



HRS

HAMPSHIRE REFRIGERATION SOCIETY

Serving the Refrigeration, Air Conditioning, Heat Pump & Environmental Industries

HRS Christmas News Bulletin

Q4 2024

A Festive Message from the HRS Team

Dear HRS Members and Friends,

As the year draws to a close, we are delighted to bring you our Christmas Quarterly Bulletin for Q4, 2024. This year has been one of growth, innovation, and success for the HVAC industry, and we owe much of our achievements to your unwavering support. Thank you for being a part of our journey, and we look forward to what 2025 has in store.

Looking Back, It has been a Year of Progress, this year has been transformative for the HVAC industry. Driven by rising demand for energy-efficient solutions and technological advancements, the market is poised for significant growth. Staying informed about these trends is essential for maintaining a competitive edge.

One of the most impactful trends has been the integration of smart technology. These innovations not only improve convenience but also enhance energy efficiency and reduce operational costs. Another important shift is the transition toward eco-friendly refrigerants, driven by global environmental concerns. HVAC systems now increasingly rely on low-GWP refrigerants, marking a major step in reducing the industry's carbon footprint. Technological advancements like variable refrigerant flow (VRF) systems, IoT integration, and advanced sensors are revolutionizing the way HVAC systems are designed, installed, and maintained. These systems provide precise control, monitoring, and optimization, ultimately offering improved comfort and energy savings for users.

Predictive maintenance powered by artificial intelligence (AI) is another game-changer. By analyzing sensor data, AI forecasts system failures or maintenance needs, enabling proactive servicing and extending equipment lifespans. Additionally, AI's ability to process large datasets allows HVAC professionals to gain a comprehensive view of industry trends, empowering them to make strategic decisions based on data-driven insights.

Celebrating Excellence in HVAC

This year has been remarkable for the recognition of talent within the HVAC sector. We extend our heartfelt congratulations to, Alex Forklings, Gold Medalist at the ACR & Heat Pumps Trainee of the Year Awards. Samuel Turato, who claimed Gold in the Refrigeration and Air Conditioning category at the 47th WorldSkills competition in Lyon. James Rowland, Silver Medalist in the Air Conditioning and Heat Pump Engineering Apprentice category. Luke Haile, who earned Bronze in the same category. Shaun Creech, recipient of the HRS 2024 Achievement Award for his outstanding contributions to training in the refrigeration industry. Lisa-Jayne Cook, newly elected President of the Institute of Refrigeration (IOR). Our own HRS committee member, Craig Girdlestone who was elected Trustee for the IOR.

These individuals and organizations have set inspiring examples of dedication and excellence in our field.

Our Exciting Plans for 2025

As we step into the festive season, we're thrilled about the events lined up for the coming year. The highlight will undoubtedly be the HRS Exhibition in March 2025, which promises to showcase the latest innovations in HVAC. Alongside this, our first Technical Breakfast Briefing (TBB) of the year will set the tone for an exciting calendar of activities.

If you haven't yet secured your stand at the exhibition, don't worry—you're still welcome to attend, network, and explore the cutting-edge advancements in our industry. We can't wait to connect with you all in person.

*Warm regards,
The HRS Team*

A STELLAR SUCCESS

The most recent Technical Breakfast Briefing (TBB) on 10 December at City of Portsmouth College was an overwhelming success. With a fully booked venue and not an empty seat in sight, the event delivered engaging presentations, valuable insights, and vibrant discussions.

The morning's agenda was packed with expert speakers who captivated the audience with their knowledge and expertise. Lawrence Leask from Kaizen kicked things off by highlighting how poor installation, design, and maintenance practices can drastically reduce refrigeration efficiency. Following him, Adam Hardacre from CIAT shed light on energy-efficient AHU (Air Handling Unit) designs, inspiring attendees to rethink their approach to sustainable HVAC solutions. The final presentation came from Rob Lamb of Star Refrigeration, who shared groundbreaking insights on using artificial intelligence (AI) to enhance system efficiency.

