



2020 Economic + Industry Report

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Orlando FEB 3 - 5
2020



2020 Economic + Industry Report

Each year the AHR Expo surveys members of the HVACR community to gauge prospects for business heading into the new year. Questions address current business trends, the previous year's performance and prospects for new business heading into 2020. Respondents are asked to indicate areas of growth and markets with the expected highest performance. Additionally, respondents are asked to write in potential opportunities, threats and challenges to be considered for the near future. This year, for the first time, the report also includes a check-in with many of our industry endorsing organizations. The purpose of this inclusion is to add perspective from the varying sectors of the industry that make up HVACR regarding discussions happening in their areas of expertise. We encourage you to review the included results of the survey, as well as the input from industry associations, and carry this knowledge with you onto the Show Floor at the 2020 AHR Expo, to be held in Orlando, Florida, February 3-5th.

For more information, please visit ahrexpo.com.

The Annual Economic Outlook Survey of HVACR manufacturers and attendees is compiled by AHR Expo, the world's largest HVACR event, and *ASHRAE Journal*.



HVACR Manufacturers and Industry Professionals Report a Strong Economy Heading into the 2020 AHR Expo

Of 1,418 total respondents (both attendees and exhibitors)...



79% reported that 2020 prospects for business are expected to be good or excellent



75% expect business to increase



25% expect business to increase more than 10%

Looking back, how did 2018 sales prospects compare to 2019?



70% reported at least 10% growth



34% reported significantly more than 10% growth

Top three 2020 market segments with a good or excellent outlook →



72% Light Commercial



67% Hospital & Health Industries



64% Residential

Others include:

- Data and Telecom Centers
- Heavy Commercial
- Schools
- Non-School Institutional
- Office Buildings
- Lodging
- Manufacturing/Industrial
- Restaurants/Hospitality
- Laboratories/Cleanrooms
- International Market

What market segments have the best prospects for 2020?



72% Maintenance/Replacement



67% Retrofit/Renovation



64% New Construction

How do customers allocate importance when choosing products?

#1 Reliability was voted the most important consideration by both attendees and exhibitors

Attendees

2. First Costs
3. Comfort
4. Energy Efficiency
5. Maintenance
6. Indoor Air Quality
7. Sustainability

Exhibitors

2. Energy Efficiency
3. Indoor Air Quality
4. First Costs
5. Maintenance
6. Comfort
7. Sustainability

What's on the radar for 2020? Opportunities, Issues and Concerns

- Tariffs
- Energy efficiency & DOE regulations
- Low GWP refrigerants and R22 phase out
- Growth of data centers
- Regulatory compliance and new standards
- Lack of skilled workforce and opportunities to grow the trades
- Automation and self-diagnostic controls
- Energy considerations
- Modularization
- Deregulation and implications to competition

- Growth of big box retailers
- Global market
- Short-term implications of a trade war
- Consolidation of manufacturers
- SEER regulations
- IoT, IIoT and system protocols

- Digitalization
- Outcome of the 2020 Election and resulting economy
- Indoor Air Quality and consumer considerations
- New Technologies - VRF, mini-splits, geothermal, tankless, VRV, green initiatives, etc.

*Responses were open-ended.



ASHRAE

ASHRAE is a diverse organization dedicated to advancing the arts and sciences of heating, ventilation, air conditioning and refrigeration to serve humanity and promote a sustainable world. Industry classifications include: consulting engineers, contractors, manufacturers, manufacturing representatives, government, health, education, design build and architects.

ashrae.org

Booth #3201

57,000+ members

Located in over 132 nations

A 2020 View of ASHRAE



DARRYL BOYCE
President

Opportunities for HVACR

“ As an industry, **we can dramatically change how buildings impact the people who occupy them** by working together to provide the innovation required to create sustainable built environments around the globe.”



IEQ KNOWLEDGE



ASHRAE has conducted research to **advance fundamental IEQ knowledge**, published documents and provided educational opportunities to spread that knowledge, as well as written standards and related documents to provide a path for that knowledge to be applied.

