutions. AESG said this is reflected in the over 100% year-on-year growth its MEP division posted.

Nicholas Byczynski, Director of Building Services, AESG, largely credited the success to the division's extensive utilisation of automation and digital design tools, such as Building Information Modelling (BIM), Revit, Dynamo, Python and the IES Virtual Environment. "Clients are concerned with outcomes, and currently, the key objectives we see across projects in the Middle East are enhancing energy efficiency and reducing operational overheads," Byczynski said. "By developing world-class digital design and automation capabilities, we have been able to cater to this need, delivering faster, more accurate models that reduce errors and rework during construction, and ensure that designs are optimised across the entire project lifecycle."



Nicholas Byczynski

Byczynski said that among the industry segments most actively pursuing Net Zero targets in the region are the giga- and mega-scale projects, critical infrastructure and the hospitality sector. Alignment with government strategies and a desire to tangibly demonstrate sustainability commitments appear to be the key factors behind this, he said.

Some of the metrics to consider at the early stage of design are energy-usage intensity (EUI), renewable-energy percentage, energy cost savings, water-usage intensity (WUI), recycling and waste-management rate and indoor environmental quality (IEQ), AESG said. These measurements can be leveraged to drive down the consumption of resources through efficient design, high-quality construction, testing and commissioning and handover, followed by operations that are fully cognisant of the project's aspirations, AESG said.

Consequently, AESG said, its MEP division has seen clients in these sectors display appreciable eagerness to incorporate Internet of Things (IoT) devices into MEP systems, utilise active thermal mass regulation techniques, and pursue energy efficiency standards and environmental certifications like LEED, MOSTADAM and BREEAM.

With these paradigms representing the leading edge of the MEP industry, AESG said, it has invested to recruit and foster top talent to cater to clients' requirements. Over the last year alone, the company said, it has more than quadrupled the size of its MEP engineering team and has clear plans to further scale its team of experts by 200% through 2025.

Against the backdrop of unprecedented rainfall in the UAE, and sweltering heatwaves across the region, developing new, climate-resilient systems and retrofitting existing infrastructure have also been key trends in the regional MEP industry, AESG said. "This is definitely an area of focus for us in 2025," Byczynski said. "Digital design and simulation play especially significant roles in developing MEP systems that mitigate or, at least, minimise the impact of extreme weather events. As we have already developed extensive expertise in these areas, we are especially well-positioned to address this issue and, in doing so, safeguard our clients' prized assets and elevate the quality and resilience of the region's built environment."



## SAVING THE ENVIRONMENT FOR FUTURE GENERATIONS TODAY



**AESG** PRE INSULATED DUCT SYSTEM

**AESG** ANTIMICROBIAL PRE INSULATED DUCT SYSTEM

**AESG** EASY+ PRE INSULATED DUCT SYSTEM

**AESG** PHENOLIC PRE INSULATED DUCT SYSTEM



UNIGULF®  
 وهي جاف المساندة لخدمة التشييد والتدوير  
 AIR CONDITIONING INDUSTRIES L.L.C.



# Johnson Controls emphasises smart buildings' role in commercial real estate

Company publishes report that it says bolsters the belief that investments in smart buildings are essential for leaders to enhance sustainability and security and to save money

By CCME Content Team

**T**HE commercial real estate sector faces unprecedented challenges, and against the backdrop of the New York Climate Week 2024, the movement toward smarter buildings is top of the mind, according to Johnson Controls (JCI). The company announced its recently released spotlight report, "Cracking The Smart Buildings Code: A Spotlight On Retail And Commercial Real Estate", building on a 2023 commissioned study conducted by Forrester Consulting on behalf of JCI. The report reveals that investments in smart buildings are essential for leaders aiming to enhance sustainability and security and to save money, JCI said.

Vijay Sankaran, Vice President and Chief Technology Officer, JCI said: "Smart buildings are not just a trend; there is growing recognition they are a necessity for modern commercial real estate. This report highlights the urgent need for integrated systems and expert partners to navigate the complexities of today's commercial real estate market to achieve long-term success."

JCI said the digitalisation of buildings provides an immense opportunity to

gain a clearer picture of the operation of facilities to create sustainable, healthy and safe environments – a critical differentiator for both commercial real estate tenants and buyers. Johnson Controls said 75% of commercial real estate and retail leaders say smart buildings are important to accelerating their digital transformation efforts.

