

# Heating, Ventilation, Airconditioning and Refrigeration Summit

Smart Sustainable Solutions  
for HVAC Systems...



21 & 22 May 2025  
Protea Hotel by Marriott  
Breakwater Lodge  
Waterfront

## SPEAKERS INCLUDE:



**Margaret Molefe**  
Director Department of Forestry,  
Fisheries, and the Environment



**Grant Lairdlaw**  
Owner, Air-conditioning and  
Refrigeration Academy



**Andre van Der Merwe**  
Managing Director Evapco



**Alex Kuzma**  
Head of Engineering Woolworths  
Real Estate



**Ian Lester**  
MD and Founder Beyond Wireless



**Wesley Williams**  
Founder Paradigm Cooling



**Nicholaas Du Plessis**  
Senior Engineer Metraclark



**Professor Hanno Reuter**  
Professor extraordinary -  
Thermo-fluids Stellenbosch  
University SA



**Hannes Steyn**  
Director - Heating and Refrigeration  
Technologies - Southern/Eastern  
Africa at GEA Africa



**Christian Tomanek**  
Managing Director of Testo  
South Africa



**Kavir Sewall**  
Danfoss



**Eugene Le Roux**  
Director - EAC Project  
Management



**Charles Freedman**  
CEO ServCraft



**Chris Visser**  
Managing Director Multilayer  
Trading



**Warren Hurter**  
Co-founder NextDrive



**Roy Naidoo Danfoss**  
Danfoss



**Shaun Hadfield**  
Managing Director Future Green

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**Introduction:** Welcome to the Heating, Ventilation, Airconditioning and Refrigeration Summit. This premier event brings together industry leaders, innovators, and experts to explore the latest advancements in refrigeration, HVAC, and heat pump technology. Join us as we delve into cutting-edge solutions for energy efficiency, environmental sustainability, and the future of the industry. The Current State of the HVAC & Refrigeration industry is undergoing a green transformation. A heightened focus on sustainability, driven by environmental concerns and rising energy costs, is propelling the adoption of renewable energy sources and energy-efficient solutions. Heat pumps that can deliver heating, cooling and hot water are gaining traction, becoming the preferred choice for new homes, while the industry explores innovative solutions to decarbonise existing buildings. Advanced building automation and digital control solutions are helping to unlock the change. Smart and connected HVAC systems are revolutionising buildings' management tactics and increase their performance potential; by harnessing AI and machine learning, building operators can optimize systems performance, enhance indoor air quality, and deliver unparalleled comfort while reducing energy consumption."

**CASE STUDIES:** The conference will feature a series of case studies showcasing successful implementations of advanced refrigeration, HVAC, and heat pump technologies from around the world. These case studies will highlight the benefits of energy-efficient systems, the challenges faced during implementation, and the lessons learned. International experts will present data and analysis, supported by pie diagrams illustrating energy savings, cost reductions, and environmental impact.

**AIM OF THE CONFERENCE:** The aim of the Heating, Ventilation, Airconditioning and Refrigeration Summit is to create a platform for industry stakeholders to come together and discuss the latest technological advancements, share best practices, and explore innovative solutions for improving energy efficiency and environmental sustainability. By fostering collaboration and knowledge exchange, the conference aims to drive the adoption of cutting-edge technologies and promote sustainable practices in the refrigeration and HVAC sectors.

### Key trends shaping the HVAC-R industry in South Africa include:

- **Sustainability & Regulatory Compliance:** Decarbonisation initiatives and new regulations are driving efforts to develop more energy-efficient HVAC-R systems.
- **Smart Technologies:** The rise of IoT and AI is transforming HVAC operations, allowing for centralized and automated control.
- **Energy Efficiency Regulations:** New energy efficiency targets and phasedown of high-GWP refrigerants are influencing the industry.
- **Indoor Air Quality:** Growing awareness of indoor air quality is driving demand for advanced air filtration and purification systems.

### Sustainability & Regulatory Compliance

With the effects of climate change intensifying in recent years, the HVAC-R industry is navigating a pivotal moment in which sustainability is taking centre stage. A prominent topic of discussion among report contributors, decarbonisation initiatives are driving major efforts to develop more energy-efficient HVAC systems. From manufacturers to building operators, stakeholders across the board are investing in solutions that lower carbon emissions, reduce energy consumption, and align with ambitious net-zero targets. Incentives such as tax credits and new regulations further accelerate this transformation, spurring the adoption of advanced technologies.