- IEQ is **Indoor Environmental Quality**: a perceived indoor experience of the building indoor environment that includes aspects of design, analysis, and operation of energy efficient, healthy, and comfortable buildings.

HUMAN WELLNESS



Human wellness within the built environment is an area of significant opportunity. ASHRAE's leadership role will expand in IEQ to support the growing interest in wellness and operational success in buildings by **incorporating objectives into ASHRAE technical activities and working with other organizations to link the built environment to operational excellence.**

“ ASHRAE is **creating networks and establishing new strategic partnerships to expand the Society's opportunities for engagement**, not only within the HVACR industry, but across the many industry sectors that also have a stake in IEQ, operational performance and sustainability.”



MULTIDISCIPLINARY RESEARCH



Research that involves: building design, construction, commissioning, maintenance and operation.

A 2020 View of ASHRAE continued...



ASHRAE Member Discussions

Best design practices and standards

The incorporation of innovative technologies in design

Novel approaches to HVAC&R systems and buildings due to changing energy, economic, and environmental concerns

Best practices for working with building owner-operators to develop strategies that will prepare them to effectively operate buildings

Most people spend **90%** of their time indoors

with >50% of that time in their homes



The built environment highly impacts virtually all aspects of life.



ASHRAE members provide a healthy and sustainable built environment for all through research projects, standard developments, organization partnerships, education programs and more. This is all done in accordance with our mission “advancing the arts and sciences of heating, ventilation, air conditioning, refrigeration and their allied fields”.



More details about Darryl K. Boyce, P.Eng., 2019-20 ASHRAE President and his **theme for the Society year, “Building for People and Performance. Achieving Operational Excellence.”**, can be found at ashrae.org/president.

For complete conference information, visit the [2020 ASHRAE Winter Conference website](#).

Challenges Ahead



A greater **emphasis needs to be placed on operability during the design, construction and turnover** with an emphasis on the Indoor Environmental Quality without wasting energy.

Operational performance is an important process in the management of buildings. Buildings are falling short on operating to the expectations of the building designers and operators – and there are three key reasons why:



one

Great designs are not always delivering great operations. Designers can do more to transfer their great design into effective operations.



two

Buildings are more complex. Industry professionals design technology to help improve operations, but it doesn't always end up that way.



three

Building operators are overwhelmed. At building turnover, operators are rarely properly oriented.

OTHER CONSIDERATIONS



An ongoing challenge within the industry is **helping building owners and operators set concrete and measurable IAQ goals.**

Solution



Building operations team representatives need to be **included all the way through the design**, not solely at the “end of design.”



The design should reflect the capabilities of the people operating the building. As a result, operators will not be left wondering, “How do I make this work?”



Design decisions must be **evaluated for their impact on Indoor Environmental Quality (IEQ).**

“Building and HVACR professionals have an **obligation to make the indoor environment a place where we can be safe, healthy, productive, and comfortable.** At the same time, we are also stewards of the environment and must provide for these human needs in ways that are sustainable.”

A 2020 View of ASHRAE continued...



ASHRAE in Action

In the past year, ASHRAE formed a Multidisciplinary Task Group, Effective Building Operations. MTG.EBO will coordinate the activities of multiple Technical Committees, Task Groups, Technical Resource Groups and other stakeholders in the area of training and tools to support the operation of buildings to enhance the indoor environment and use energy effectively.

Responsibility will include suggestions for research as well as the development of technical programs and special publications on effective building operation to achieve quality Indoor Air Quality while not wasting energy.

Technical Committee 7.3, Operation and Maintenance Management, **provides general guidance in the area of operation, maintenance and commissioning** of air conditioning, heating, ventilating and refrigeration systems and equipment.

Technical Committee 4.3, Ventilation Requirements and Infiltration, **examines ventilation requirements and the analysis of infiltration, airflow around buildings, exhaust and the re-entry of exhaust**, including their integration interactions with indoor air quality and energy calculations for buildings and HVAC system design and operation performance and energy consumption.