Nearly two-thirds of leaders, JCI said, indicate smart buildings are important for reducing costs, accelerating sustainability initiatives and driving business growth. JCI said these results reveal that retail and commercial real estate leaders are seeking outcomes that have a positive impact for building owners, occupants and the bottom line.

According to JCI, additional key findings include:

- **Competitive Differentiator:** Investing in smart buildings is a competitive differentiator, as smart buildings not only help commercial real estate and retail leaders attain sustainable, secure and efficient outcomes, but they also competitively differentiate their facilities in the market.

- **Integration Gaps:** Only 13% of commercial real estate and retail leaders say they have fully integrated building systems, leading to inefficiencies and increased risks. This lack of integrated data and insight is reducing operating efficiencies (62%), reducing customer loyalty (59%) and increasing regulatory penalties (57%).
- **Vital Insights:** Building data is crucial for decision-making across various departments, including security, sustainability and facilities management, and many leaders recognise the current risks they face by having limited data.
- **Partner Expertise:** Leaders seek partners with advanced technology, integration capabilities and industry experience to drive smart building initiatives.

JCI said it is optimised to be the comprehensive solutions provider for commercial buildings, as a one-stop-shop for leaders looking for a partner with the technology and industry experience to drive meaningful outcomes. Julie Brandt, President of Building Solutions North America, JCI, said: "As a leader in the smart buildings industry, we have a comprehensive understanding of how connected, data-driven solutions provide deeper insights into a building's performance and how we can optimize equipment performance and enable proactive services. This report confirms what we're already hearing from our customers – that smart buildings are foundational to the design, operation, and maintenance of indoor environments, ultimately driving value."





# BAC releases its ESG report

Company says it has achieved 17% reduction in energy intensity since 2019

By CCME Content Team

**B**ALTIMORE Aircoil Company (BAC) has announced the release of its second Environmental, Social and Governance (ESG) Report. Making the announcement through a Press Release, BAC said the 2023 ESG Report highlights the progress made on key initiatives, accomplishments and targets necessary to achieve its vision of reinventing cooling to sustain the world.

Don Fetzer, President, BAC, said: "This ESG report serves not only as a record of our progress and accomplishments but, more critically, establishes metrics and targets to hold ourselves accountable to achieve the best business results in environmentally and socially responsible ways. We, at BAC, have an obligation to innovate so we can achieve our vision of reinventing cooling to sustain the world."

BAC said with the earth's most critical resources in short supply across the globe, the focus on long-term sustainability has never been higher. Through innovative design and engineering, BAC said, it has developed technologies that set the precedent for sustainable cooling.

In 2023, BAC said, the energy intensity of the company's operations decreased for the second consecutive year relative to consolidated revenue, with a 17% reduction since 2019. With increased emphasis on renewable resources, BAC said, it has nearly quadrupled its percentage of renewable electricity used since 2019, a trend that is expected to continue in the coming years.

BAC said the shift towards renewable electricity, in combination with other energy efficiency and decarbonisation efforts, has enabled it to achieve Scope 1 and 2 emission reductions that exceed 10% year-



on-year. BAC said that brings the actual emissions for 2023 on track to achieve the target of reducing absolute Scope 1 and 2 emissions by 50% by 2030 versus the 2019 baseline. BAC said it has cut potable water usage by 24% relative to consolidated revenue since 2019, with facility and filtration upgrades and the harvesting of rainwater as contributing factors.

Transparency among customers, staff and suppliers has been a staple of the company, BAC said. Responsibly sourcing materials by ensuring suppliers and subcontractors adhere to standard sustainability metrics, BAC said, is a goal that allows it to succeed and thrive together.

BAC said the ESG report highlights BAC's commitment to social responsibility, with diversity, equity and equality constituting the foundation of building better culture and relationships.

