

AHR Expo Releases 2024 Trend Report

WESTPORT, CONN.—In anticipation of the 2024 AHR Expo, AHR Expo released its 2024 Trend Report where they asked associations, manufacturers, engineers, contractors and thought leaders to sound off on the most impactful issues facing the HVAC&R industry.

“As the urgency of building decarbonization and the impact of climate change continue to drive change, the HVAC&R industry stands at the forefront of efforts to develop efficient, sustainable built environment solutions,” ASHRAE President Ginger Scoggins said in the report.

Other industry associations highlighted included AHRI, ASHB, BACnet International, HARDI, HVAC Excellence, IAPMO/RPA, PHCC and RSES, along with updates from the floor and in the field.

Here are the six common industry themes highlighted. Read the full report at <http://tinyurl.com/3hrh2vcs>.

Regulations Remain a Driving Force Toward a Cleaner Future

- Decarbonization;
- Green transition;
- New standards with quicker onboarding; and
- Global refrigerant transition.

“The global refrigerant transition, led by the United States, is well underway, and will prove to be a seamless transition when all is said and done. Decarbonization has highlighted our industry as a solution to emission and energy use reductions,” AHRI President and CEO Stephen Yurek said.

The Built Environment is Evolving

- IoT, AI and controls;
- Automation;
- Data analytics; and
- Cybersecurity and building automation systems.

“Building automation control systems are driving increased functionality, efficiency and cybersecurity in the industry,” BACnet International president and managing director Andy McMillan said.

“They are no longer something that can be deferred because to ‘Future Proof’ a building it must first be ‘Now Proof.’”

Supply Chain

- Supply chain has rebounded to stable health;

- A2Ls and the effect on distribution; and
- Consolidation across the industry.

Workforce and Training

- The need for a strong and skilled workforce;
- Streamline the flow of communication across the chain; and
- Training evolution.

“The HVAC&R industry is on the brink of a compelling era with abundant opportunities for innovation and growth,” Scoggins said. “As buildings become technologically advanced, the demand for skilled HVAC&R and built environment professionals who can navigate this evolving landscape will increase. This creates a prime opportunity for expanded training and education, as well as collaboration, to meet the needs of our growing industry.”

Product Adoption

- Heat pumps; and
- Building automation systems.

“Electrification gains traction as heat pumps redefine heating and cooling paradigms. Indoor air quality emerges as a paramount concern, fostering advancements in filtration and purification technologies,” ASHB President and CEO Greg Walker said.

Expansion, Growth and Meeting Demand

- Managing multiple areas of growth within the industry;
- Educating first the workforce and second the end user; and
- Cutting-edge technology and environmental responsibility.

“The HVAC&R industry has undergone transformative shifts, marked by a departure from conventional practices towards a future defined by innovation and sustainability,” Scoggins said. “One of the most significant shifts is the industry’s pivot towards energy-efficient solutions in response to the escalating climate crisis. Another notable change is the growing emphasis on IAQ and occupant well-being, highlighting a broader recognition of the critical link between HVAC&R systems and human health.” ■

ASHRAE and Other Key Organizations Deliver Climate Action at COP28

DUBAI - The 2023 United Nations Climate Change Conference (COP28), was recently held Nov. 30 to Dec. 12 in the United Arab Emirates and was a forum for industry leaders, policy makers, scientists and businesses to collaborate on climate action and shape a more sustainable future.

ASHRAE leadership participated in an official COP28 side event titled “Design Thinking, Global Standards & Integrative Solutions for a Net Zero Built Environment” on Dec. 8. During this event, a panel discussion with other leading industry organizations focused on how the building sector plays a vital role in reducing greenhouse gases (GHGs) globally. Emily Grandstaff-Rice, president of the American Institute of Architects, said at the panel, “The simple fact about climate change is that there is nothing simple about climate change. There is no one single thing we can do to achieve decarbonization. And

even if a total shift to renewable energy were achievable, that would only get us partway there. Meeting GHG targets is crucial but it’s only one metric. Everything we do has ripple effects. In this broader view, climate action extends beyond energy to human and ecosystem health. To equity and climate. And importantly, adapting [to] the inevitable climate changes that will happen no matter what we do now.”

ASHRAE and several building industry organizations issued a letter to government representatives committing to their leadership roles in achieving net zero GHG emissions in all new buildings in operation by 2030. By the end of COP28, nearly 200 countries also pledged to move away from fossil fuels—a first for U.N. climate talks that have been in the works for decades; still, there remains skepticism on the scope and feasibility of the long-term results of this deal. ■

ASHRAE Releases Guide on Role of Grid Interactivity in Decarbonization

ATLANTA -ASHRAE's *Grid-Interactive Buildings for Decarbonization: Design and Operation Resource Guide* is the second in a series of guides developed by the ASHRAE Task Force For Building Decarbonization (TFBD) and provides information on maximizing carbon reduction through buildings' interaction with the electric power grid.

"Grid-interactive buildings actively engage with the energy grid. They utilize smart technologies, renewable energy sources and energy storage systems to optimize energy consumption and generation. This allows them to respond in real-time to grid signals, thereby reducing overall demand and GHG emissions," said ASHRAE TFBD chair Kent Peterson, P.E., Presidential Member/Fellow ASHRAE. "Integrating buildings with the electrical grid is a critical component in the decarbonization process. It's an emerging focus for building professionals, and

ASHRAE is thrilled to provide new guidance as we collectively work towards a more sustainable, resilient and energy-efficient built environment."

Decarbonizing the electric grid necessitates a fundamental shift toward a dynamic, two-way relationship between buildings and the grid. This approach enables buildings to respond flexibly to grid conditions, including time-varying carbon emissions rates. In recent years, the significance of this two-way communication has grown, driven by the integration of renewable energy sources, grid reliability concerns and the impact of extreme weather conditions. The *Grid-Interactive Buildings for Decarbonization: Design and Operation Resource Guide* can be purchased from the ASHRAE Bookstore or by contacting ASHRAE Customer Service at 1-800-527-4723 (United States and Canada), 404-636-8400 (worldwide). ■