ASHRAE has several resources and projects focused on Indoor Environmental Quality, including standards 62.1, 62.2, 170, the IAQ Guide and a section devoted to IAQ in the International Green Construction Code powered by Standard 189.1-2017. ASHRAE's standards are harmonized in order to help facilitate all aspects of building science with a goal of having good IEQ and energy efficiency.



Air-Conditioning, Heating, and Refrigeration Institute (AHRI)

Our industry comprises residential and commercial air conditioning and space heating, water heating, and commercial refrigeration equipment. It does not encompass so-called “white goods” such as room air conditioners or residential refrigerators – those are in the purview of the Association of Home Appliance Manufacturers.

ahrinet.org

Booth #3300

320 member companies

Sectors: Applied; Heating; Refrigeration; Unitary

A 2020 View of AHRI



STEVE YUREK
President & CEO

“ Our industry continues its **steady commitment to increased energy efficiency, environmental performance, convenience, and comfort for its products, equipment, and customers.**”

Opportunities for HVACR



One of the biggest opportunities is the **industry coming together to lobby for and get legislation passed that would establish a national phase down schedule for HFCs.** This could provide some certainty for manufacturers, distributors, contractors, and others with respect to when equipment using alternative refrigerants will need to be available.

Challenges Ahead + AHRI Member Discussions

COOLING/REFRIGERATION



The coming **transition from HFC refrigerants to their replacements** – a transition that will take place in stages over the next several years.

HEATING



There is **growing interest in decarbonization** in cities and states – an interest that could have serious ramifications for our heating members and their customers.

Opportunities for Impact

COOLING/REFRIGERATION



- Solar powered and ice powered commercial AC units
- App-based monitoring systems to rapidly identify leaks or leak threats
- Rapid cooling technologies to inhibit bacteria growth and enhance food safety

HEATING



- Hydrogen-enriched natural gas
- Heat pump boiler systems
- Gas absorption heat pumps
- Hot water circulators save energy and water, while grid-enabled water heating can heat water at off-peak times or generate from renewables and store for later use

“ **Our industry touches the life of virtually every American (and most of the world) in many ways, on a daily basis.** Our 320 member companies have a combined \$46 billion in annual sales and support some \$256 billion in annual economic activity in the United States alone. Those companies directly employ some 130,000 employees in the U.S., while supporting, in conjunction with distributors and contractors, a total of 1.3 million American jobs.”

BACnet International

bacnetinternational.org

BACnet International is an industry association that facilitates the successful use of the BACnet protocol in building automation and control systems through interoperability testing, educational programs and promotional activities. BACnet International oversees operation of the BACnet Testing Labs (BTL) and maintains a global listing of tested products.



Booth #161

A 2020 View of BACnet



ANDY MCMILLAN
President

BACnet at a Glance



We have approximately **160 corporate members and 5000 individual members**. In addition, we have associated organizations in Europe, China and India with additional members.



Industry Sectors include: **Building Automation and Energy Management**

Since the Last AHR Expo



The awareness of the **need for network and system security in building automation continues to grow** and has perhaps reached a tipping point for real action to begin.



There is a growing understanding in the industry that the Internet of Things is driving a host of technologies that can improve building controls but the **business models and products in consumer IoT do not meet commercial building owner needs**.

This has led to a broad consensus on the **need for focus on commercial building IoT (BIoT) to leverage technologies** like cloud analytics and big data without compromising the requirements of building owners.

BACnet International Members exhibiting at AHR have grown from:

56 in 2019 **to** **70** in 2020 which is a **25%** increase over last year

69 of the 70 have BTL Listed Products, BTL Listings have been independently tested by a recognized BACnet testing organization in accordance with the BTL requirements.

Challenges Ahead



System security and the appropriate application of Building Internet of Things (BIoT) are the most pressing issues [for HVACR]. These are both immediate issues that will continue to evolve and impact the long-term success and are critical to the growth and success of the industry.