**Our BENCHMARKING TOOL IS NOW LIVE....**

**Benchmark your building's energy performance and see how it measures up against industry standards and peers**

[www.benchmarking.grfn.global](http://www.benchmarking.grfn.global)

<a href="http://www.grfn.global">www.grfn.global</a>	<b>United Arab Emirates</b> Dubai   Abu Dhabi T: +(971) 4 379 0101 F: +(971) 4 379 0202	<b>Saudi Arabia</b> Riyadh T: +(966) 56 319 4787	<b>Egypt</b> Cairo T: +(20) 2 273 51 001 T: +(20) 2 273 51 002	<b>Lebanon</b> Beirut
--	--	--	---	--------------------------

## Epta showcases its technologies and integrated services at Chillventa

Company says its portfolio is entirely based on natural refrigerants, adding that it has been able to anticipate market trends and the latest regulatory developments

By CCME Content Team

**E**PTA, which specialises in commercial refrigeration, presented its technologies, solutions and integrated services at the latest edition of Chillventa, the international trade fair for refrigeration, air conditioning, ventilation and heat pumps for commercial and industrial applications, which ran from October 8 to 10, in Nürnberg, Germany. Making the announcement through a Press Release, Epta said it solidified its position as a fully integrated provider on a global scale, catering to operators in the retail, food & beverage and Ho.Re.Ca. sectors.

Epta said its total solution portfolio at Chillventa featured a complete and innovative technological offering designed to effectively meet the diverse needs of retail spaces, worldwide. Complete and integrated due to the synergy between the Group's various brands, Epta said, its portfolio is entirely based on natural refrigerants, through which, as a Green Transition Enabler, it has been able to anticipate market trends and the latest regulatory developments. In line with the claim "Innovation

Reloaded. The Epta Sustainable System", all of Epta's solutions are compliant with the new European F-Gas Regulation (EU) 2024/573 and are geared towards sustainable innovation, the company said.

Epta said its natural refrigeration is founded on three core technologies. All three, the company said, rely exclusively on R-290 propane and CO<sub>2</sub>, which represent the only viable alternative to traditional HFC refrigerants and the latest synthetic HFO blends, to the benefit of superior operational efficiency and a reduced environmental footprint.

Epta said its expertise has enabled the development of propane plug-ins, integral solutions and transcritical CO<sub>2</sub> remote cabinets. The propane R290 plug-ins, which are self-contained refrigerated units available for both positive and negative temperatures, are equipped with onboard engine and do not require connection to a central refrigeration plant, confirming their suitability for small retail spaces, the company added. Epta said its propane R-290 Integral solutions, available with air-cooled (air) or water-cooled

(waterloop) condensation, feature a fully integrated refrigeration unit pre-assembled within the cabinet. Integral technologies, emblematic of the Group's technical and engineering expertise, combine the modular approach and energy performance standards of remote cabinets with the same ease of installation as plug-ins, ensuring that product display remains unchanged, the company said.

Epta claimed that the transcritical CO<sub>2</sub> remote cabinets, now in their fourth generation, underscore its leadership in CO<sub>2</sub> refrigeration. Additionally, glycol-based counterparts, it said, are also available, using a natural refrigerant to cool glycolated water within the refrigeration plant, which is then distributed to the remote systems through dedicated pipelines.

Epta said Chillventa was an opportunity to guide visitors through a selection of its solutions, all under the Costan and Bonnet Névé brands, symbolising individual technologies.

On display at Chillventa for the propane plug-in series was the positive vertical model Tango/MultiFresh from the SlimFit/MultiCity range, which, in specific configurations, achieves energy class A and delivers 40% energy savings compared to the previous model, Epta claimed.

For the propane integral solution, Epta said, it presented the GranVista Integral Ultra/SkyView Integral Perform and GranBering Integral Ultra/SkyLight Integral Perform models, both part of the GranFit/SkyEffect family featuring an air condensation system. Notably, the latter, a negative vertical unit tailored for frozen food products, is equipped with compressors with inverters and a new hybrid defrost system, resulting



▶ in energy savings of over 30%, the company said. In addition, GranVista Integral Ultra/SkyView Integral Perform and GranBering Integral/SkyLight Integral are available in their respective Waterloo versions, in which a water circuit, showcased as

a wall module at the stand, allows for heat recovery for additional in-store applications, ensuring more efficient thermal management, Epta said.

Lastly, as a practical example of the CO2 remote cabinets, Epta said, it showcased the glycol version of the

vertical positive MD7 from the Nordic Line/Nordic Star, designed for the Hard Discount segment. Moreover, the company said, the unit is fitted with the Pipe Most configuration, specifically designed to speed up the installation and ducting processes.



## FOUNDED TO LEAD

Allied has grown into one of the leading Engineering and Project Management firms in the Middle East, boasting offices in 3 major Countries in the Middle East (Egypt, United Arab Emirates, Kingdom of Saudi Arabia).