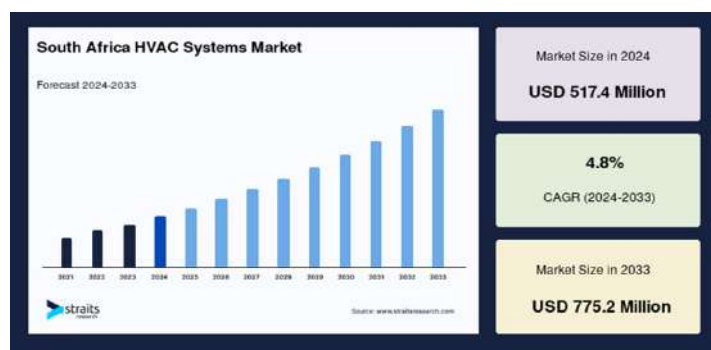
### WHO SHOULD ATTEND:

- **Industry Professionals:** Engineers, technicians, and managers working in the refrigeration, HVAC, and heat pump sectors.
- **Researchers and Academics:** Experts and scholars conducting research in energy efficiency, environmental sustainability, and related fields.
- **Policy Makers:** Government officials and regulators responsible for developing and implementing policies related to energy efficiency and environmental protection.
- **Manufacturers and Suppliers:** Companies involved in the production and supply of refrigeration, HVAC, and heat pump equipment and components.
- **Environmental Advocates:** Organizations and individuals dedicated to promoting sustainable practices and reducing the environmental impact of energy consumption.
- **Students and Graduates:** Aspiring professionals looking to enter the refrigeration, HVAC, and energy efficiency sectors and seeking networking and learning opportunities.

While these developments present opportunities, they also pose challenges as buildings whose HVAC systems can account for as much as 70% of their energy consumption, must balance the need to follow regulations while maintaining cost efficiency and HVAC system performance. Innovative energy management solutions are essential to meeting these demands.

International HVAC System Market Size, Trends in South Africa, The global HVAC system market size was estimated at USD 249.37 billion in 2024 and is projected to grow at a CAGR of 7.5% from 2025 to 2030. The market is driven by the rising need for cost-effective and energy-efficient space cooling and heating applications in commercial and industrial sectors<sup>1</sup>. Rapid urbanization and increasing demand for energy-efficient products are expected to drive the demand for heat pumps in the residential sector.

In South Africa, the HVAC systems market was valued at USD 517.4 million in 2024 and is expected to grow to USD 775.2 million by 2033 at a CAGR of 4.8% during the forecast period (2025–2033). This growth is driven by rising urbanisation, increased investments in infrastructure, and the adoption of energy-efficient HVAC systems in residential, commercial, and industrial sectors<sup>2</sup>. Technological advancements in smart HVAC solutions are also bolstering regional demand.



### OBJECTIVES:

- 1.Showcase Innovations:** Discover the latest technological advancements in refrigeration, HVAC, and heat pumps that are driving energy efficiency and sustainability in the industry.
- 2.Foster Collaboration:** Connect with industry leaders, researchers, and professionals to share knowledge, ideas, and best practices for achieving energy-efficient and environmentally friendly solutions.
- 3.Explore Market Trends:** Gain insights into current market trends, emerging technologies, and regulatory developments that are shaping the future of the industry.
- 4.Promote Sustainability:** Highlight the importance of sustainable practices and the role of advanced technologies in reducing the environmental impact of refrigeration and HVAC systems.
- 5.Education and Training:** Offer educational sessions, case studies, and networking discussions to enhance the skills and knowledge of professionals in the field.

### CONCLUSION:

The Heating, Ventilation, Airconditioning and Refrigeration Summit is a must-attend event for anyone involved in the refrigeration, HVAC, and energy efficiency sectors. By attending, you will gain valuable insights into the latest technological advancements, connect with industry leaders, and learn about innovative solutions for achieving energy efficiency and sustainability. Don't miss this opportunity to be a part of the future of the industry!