A 2020 View of BACnet continued...

Interesting Facts

We have published information developed by the market research firm, BSRIA, that shows

 **60%**

or more of building controls projects on a global basis specify BACnet.

This is a testament to the strong user requirement for interoperable systems based on global standards.

Opportunities for HVACR



Data security, privacy and IoT are pressing issues facing the industry but they are also part of a broader movement in society.



As an industry, we have an **opportunity to lead in addressing these issues within our own community** without waiting for (or hoping against) regulatory solutions.

Opportunities for Impact

“ One of the most impactful innovations is the **recent addition of BACnet Secure Connect (BACnet/SC) to the BACnet standard.** This will enable the deployment of building automation solutions with advanced security features based on standard IT best practices. It will also motivate the industry to address the non-technical elements of system security.”



“ The importance of system security continues to increase. The BACnet community is addressing this through the addition of BACnet Secure Connect (BACnet/SC) to the standard to enable more secure networks. **In parallel with implementing BACnet/SC the BAS industry must adopt a more security conscious culture in order to leverage more secure networks into more secure systems.**”



Booth #162

Continental Automated Buildings Association (CABA)

caba.org

The Continental Automated Buildings Association (CABA) is a leading international, not-for-profit, industry organization that promotes advanced technologies in homes and buildings. Its 380 strong corporate members and 27,000+ individual industry contacts are leaders in advancing integrated home systems and building automation worldwide.

A 2020 View of CABA



RON ZIMMER
President & CEO

CABA at a Glance



380 corporate members and
27,000 individual industry contacts

Opportunities for CABA



Looking at the market in 2020, we're encouraged that recognition about the benefits of intelligent buildings systems continues to grow. **Buildings managers and tenants stand to benefit from intelligent buildings technologies in the form of:**

- Reduced building operating costs
- Better return-on-investment from new technologies
- Greater safety, security, and occupant comfort
- Improved energy efficiencies

“ The market has seen some cost incentives for the adoption of intelligent buildings technologies in HVACR and this is an encouraging development. **Cost incentives recognize that more intelligent and responsive systems are better equipped to support peak demand reduction programs and energy savings during high consumption periods for heating and cooling.** For example, advanced occupancy and lighting sensors that work with lighting and heating, ventilation and air conditioning.”



Challenges Ahead



It can take years to acquire the expertise behind HVAC technology, and that **technology continues to evolve at a breathtaking pace.** Project partners involved in design and delivery of intelligent buildings can find HVAC technologies very complex.



We need to continue to **move the needle on integrating various building systems** and, given the large numbers of new devices and units coming to market, achieving greater interoperability.

A 2020 View of CABA continued...

CABA research revealed that the **intelligent building market presents a significant opportunity for smart systems and IoT-based revenues**, with a total opportunity of

\$16.8 billion

in 2018

growing at a compound annual growth rate of

14% to **\$32.4 billion**
in 2023

“**The need to have the very latest expertise in HVAC cuts a wide swath through our association member segments**, from OEMs (original equipment manufacturers), integrators and installers, to builders, developers and facility managers to engineering and architecture. As one of the leading conferences, AHR Expo is a pivotal place for the education and networking that is necessary to gain that expertise and understand the current state and future direction of the market.”



Opportunities for HVACR



HVAC is among the BIG FOUR technologies in almost all intelligent building projects, along with lighting systems, fire and life safety, and security systems. Current and past CABA Research anticipates a **strong future demand for Intelligent Building technologies**, and with that, more attention to HVAC and other critical systems at an early design and planning phase of Intelligent Buildings.

CABA Research Findings

Our research on the monetization of intelligent buildings identified top use cases. In the tenant survey, the ability to have energy use awareness reports, as an example, was identified as one of the top benefits, with 51% noting that these reports would have a positive impact. Some specific examples such as temperature optimization and air quality monitoring each were believed to be positive impacts by 60% or more of respondents in the tenant survey.