Allied offers full range of Engineering and Project Management services provided by nearly 140 dedicated professionals distributed among Egypt, UAE and KSA.

The company is a multidisciplinary consulting firm and has a track record and specialization in Buildings, Industrial Works and District Cooling and Power Generation Plants.



**HEAD OFFICE:**  
**CAIRO, EGYPT**  
Tel: (202) 25161610 / 25163737  
Fax: (202) 27549849  
E-mail: [admin@alliedco.org](mailto:admin@alliedco.org)  
Web: [www.alliedco.org](http://www.alliedco.org)

**BRANCHES:**  
**DUBAI, UAE**  
Tel: 0971 4 297 8500  
Fax: 0971 4 2652 192  
E-mail: [alliedae@eim.ae](mailto:alliedae@eim.ae)  
**JEDDAH, KSA**



**DOWNTOWN DUBAI  
DEVELOPMENT  
DUBAI, UAE**



**EMPOWER  
BUSINESS BAY  
DUBAI, UAE**



**ADMINISTRATIVE CAPITAL  
OF URBAN DEVELOPMENT  
CAIRO, EGYPT**

## ASHRAE introduces first batch of Certified Decarbonization Professionals

Organisation says June-July exams have resulted in 64 new professionals receiving their certifications

By CCME Content Team

**A**SHRAE announced its inaugural cohort of Certified Decarbonization Professionals (CDPs), taking a step forward in the global effort to reduce carbon emissions in the built environment. Making the announcement

through a Press Release, ASHRAE said the Certified Decarbonization Professionals (CDP) programme is an international certification that validates the competency of decarbonisation professionals to assess, analyse and

develop effective strategies to eliminate and reduce the lifecycle carbon footprint of buildings.

ASHRAE said the programme, funded by the ASHRAE Center of Excellence for Building Decarbonization, is developed in a record 11 months and enables industry professionals to demonstrate competency in critical building decarbonisation tasks. Since its launch, earlier this year, the CDP has been the most applied-for ASHRAE certification, highlighting its importance and relevance in today's building and energy sectors, ASHRAE said.

M. Dennis Knight, President, ASHRAE, said: "Decarbonization is

## Ziehl-Abegg appoints Joachim Ley as CEO

Chairman of the company's Supervisory Board says the spirit of Ziehl-Abegg as a successful family business will continue to live on

By CCME Content Team

**Z**IEHL-ABEGG'S Chief Operating Officer (COO), Joachim Ley, who has been with the company since 2021 and played an active role in shaping the company's global growth, will be the new CEO of the company. Making the announcement through a Press Release, Ziehl-Abegg said the Supervisory Board has decided to hand responsibility for the entire Executive Board over to Ley, who holds a degree in industrial engineering and was responsible for production, purchasing, central logistics and processes.

Ziehl-Abegg said Ley, 47, after completing his studies, took on various management positions in the operational area. Ziehl-Abegg said prior to joining the company, Ley was a member of the Board of Directors of a market-leading supplier to the aviation industry for many years.

Dennis Ziehl, Chairman of the Supervisory Board of electric motor and fan manufacturer, Ziehl Abegg, said: "Ziehl-Abegg is a family business and will continue to be so in the future. This DNA has been moulded by my family

over more than 100 years, and this will continue in the face of global change.

"With Mr. Joachim Ley (CEO), Mr. Wolfgang Mayer (CTO) and a successor for the position of CFO to be named as soon as possible, in future we will have an Executive Board comprising three members.

"I would like to express my sincere thanks to Dr (Marc) Wucherer as CEO and Mr (Olaf) Kanig as CFO for their work over the past years. Dr. Wucherer introduced a strategy for the future to make the company fit to compete on the global stage. The path chosen for this purpose was and remains both right."

In the five years of his tenure as CFO at Ziehl-Abegg, Kanig has shown great personal commitment in leading the area under his control and has been jointly responsible for the positive, value-adding development of the company, Ziehl-Abegg said.

Ziehl said, "We have been in talks with Mr Kanig for some time now, he is making a change in career direction but will be available to us as CFO until a new appointment is made on the Executive Board.



Joachim Ley



Dennis Ziehl

▶ essential to our global sustainability goals, and ASHRAE is committed to empowering professionals with the skills and knowledge necessary to lead the charge. The Certified Decarbonization Professional program is not just a milestone for ASHRAE but a much-needed tool for the industry, as we work toward a net-zero future."