The engaging Q&A session that followed sparked dynamic discussions, offering attendees the chance to deepen their understanding and exchange ideas with the experts.

A heartfelt thank you goes to Star Refrigeration, our Breakfast sponsor of bacon and sausage butties. These moments of connection over breakfast are invaluable and would not be possible without the generous support of our sponsors and supporters.

The Hampshire Refrigeration Society's (HRS) TBB events continue to prove their worth as a platform for learning, inspiration, and networking. They bring together professionals from across the Hampshire Air Conditioning & Refrigeration Sector, fostering collaboration and growth.

We look forward to seeing even more of you at our next TBB in the new year. Don't miss out on this fantastic opportunity to learn, network, and elevate your industry knowledge!



Get Ready for the HRS 2025 Exhibition!



We are thrilled to announce that planning is in full swing for the highly anticipated **HRS 2025 Exhibition!** Mark your calendars now and make sure you don't miss this fantastic event.

Set to be Hampshire's premier networking opportunity, the exhibition promises to be a brilliant day filled with cutting-edge innovations, industry insights, and invaluable connections. After the unfortunate cancellation of our last exhibition due to COVID, we are incredibly excited to bring this event back to life bigger and better than ever before.

Whether you're here to explore the latest products, meet with industry leaders, or simply connect with fellow professionals, the HRS 2025 Exhibition has something for everyone. Don't miss your chance to be part of this vibrant and dynamic day—it's sure to be a highlight of the year!

We look forward to seeing you there!



Giving Back to the Industry a New Chapter in HRS Fundraising

At our recent events, such as the immensely successful 37th Annual Golf Tournament at Old Thorns and the latest Technical Breakfast Briefing (TBB) at Portsmouth College, you may have noticed something new. We're excited to announce the launch of our very own fundraising initiative, designed to make a lasting impact.

The goal of this initiative is to provide educational opportunities for individuals from underprivileged or disadvantaged backgrounds, helping them to join our beloved industry. By raising funds, we aim to empower talented individuals who might otherwise miss the chance to pursue their aspirations.

To support this cause, we've introduced exclusive, personalized HRS badges. These badges represent not just a symbol of our society but also the commitment to fostering the next generation of industry professionals.

Stay tuned for more updates as we work together to make this vision a reality. Let's continue to pave the way for a brighter future.

“One badge and one opportunity at a time.”



HRS Advocates for Sustainable Refrigerants

In the push for environmentally friendly refrigeration solutions, natural refrigerants like R718 (water), air, R717 (ammonia), R744 (carbon dioxide), and hydrocarbons have emerged as key players. These refrigerants boast a low or negligible Global Warming Potential (GWP), avoiding the release of harmful F-gases and significantly contributing to climate protection efforts.

Among them, Propane (R290) has gained particular attention as a sustainable choice. Recognized for its high efficiency and eco-friendliness, R290 stands out with a remarkably low GWP index of just 3—compared to R32, which has a GWP index of 657. This significant difference highlights R290's potential to reduce the environmental footprint of refrigeration systems.

The market landscape for refrigerants is also shifting. In 2024, Europe saw price increases for several lower-GWP refrigerants, including a 10% rise in R448A and a 6% increase in R449A—both replacements for R404A. Meanwhile, the price of R32 climbed 2%. However, not all refrigerants followed this trend: CO2 prices remained stable, and R290 experienced a slight decrease of 1%, making it an even more attractive option for sustainable cooling solutions.