The same research included a **survey of building operators and owners about their perceptions on adopting new systems.** In terms of **pain points**, 38% of respondents identified “costly set-up and implementation” as a key challenge and 47% identified complex integration with current systems as a key challenge. They also identified (1) predictive and preventative maintenance and (2) energy efficiency as top use cases for adopting new technologies.

With respect to predictive maintenance, the research provided an example of a commercial building with unexpected maintenance issues with the building’s HVAC system. This led to expensive maintenance costs, unexpected downtime and tenant discomfort. The solution was to install sensors and analytics software platform that predict possible system failure and alert maintenance teams before failure happens. In this scenario the solution reduced HVAC downtime, enabled more efficient maintenance scheduling, and increased building occupant comfort. These improvements were expected to lead to a Return-on-Investment (ROI) of 12-18 months and an estimated 8-12% cost savings for HVAC maintenance and downtime per year.

With respect to energy efficiency, in another case study, meeting rooms in a university commons building were not used 100% of the time during the workday. The university wanted to understand when rooms were occupied or empty to save money on energy and make occupants more comfortable. The solution was to install building occupancy sensors and the information from these sensors informed control of the building’s automation systems, HVAC controls, and security systems to automate room conditions based on occupancy. This led to significant avoided HVAC expenses. It was estimated in this scenario that there would be a full payback on a \$30,000 technology investment after three years.

What are the top use cases thought to have a positive impact?

51% energy use awareness reports

60% temperature optimization and air quality monitoring

What is a key challenge to adopting new systems for buildings?

38% costly set-up and implementation

47% complex integration with current systems

What is the impact of improvements made to predictive maintenance issues?

Return-on-Investment of **12-18 months**

8-12% yearly cost savings for HVAC maintenance & downtime

What kind of savings can energy efficiency changes bring?

Estimated full payback on a **\$30K tech investment** after three years



Home Ventilating Institute (HVI)

hvi.org

Founded in 1955, HVI certifies a wide range of home ventilating products manufactured by companies located throughout the world which produce the vast majority of the residential ventilation products sold in North America.

Booth #4672

A 2020 View of HVI



JACKI DONNER
Executive Director/CEO

HVI at a Glance



59 member companies



Members will take on more of the actual **ventilation installations** so they are done correctly (exhaust, supply, and balanced)

Since the Last AHR Expo



We have noticed some **volatility of the market** and, more specifically, the **shipping statistics of HVAC goods**.



There are **more code-driven initiatives being operationalized** as we complete 2019 and move into 2020.

- **California's Title 24** is prompting questions on how to adequately meet the code. California's energy code is designed to **reduce wasteful and unnecessary energy consumption** in newly constructed and existing buildings.

Opportunities for HVACR



New codes being adopted are causing some confusion for the designers and installers of HVAC equipment. **Education is going to be paramount as manufacturers market their products** in different regions within the country.



Validation of manufacturer software is becoming more critical by standards organizations.



Higher quality/green products are in demand by the market/consumers:

- High-efficiency motors
- High-efficiency components (filters, energy cores, compressors, etc.)
- Consumer activity demand-based control packages

Control packages include:

- Internet of Things (IoT)
- More acceptance to Whole Home Ventilation Solutions by homeowners
- Sensors that measure actual activity in the space to perform certain HVAC functions

Sensors include:

- CO2
- IAQ
- VOC
- Occupancy

A 2020 View of HVI continued...



HVI Member Discussions

Differing of code requirements between the consensus of national and state codes.

Customers are confused and are seeking industry experts for guidance. (i.e., What do you have to help me meet the requirement?)

Opportunities for Impact



IoT, integration with total home automation



Higher operating efficiency of HVAC



Hidden **ventilation**

Challenges Ahead



As much as code-driven initiatives may be beneficial, these **codes are challenging to navigate for designers and difficult for installers and operators to function and service.** Education will be a challenge.



Supply chain challenges



Import impacts



Labor force challenges



Take on more of the **installation of ventilation systems** (i.e., exhaust fans)



Hydraulic Institute (HI)

pumps.org

The Hydraulic Institute is comprised of over 120 Pump, Component and System Manufacturers and Suppliers who work together to develop technical standards, training resources and certifications for users across all industries.