ASHRAE said the certification programme is designed for professionals who are responsible for decarbonising new and existing buildings. ASHRAE said eligibility requirements include education, work experience and a code of professional conduct. ASHRAE



M. Dennis Knight

said it also includes passing a rigorous certification exam, validating competency in building decarbonisation tasks across eight domains, including decarbonisation drivers, project planning and development, construction and renovation, passive and active efficiency, facility management and distributed energy resources.

ASHRAE said its Center of Excellence for Building Decarbonization provided the vision and resources for the certification and supports ASHRAE's commitment to reducing carbon emissions in the built environment through education, research and the development of innovative tools and resources.

## Danfoss Power Solutions appoints Shree Gurumurthy as Senior VP of Global Operations

Company says Shree Gurumurthy will lead multiple key business functions to drive growth across the organisation

By CCME Content Team

**D**ANFOSS Power Solutions has appointed Sriram (Shree) Gurumurthy as Senior Vice President of Global Operations, effective immediately. Danfoss said previously Vice President of Global Manufacturing Strategy, Gurumurthy will continue reporting directly to Eric Alström, President of Danfoss Power Solutions, and will join the Power Solutions Leadership Team. He is based in Eden Prairie, Minnesota, in the United States.

Making the announcement through a Press Release, Danfoss said Gurumurthy will lead the newly created Global Operations function, driving efficiency and effectiveness to achieve operational performance and profitable growth across Danfoss Power Solutions. Danfoss said he will oversee multiple key business functions, including safety, environment, health and quality; supply chain; manufacturing footprint strategy; Danfoss Business Systems; indirect

procurement; manufacturing systems and services; distribution centres and communications and events.

Gurumurthy said: "Throughout my years in manufacturing, I've seen what works and what doesn't in driving operational excellence. Applying standardized processes, tools and systems is one of the factors proven to work, and I'll ensure our functions are



Sriram (Shree) Gurumurthy

second to none in this area. I have a talented operations team, and I'm eager to collaborate and unlock new levels of performance gains and drive growth at Danfoss."

Alström added: "Shree has proven to be a strategic thinker in leading our post-merger footprint initiatives. He has a mind for operational improvement that will now benefit a broader cross section of our organization. I look forward to seeing his impact as he takes on this new role."

In his previous role, Danfoss said, Gurumurthy focused on growing and effectively managing Danfoss Power Solutions' overall manufacturing footprint. He joined Danfoss as part of the Eaton Hydraulics acquisition in 2021 and was appointed Global Head of Operations for the Rubber Hydraulic Hose and Fittings business unit within the Fluid Conveyance division, Danfoss said. Gurumurthy joined Eaton Corporation in 2007, Danfoss said, where he held several leadership roles in plant management, operations and global manufacturing strategy. Danfoss said he has more than 25 years of manufacturing experience within the automotive and hydraulics industries.

Danfoss said Gurumurthy holds a bachelor's degree in electrical engineering from Bharathiar University, India; a master's degree in industrial and manufacturing engineering from Western Michigan University, in the United States; and a master's degree in business administration from Case Western Reserve University, in the United States.

## Eurovent Summit 2025 to host over 300 HVACR stakeholders

President says the 2025 Summit, to take place in Prague, will be under the theme, #ManufacturingForTomorrow

By CCME Content Team

**E**UROVENT has announced the next edition of its flagship event, Eurovent Summit. Making the announcement through a Press Release, Eurovent said the event will take place from September 24 to 26, 2025 in Prague, Czechia, under the theme #ManufacturingForTomorrow.

Eurovent said the built environment is undergoing continual transformation, driven by environmental, technological and economic shifts. The Summit, it said, sets the stage for critical discussions.

The theme of the event, Eurovent said, highlights the European HVACR industry's commitment to sustainable growth, which works for people, the environment and businesses.

Raul Corredera Haener, President, Eurovent, said: "We are thrilled to host more than 300 HVACR stakeholders at our next Summit in 2025, as we will focus on the industry's commitment to measure and manage its environmental impacts for a more sustainable future. We look forward to welcoming

all participants to Czechia, a centrally located country developing exceptionally well in the HVACR sector. The next Eurovent Summit will highlight the environmental awareness of the HVACR industry, and the work being done to ensure a better life for future generations."