Looking ahead, HRS will explore the transformative potential of propane refrigeration in greater detail. Don't miss our upcoming Technical Briefing Bulletin (TBB) in 2025 for in-depth insights on this innovative technology





What members of HRS are getting up too



Breathtakingly beautiful and astonishingly resilient, Rwanda is a country like no other

By Craig Girdlestone

<https://bydegrees.cleancooling.org/features/2024/12/rwanda-a-journey-of-discovery-and-sustainable-progress>

Breathtakingly beautiful and astonishingly resilient, Rwanda is a country like no other. Nestled in the heart of Africa, this land of sprawling lakes, beautiful hillsides, and smoking volcanoes has an indelible charm. Though most visitors come to witness the famed mountain gorillas, my time in Rwanda revealed a wealth of beauty, both natural and human, that far surpasses any expectation. My recent experience working with the Africa Centre of Excellence for Sustainable Cooling and Cold Chain (ACES) was transformative, not just professionally but personally.

When I was invited to contribute to ACES, it was an opportunity I could not refuse. Rwanda, like much of Sub-Saharan Africa, faces the dual challenges of food insecurity and climate vulnerability. Poverty, agricultural competition, and climate change have combined to create a pressing need for innovative solutions in food preservation and distribution. With the UN Sustainable Development Goal to end hunger by 2030 as a guide, Rwanda is working tirelessly to build sustainable systems that ensure food security for its people.

The ACES initiative is central to these efforts. Situated on a five-hectare campus near Kigali, with an adjacent 200-hectare farm, the centre fosters collaborative research, tests new equipment, develops knowledge, and delivers training programs. My role in designing and building specialist test chambers was pivotal in advancing the centre's mission. But to truly understand the needs of the project, I first had to understand Rwanda itself. Traveling the country was eye-opening. From the bustling streets of Kigali to the serene countryside, I saw firsthand the challenges and opportunities in the supply chain. As a practical engineer, I was impressed to find a growing acceptance of natural refrigerants like R290. However, being a landlocked country with limited existing cold-chain infrastructure, sourcing reliable and cutting-edge equipment posed significant hurdles. My exploration wasn't just professional. It was deeply personal. As a passionate mountain biker, I took to Rwanda's famous "land of a thousand hills" under my own power. This immersive approach brought me closer to the real Rwanda, the people. From children operating water pumps to families depending on mobile technology for everyday needs, I encountered a resourceful and warm community. Until you meet a Rwandan, you cannot fully appreciate why it is the "Gem of Africa."

My work also took me into the heart of Rwanda's agricultural and industrial sectors. I assisted the National Agricultural Export Board (NAEB) & (RAB) in identifying and addressing failing post-harvest equipment. With an emphasis on practical solutions, I helped optimise cold storage tenders for perishable goods and how we will deliver technical training to farmers. This included looking at ways to improving cold-chain management for meat supply, a crucial step in maintaining quality and safety for domestic and export markets.

The Gako meat production project was particularly rewarding. By assisting with designing cold storage facilities for slaughterhouses to contribute to increasing meat production and quality an effort vital to both food security and economic development. My consultations spanned vaccine cooling, dairy processing, commercial retail cooling, and even brewery refrigeration. These engagements underscored the breadth of cold-chain applications and their transformative potential for Rwanda.

Drawing parallels with the Western world's 20th-century adoption of cold-chain infrastructure, I see a similar journey unfolding in Central Africa. Just as refrigeration revolutionised food safety and reduced waste in the West, Rwanda is poised to harness these technologies to improve its agricultural output and enhance the lives of its people.

Looking back, my time in Rwanda is more than just another project. It is a profound lesson in resilience and innovation. The people I met, the landscapes I traversed, and the challenges I tackled have left an indelible mark and I have more future trips to come as we complete the work. To play even a small part in Rwanda's journey toward sustainable progress is a privilege I will cherish forever.

As I reflect on my career in the cooling industry, I realise just how meaningful it has been. Rwanda's story is still being written, but the steps being taken today through initiatives like ACES are setting the foundation for a brighter, more sustainable future. For me, this has been more than a professional milestone; it has been a journey of the heart.