Booth #9311

A 2020 View of HI



MICHAEL MICHAUD
Executive Director

HI at a Glance



120 member companies

The Hydraulic Institute is the **largest association of pump OEMs and supplier companies** in North America.

Industry Check In



2020 will bring an important new regulation requiring energy efficient pumps

In January 2020, approximately

25% of clean water Pumps **between 2-200 hp** will no longer be on the Market

Opportunities for HVACR



With lighting incentives fading out in 2020, **building and system owners will find new pump related incentive programs** that many utilities are now launching to meet their energy efficiency goals



New tools like the **Energy Rating Label and ER Database help calculate real savings** that will shape purchasing decisions and qualify for rebates in many markets

Opportunities for Impact

Smart pumps are essentially pumps with:

- integrated motors
- variable speed capability
- sensors which offer increased connectivity with building management systems and allow for even greater operating flexibility

...like the ability to:

- adjust flow to meet demand response and time of use requirements
- help achieve building or system wide energy efficiency goals

HI Member Discussions



HI developed a **simple Energy Rating Label** that will help owners, specifiers and users determine not just that equipment meets the new regulation – but actually **helps calculate the savings in Kwh and \$s**. Look for ER Labeled pumps for the first time on the Show floor.



Booth #1129

National Air Duct Cleaners Association (NADCA)

nadca.com

NADCA: The HVAC Inspection, Cleaning and Restoration Association, otherwise known as the National Air Duct Cleaners Association (NADCA), was formed in 1989 as a nonprofit association of companies engaged in the cleaning of HVAC systems. Its original mission was to promote source removal as the only acceptable method of cleaning and to establish industry standards for the association.

A 2020 View of NADCA



JODI ARAUJO
Chief Staff Executive

NADCA at a Glance

NADCA is in the final stages of the **first round of an Energy Study**. Led by Dan Stradford, NADCA Vice President, in partnership with Dr. Mark Hernandez of the University of Colorado at Boulder, this study was formulated to determine if any statistically significant changes in energy usage was associated with systematic HVAC duct and heat-transfer equipment cleaning. The executive summary of this study is in review and will be released in early Spring.



1,300+ member companies

Since the Last AHR Expo



Our members have noticed shifts in the **advancement of AI in the industry** and the use of new technology in learning platforms.

Challenges Ahead



The aging workforce and labor shortage are weighing heavily on the air duct cleaning industry. **Low unemployment rates are driving wages up and if our members don't compete they lose tenured employees** in whom they've invested thousands of dollars in on-the-job training, healthcare, tools, equipment and most importantly, certifications.

Opportunities

“ Skilled labor is cool again! Calloused hands and dirty clothes showing off a hard days' work is a thing of pride, no longer of days gone by. **The marketing is everywhere and our industry is capitalizing on that in 2020.** Partnering with trade schools to define a career path for students in the HVAC and air duct cleaning industry will be a focus of NADCA's marketing efforts next year.”

According to **Degree Query's infographic**, ten years post-grad,



a worker with a one-year certificate makes **\$1,347/ year**

less than someone with a 4-year bachelor's degree.

When you consider the cost of a bachelor's degree is on average, **80% higher than trade school or a 2-year degree,**

it becomes a strong consideration for students entering the workforce.



Sheet Metal Contractors National Association (SMACNA)

smacna.org

SMACNA members perform work in industrial, commercial, institutional, and residential markets. The voluntary technical standards and manuals developed by SMACNA Contractors are accepted worldwide by the construction community, as well as foreign government agencies. ANSI, the American National Standards Institute, has accredited SMACNA as a standards-setting organization.