Eurovent said the Summit will explore how circularity and sustainability can be part of growth and innovation strategies that advance the global leadership of European companies in HVACR technology. The event, Eurovent said, will take place in Prague, as a tribute to the city's historical significance and its location in the fast-developing HVACR manufacturing heartland of central Europe. Eurovent said the event will celebrate the industry's tradition of excellence and adaptation to evolving demands and trends.



# Eurovent expands membership with HiRef partnership

Organisation says the membership application was approved during the online meeting of the Eurovent Board of Directors in early September.

By CCME Content Team

**E**UROVENT has welcomed on board HiRef, an Italian manufacturer of HVACR equipment. Making the announcement through a Press Release, Eurovent said HiRef is a manufacturer that offers precision air conditioning systems for technological infrastructures, and industrial process conditioning and solutions that promote economic and environmental sustainability.

Eurovent said the company was founded in 2001 and now is at the

centre of a network of businesses operating in complementary sectors with specialisation in the HVACR sector, to ensure customers a complete, tailored and sustainable service. HiRef targets both the Italian and international markets through a network of commercial branches and a network of dealers present in Europe, Latin America and Africa, Eurovent said.

Fabio Poletto, General Manager, HiRef, said: "We are thrilled to become part of Eurovent, as we see immense

value in collaborating and exchanging ideas with fellow industry leaders. This kind of partnership is key to continuously enhancing industry standards, especially in the rapidly evolving IT cooling sector, which has a growing impact on our environment. By uniting our efforts, we can drive the market forward, focusing on innovation and setting standards that prioritise sustainability."



## Sorption Wheels with the Largest Installation base in the world



**ENERGY RECOVERY WHEELS**  
for Highest Recovery Efficiency

**Desiccant Rotors International**  
**+971-6-5578148**  
www.drirotors.com, enquire@pahwa.com



## Desiccant Dehumidifiers

for  
Effective moisture control solution



Engineered  
Dehumidifiers

Compact  
Dehumidifiers

**Bry-Air (Asia) Pvt. Ltd.**  
**+971-6-5574622**

www.bryair.com, support@bryair.ae

# ASHE celebrates industry excellence with 2024 Awards

Society says the initiative recognises members and organisations for their excellence in optimising the health care physical environment

By CCME Content Team

**T**HE American Society for Health Care Engineering (ASHE) celebrated the outstanding achievements by members to improve the health care physical environment, during its annual member awards at the Health Care Facilities Innovation Conference (formerly the ASHE Annual Conference & Technical Exhibition) from July 21 to 24 in Anaheim, California, in the United States.

Making the announcement through a September 26 Press Release, ASHE said the ASHE award winners



are featured in the special cover story section of *Health Facilities Management (HFM)* magazine. ASHE said the section begins with interviews

with Daniel J Campbell, Regulatory Compliance Officer, Fox Chase Cancer Center, Philadelphia, who received the Crystal Eagle Leadership Award that is considered as ASHE's lifetime achievement award; and George "Skip" Smith, Hilliard, Ohio, who received the ASHE President's Award, which is given at the discretion of the sitting ASHE president to an individual who goes above and beyond to optimise the health care physical environment.

ASHE said the following pages of the section feature ASHE Fellow (FASHE) and Senior (SASHE) recipients, as well as the Emerging Regional Leader Award recipients, who are recognised from each region for their commitment to the field and their interest in developing further leadership skills. ASHE said the section highlights ASHE Chapter Award recipients for their outstanding achievements and contributions to optimising the health care physical environment.

ASHE said following those awards is a roundup of ASHE's Energy to Care Awards, with profiles of 21 Sustainability Champions Award winners, recognised for demonstrating leadership in sustainability on an annual basis. ASHE said the section includes awards listings for Sustained Performance, which celebrates accomplishing sustainability goals supporting healthy, equitable and resilient environments and communities; Energy to Care, which recognises facilities accomplishing sustainability goals that support healthy environments and communities over time; and the Chapter Challenge, which is awarded to ASHE-affiliated chapters.