AGENDA	
DAY ONE: WEDNESDAY 21 MAY 2025	
08:00 - 08:30	<b>REGISTRATION</b>
08:30 - 09:00	<b>Bridging the Gap:</b> Navigating Regulatory frameworks for the HVAC-R Sector <ul style="list-style-type: none"> <li>Emerging trends in HVAC-R regulations</li> <li>Outline the compliance challenges faced by professionals</li> <li>Delve into strategic approaches to ensure your operations are aligned with the evolving standards</li> </ul> <b>Session Facilitator:</b> Eugene Le Roux, Director - EAC Project Management
09:00 - 09:30	<b>Montreal Protocol.....</b> <ul style="list-style-type: none"> <li>The crucial role of international collaboration in the fight for ozone layer protection and the phasing out of Ozone Depleting Substances (ODS).</li> <li>Molefe will highlight the progress made under the Montreal Protocol, a global agreement aimed at safeguarding the ozone layer</li> <li>Discussing the importance of strengthening government and industry relationships to accelerate these efforts.</li> </ul> <b>Speaker:</b> Margaret Molefe, Director Department of Forestry, Fisheries, and the Environment
09:30 - 10:15	<b>TEA BREAK</b>
10:15 - 11:15	<b>Top Strategies for Effective Data Centre HVAC Systems</b> <ul style="list-style-type: none"> <li>Data centre HVAC systems are essential for ensuring the optimal performance of IT equipment by controlling temperature, humidity, and air quality.</li> <li>This session explores their importance, key components, effective cooling methods, and emerging trends.</li> <li>By the end of the session, you'll have a comprehensive understanding of how to manage and optimize HVAC for your data centre</li> </ul> <b>Speaker:</b> Roy Naidoo, and Kavir Sewlall, Danfoss
11:15 - 11:45	<b>Technology and the future of HVAC installation in South Africa:</b> What are the technologies shaping installation and service teams today ? And how they will shape businesses Tomorrow.... <b>Speaker:</b> Charles Freedman, CEO ServCraft
11:45 - 12:15	<b>Environmentally Friendly Refrigerants:</b> Learn How the Shift Towards Sustainable and Eco-friendly Refrigerants is Shaping the Future of Cooling Solutions, Achieving Lower Greenhouse Gas Emissions <b>Speaker:</b> Chris Visser, Managing Director Multilayer Trading
12:15 - 12:45	<b>The Internet of Things (IoT) and Refrigeration:</b> A Marriage of Technologies <ul style="list-style-type: none"> <li>Remote Monitoring and Control</li> <li>Predictive Maintenance</li> <li>Energy Efficiency and Sustainability</li> <li>Enhanced Safety and Compliance</li> </ul> <b>Speaker:</b> Wesley Williams, Founder Paradigm Cooling
13:00-14:00	<b>NETWORKING LUNCH</b>
14:00 - 14:45	<b>The Drive for Sustainable Compressors in Refrigeration:</b> Choosing Evaporative Condensers for Maximum System Efficiency <b>Speaker:</b> Andre van Der Merwe, Managing Director Evapco
14:45- 15:30	<b>Beyond the Internet of Things (IoT) and The Evolution towards Cold-Chain-as-Service (CaaS).</b> <ul style="list-style-type: none"> <li>Recent challenges of keeping cold chains alive and how IoT and AI are enabling the shift from capital intensive cold chains to cold chain as a service.</li> </ul> <b>Speaker:</b> Ian Lester MD and Founder Beyond Wireless
15:30 - 15:45	<b>NETWORKING BREAK</b>
15:45 - 16:30	<b>DE-CARBONISING using Natural Refrigerants:</b> "A Woolworths Case study" <ul style="list-style-type: none"> <li>Woolworths roadmap to sustainability involving the use of environmentally friendly, sustainable refrigeration solutions..</li> </ul> <b>Speaker:</b> Alex Kuzma Head of Engineering Woolworths Real Estate
1630 - 17:15	<b>Recent Innovations in Refrigeration and HVAC:</b> "How New Technologies Are Boosting Energy Efficiency, Cutting Costs, and Minimizing Environmental Impact" <b>Speaker:</b> Shaun Hadfield, MD Future Green
<b>END OF DAY ONE</b>	

AGENDA	
DAY TWO: THURSDAY 22 MAY 2025	
09:00 - 09:15	<b>COFFEE</b>
09:15 - 10:00	<b>Cold Chain Monitoring: Alarm Fatigue Research</b> <ul style="list-style-type: none"> <li>Investigating food safety risks, including microbial risk modeling, based on ambient air temperature monitoring compared to actual and simulated product temperature</li> </ul> <b>Speaker:</b> Christian Tomanek, Managing Director of Testo South Africa
10:00 - 10:45	<b>Dry -Wet Cooling Technologies for HVACR</b> <b>Speaker:</b> Professor Hanno Reuter, Thermo-flow and industrial cooling systems expert consultant; IWC. Professor extraordinary - Thermo-fluids Stellenbosch University SA
10:45 - 11:00	<b>BREAK</b>
11:00 - 11:30	<b>Training and Youth Programmes in Refrigeration and co2 Programmes</b> <ul style="list-style-type: none"> <li>In the ever-evolving landscape of refrigeration technology, the role of technicians has become increasingly critical. How can one advance the youth towards a career in HVAC-R?</li> <li>Training programs for these professionals are not just advantageous but essential for several reasons.</li> <li>Firstly, the complexity of modern refrigeration systems demands specialized knowledge. Training programs offer structured curricula that cover the intricacies of advanced technologies and environmentally friendly refrigerants. This ensures technicians are well-prepared to handle the complexities of the latest system</li> </ul> <b>Speaker:</b> Eugene Le Roux Director EAC Project Management
11:30 - 13:00	<b>"Women's role in the HVAC and Refrigeration Industry"</b> <b>This session aims to:</b> <ul style="list-style-type: none"> <li>Raise awareness of the opportunities available to women within the sector</li> <li>Strategies on managing the skills Gap</li> <li>Case studies of women working in the sector and their successes.</li> </ul> <b>Speaker:</b> Grant Lairdlaw Owner: Air-conditioning and Refrigeration Academy. Past President, current national committee member: S.A.I.R.A.C. Current: past president and National Treasurer
13:00-14:00	<b>LUNCH</b>
14:00-15:00	<b>"A New Age" -Solar for Refrigeration</b> <b>Speaker:</b> Warren Hurter, NextDrive
15:15-15:30	<b>NETWORKING BREAK</b>
15:30 -16:15	<b>Revolutionizing African Farming</b> Discussions include how the industry is expected to evolve in the coming years... <b>Speakers:</b> Nicholaas Du Plessis, Senior Engineer Metraclark Hannes Steyn Director. - Heating and Refrigeration Technologies – Southern/Eastern Africa at GEA Africa
<b>CLOSING OF THE CONFERENCE</b>	

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