Booth #4442

A 2020 View of SMACNA



THOMAS SOLES
Executive Director,
Market Sectors

SMACNA at a Glance



The Sheet Metal and Air Conditioning Contractors' National Association (SMACNA) is an **international trade association representing 1,834 member firms in 97 chapters throughout the United States, Canada, Australia, and Brazil**. A leader in promoting quality and excellence in the sheet metal and air conditioning industry, SMACNA has offices in Chantilly, VA., which is outside of Washington, D.C., and on Capitol Hill.



SMACNA members perform work in industrial, commercial, institutional, and residential markets. They specialize in the following:

- Heating, Ventilation, and Air conditioning
- Architectural sheet metal
- Industrial sheet metal
- Kitchen equipment
- Specialty stainless steel work
- Manufacturing
- Siding and decking
- Testing and balancing
- Service and retrofit
- Energy management and maintenance

Since the Last AHR Expo



There is an **increased focus and demand for energy efficiency** from many of our customers.



Ability to use the **data generated by IoT (Internet of Things) systems** to implement preventive maintenance and to increase the efficiency of MEP systems.



There has been an **increased focus on design-build**, which has been very beneficial to our members.

SMACNA Member Discussions



Our members are interested in seeing **virtual design advances along with new construction concepts and applications**. They are eager to see what tools and applications make significant improvements in fabrication and installation processes.

Challenges Ahead

“By far, the most pressing issue right now is the **shortage of skilled talent**. That is why SMACNA is launching our **workforce development initiative in 2020 named Ignite Your Career**. This exciting new initiative will be focused on attracting more skilled and talented people to become involved in careers in the industry.”



A 2020 View of SMACNA continued...

Opportunities for Impact



Field apps and software that help increase productivity.



AI and data analytics that have the ability to be scalable in order to better predict future outcomes.

“ There is an increased focus on the **merging of manufacturing and construction**, and resultant improvements in modularization and pre-fabrication processes.”

Opportunities Ahead



- Design-build
- IPD (integrated project delivery)
- Green design
- Retrofits
- New synergies that combine innovative building enclosure systems with more efficient HVAC systems to improve the comfort of occupants



Networking. Education. Mentoring.

Booth #4464

Women in HVACR

womeninhvacr.org

Women in HVACR exists to improve the lives of their members by providing professional avenues to connect with other women growing their careers in the HVACR industry. They empower women to succeed through networking opportunities, mentoring and education.

A 2020 View of Women in HVACR



DANIELLE PUTNAM
President

Women in HVACR at a Glance



623 members comprised of contractors, technicians, students, wholesalers, manufacturers, distributors, business service providers - primarily women.

Since the Last AHR Expo



The **'hiring' crisis** everyone has been talking about seems to finally be taking root.



Women in HVACR **launched an Ambassador Program** where our membership volunteers go into local schools to present a curriculum and invite young students to consider their opportunities in the trades, specifically HVAC.

Membership Discussion Points



Finding and retaining **technicians**.



Large corporations such as Amazon who we believe will be making a strong stance in the home services space very soon.



Equipment, tools, materials, designed with diversity in mind. Smaller tools that fit in women's work pant pockets would be appreciated.



The possibility of Uberization in HVAC like Yellow Taxi is a potential wake up call for thousands of HVAC companies nationwide. Today, it's **more important than ever to continue to build strong and loyal relationships** with your customer base.

Opportunities for Impact

Service scheduling Apps for home owners that has preferred service providers pre-programmed.

We can tie more loyalty between customers and service providers to maintain a relationship even if big box stores start providing home services like Uber.



Branding of the industry. People are willing and ready to help with the hiring crisis. **It's a perfect time to unite as an industry and brand what a professional and rewarding career path we offer.**

We can continue to promote the opportunities in HVAC.

Challenges Ahead

“ Our membership is primarily women - and they do not often report hostile work environments, especially during the busy seasons. Owners seem to be asking ‘How can we find and retain talent?’ And employees seem to be asking, ‘Why doesn't our boss appreciate us more?’ Everyone works hard and long hours in HVAC and they would appreciate recognition and some schedule normalcy. **There is a lack of processes in many realms of HVAC and that creates poor management environments.**”