ASHE said the final article in the special section is a profile of the Boston Medical Center Health System, winner of ASHE's 2024 Excellence in Health Care Facility Management Award. ASHE said the award recognises the system's extraordinary efforts in establishing the Brockton (Mass.) Behavioral Health Center, which converted an out-of-service nursing home built in the 1960s into an 80-bed, state-of-the-art behavioral health facility that provides crucial access to inpatient behavioral health care in Brockton and the greater

**The Leading District Cooling Engineering Experts**

**DC PRO ENGINEERING L.L.C.**

- Sharjah • Al Durah Tower • Office 407 • P.O. Box: 22851, Sharjah-U.A.E. •
- Tel: +971 6 556 6880 • Fax: +971 6 556 6881 • Email: gmail@dcproeng.ae •





# NOW HIRING

## FEMALE MARKETING EXECUTIVE

### Job Summary:

The Marketing Executive will be responsible for executing marketing strategies and campaigns to enhance brand visibility, generate leads, and support sales initiatives. This role will involve working closely with cross-functional teams to promote the company's innovative products, while focusing on increasing market share in the HVAC, automotive, and industrial sectors.

### Key Responsibilities:

- Campaign Development & Execution, Digital Marketing
- Content Creation, Event Management, Support for Marketing & Events
- Market Research & Analysis, Sales Support, Brand Management

### Requirements:

- Bachelor's degree in marketing, Communications, Business, or a related field.
- 3+ years of experience in a marketing role, preferably in the B2B or industrial sectors such as HVAC, automotive, or manufacturing.
- Strong understanding of digital marketing, including social media, email marketing, SEO, and paid advertising.
- Proficiency with marketing tools such as CRM, email platforms, Google Analytics, and social media management tools.
- Excellent written and verbal communication skills, with the ability to create compelling content.

### Preferred Skills & Attributes:

- Experience in the HVAC, industrial, or technology sector, with a strong understanding of technical products and B2B marketing.
- Familiarity with graphic design software such as Adobe Creative Suite (Photoshop, Illustrator, InDesign).

## BUSINESS DEVELOPMENT MANAGER

### Job Summary:

We are seeking a skilled and motivated Business Development Manager to join our dynamic team. The ideal candidate will be responsible for identifying, developing, and fostering long-term business relationships that align with the company's growth strategy. This role involves researching market opportunities, managing strategic partnerships, and driving revenue by implementing effective business development initiatives.

### Key Responsibilities:

- Market Research & Strategy Development
- Lead Generation & Sales
- Relationship Management
- Proposal & Contract Management
- Performance Monitoring & Reporting
- Collaboration

### Requirements:

- Bachelor's degree in Business, Engineering, or a related field. An MBA is preferred
- 3-7+ years of experience in business development, sales, or key account management within industrial, HVAC, or related sectors.
- Excellent communication, negotiation, and presentation skills.
- Strong analytical skills with the ability to assess and respond to market opportunities.
- Familiarity with the technical aspects of ventilation, motor, or drive technology is highly desirable.

### Preferred Skills & Attributes:

- Strong Knowledge of HVAC industry and key players in the market.
- Ability to build rapport and maintain relationships with a diverse range of clients and partners.
- Strong understanding of energy-efficient and sustainable solutions, and the ability to position these benefits to customers.

## TECHNICAL SUPERVISOR (APPLICATION & QUALITY)

### Job Summary:

We are seeking a skilled and motivated Technical Supervisor to join our dynamic team. The ideal candidate will be responsible for our technical operations, provide expert training to the sales team, customers, consultants, develop our technical area, and ensure exceptional customer support including RMA. This role involves significant travel, including international trips to collaborate with other subsidiaries, Middle East customers with site visits.

### Key Responsibilities:

- Training and Development
- Technical Area Management
- Customer and Site Visits
- Engagement with Sales Team
- International Collaboration and Travel

### Qualifications:

- Bachelor's degree in Engineering or a related field.
- Proven experience in a technical supervisory role, preferably within the HVAC industry.
- Strong knowledge of fans and HVAC systems.
- Excellent problem-solving skills and the ability to troubleshoot complex technical issues.
- Effective communication and presentation skills.
- Willingness to travel extensively, including international trips.
- Excellent English written and spoken level

## FEMALE CUSTOMER SERVICE & ADMINISTRATIVE ASSISTANT

### Job Summary:

The Customer Service and Administrative Assistant will play a key role in supporting both customers and internal operations. The role involves handling customer inquiries, processing orders, providing administrative support, and ensuring smooth coordination between departments. The ideal candidate will have strong communication skills, be highly organized, and be committed to delivering excellent service.