I am thrilled to share that this journey is far from over. I will be returning to Rwanda for future projects and continuing to support this inspiring nation as it strides forward to a sustainable and prosperous future.

A Special word from our Chairman

'Well this is another year gone and I trust that you have all had a successful trading year.

From a society point of view, we've had an eventful year with several changes on the HRS team. It gives me great pleasure to welcome aboard 3 new committee members who I hope will continue to drive the society forward. They are Craig Girdlestone, Nicola Prentice and Kyle Hobley. They all work within the RAC-HP industry and have a wealth of experience within their respective companies. They are very keen and are looking forward to promoting the HRS society, in the next phase of our development.

As the years are gradually catching up with me, I have decided to take a step back, (not a leap) to allow the younger generation to drive the society forward with new ideas and growth, especially with the technical challenges that lie ahead.

2024 was a busy year for us, with some excellent TBB's, Technical Breakfast Briefings held at the City of Portsmouth College every 3 months. Many varied topics were covered, such as CO2 in smaller retail and petrol filling stations, Refrigerant updates, new service and installation products, discussions on ways of improving energy efficiency within your customers business, and AI technology for the future. We had some great feedback received from those who attended.

The annual golf day was another huge success attended by over 120 golfers plus 25 additional evening guests. During the day we had HRS lapel badges for sale, which raised approx £900 towards sponsoring a student for their career development, before the presentation of prizes we awarded Shaun Creech FlnstR the HRS achievement award of 2024.

Things to look forward to in 2025 are the HRS exhibition in March, The 38th Annual Golf tournament at Old Thorns in July, A possible summer family fundraising day with BBQ and games etc. We are also reintroducing our Christmas golf day. (Venue yet to be decided). Along with our quarterly TBB's.

On a final note, we have had to say goodbye to a number of our industry friends. We send their families our deepest condolences especially at this time of year.

In conclusion, I would like to take this opportunity to wish you all a very Happy Christmas and a prosperous New Year, and also thank you all for your continued support which motivates us to keep the society going.'

For and on behalf of HRS

John R Emm FlnstR.

Chairman of HRS.



Dates to Remember

Date	Events Calendar
19 March 2025	HRS Exhibition
19 March 2025	TBB
17 July 2025	38 th Golf Tournament
Dec 2025 (tbc)	Christmas Golf



Thank You for a Wonderful Year

To our loyal supporters and new followers alike, we extend our heartfelt gratitude for your contributions to the Hampshire Refrigeration Society (HRS) community. Watching our network grow, thrive, and flourish over the past year has been a true privilege.

Your unwavering support has been the backbone of our success, and we're thrilled to continue this journey together as we enter an exciting new chapter in 2025.

From all of us at HRS, we wish you a joyful and blessed Christmas season filled with warmth, laughter, and happiness. Here's to a prosperous and inspiring 2025, brimming with new opportunities and achievements for us all.

Thank you for being part of the HRS family!





John R Emm FlnstR
HRS Chairman



Jayne Emm
HRS Secretary & Treasurer



Damian Wiszniewski
FlnstR
Vice Chairman



Craig Girdlestone
FlnstR
Committee



Nicola Prentice
AMInstR
Social Media & Events
Co-Ordinator



Michal Wiececzek
MInstR
Committee



Kyle Hobley
Committee





WANT TO BECOME A SPONSOR?

Is your company looking to make a mark in the HVAC industry? Sponsoring the HRS 2025 Exhibition and other events is a fantastic opportunity to showcase your brand, engage with industry professionals, and support the growth of our community.

You or your company can play a key role by providing prizes, advertisements, and exciting giveaways that will be showcased throughout our events. Sponsorship offers a unique chance to promote your business to a targeted audience while supporting the growth of the HVAC sector.

Interested in learning more about how you can get involved and make an impact? Contact a member of our committee today to explore sponsorship opportunities and find out how you can help elevate your business while contributing to the success of HRS events.

Contact us at: hrscommittee@outlook.com