### Requirements:

- High school diploma or equivalent; a bachelor's degree in Business Administration or a related field is preferred.
- 3-5 years of experience in a customer service or administrative role, ideally in an industrial or technical product environment.
- Strong verbal and written communication skills.
- Proficiency with CRM, SAP and Microsoft Office Suite (Word, Excel, Outlook).
- Excellent organizational skills and attention to detail.
- Ability to manage multiple tasks and prioritize effectively in a fast-paced environment.
- Problem-solving skills with a focus on delivering solutions for customers.

### Preferred Skills & Attributes:

- Experience in a B2B or industrial sector such as HVAC or manufacturing.
- Familiarity with order processing, invoicing, and shipping procedures.
- Ability to build rapport with customers and internal teams.
- Strong data entry skills and ability to manage and interpret data accurately.

**Application Process:** If you are passionate about HVAC technology and have the skills and experience to excel in this role, we would love to hear from you. Please submit your resume and a cover letter detailing your qualifications and interest in the position. Contact [alissa@careersbay.com](mailto:alissa@careersbay.com)

# {Quoteyard}

We bring you a collection of some of the most interesting quotes, extracted from articles in this issue. In case you missed reading, we recommend you flip back to take full advantage of the insights and remarks, in the context in which they have been presented.

“ Another significant milestone is the recent formation of a standards working group tasked with developing a new AHRI standard on "evaporative cooling", at the request of local regulatory authorities. This reflects the growing demand for region-specific solutions and highlights the critical role of manufacturers in developing standards that meet the unique needs of the GCC region market. Governments are increasingly recognising that collaboration with industry experts, such as manufacturers, is essential to achieving their regulatory goals. p06

“ On average, a retrofit will cost 40-60% what a new chiller will cost, and that is without the installation cost of new chillers. And that is why I would like to assert that capex funds can be redirected towards optimising and modernising the existing chillers with upgrades. p08

“ The COVID-19 pandemic and the subsequent global supply chain disruptions brought the issue of food security to the forefront, prompting governments across the region to invest in improving their cold storage infrastructure. At the same time, as part of the UAE's National Food Security Strategy, there have been huge developments in the local agricultural scene that have brought a wide range of fresh produce to market, helping reduce dependency on imports. p10

The smaller the divisor, the higher the PUE, but the divisor includes the power consumed by server fans, which are responsible for a substantial portion of the total IT power consumption. Direct-to-chip liquid cooling mostly removes the need for server fans, making PUE higher while lowering total power use.

p14

As the demand for high-quality HVAC solutions grows, the role of robust certifications, like Eurovent, becomes increasingly important. These certifications are not just a mark of quality but a testament to a product's performance and reliability. Certification bodies must prioritise supporting emerging markets like Pakistan in better understanding the essential certification 20



PRODUCER



OFFICIAL PUBLICATION

**climate control** MIDDLE EAST  
KEY PERSPECTIVES ON THE REGION'S HVACR INDUSTRY



## 12<sup>TH</sup> MIDDLE EAST COLD CHAIN & FOOD SAFETY CONFERENCE

**20 JANUARY 2025**  
RIYADH, KINGDOM OF SAUDI ARABIA

UNDERSTANDING DEMAND FOR CUTTING-EDGE COLD CHAIN-RELATED SOLUTIONS IN THE KINGDOM, AND MATCHING THEM WITH TECHNOLOGIES THAT HAVE THE POTENTIAL OF SURPASSING EXPECTATIONS

**HARVEST | FOOD PRODUCTION & PROCESSING | TRANSPORT REFRIGERATION |  
FOOD RETAIL/HORECA/VENDING SOLUTIONS | CONSUMER**

**[ccme.news/event/foodchain](https://ccme.news/event/foodchain)**

FOR EDITORIAL-RELATED QUERIES:

**Surendar Balakrishnan**  
Co-Founder & Editorial Director  
M: +971 50 509 2457  
E: [surendar@cp-industry.com](mailto:surendar@cp-industry.com)

FOR SPONSORSHIP OPPORTUNITIES:

**Frédéric Paillé**  
Co-Founder and Commercial Director  
M: +971 50 714 7204  
E: [fred@cp-industry.com](mailto:fred@cp-industry.com)



“HVAC is used in every region of the world now so it’s very important that we have higher efficiency and better costs. This is the place to find it.”

 **AHR** *Orlando*  
FEBRUARY 10-12, 2025



Find your why.