



AUSTRALIAN INSTITUTE OF REFRIGERATION, AIR CONDITIONING AND HEATING

# 2020–2022 STRATEGIC PLAN

THE INSTITUTE FOR HVAC&R PROFESSIONALS AND PRACTITIONERS



[www.airah.org.au](http://www.airah.org.au)

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## Introduction

In August 2018, AIRAH embarked on a schedule of activity to develop a new strategic plan for 2020–2022. As well as building on the current 2017–2019 plan, the Board requested that the plan also respond to changes in AIRAH’s financial situation (i.e. impact of the loss of the ARBS contribution), and a variety of issues and opportunities that arise from developments in the HVAC&R industry and the political and economic environment.

In developing the plan, workshops were conducted with the Board, Associate Directors and AIRAH staff; members and customers were surveyed; and a small number of in-depth interviews were conducted. In addition, we considered the ever-changing landscape of associations more broadly to ensure AIRAH maintains a sound operating platform from which it can meet its purpose. (Ref. Association Apocalypse, June 2019; Association Membership and Services Survey 2018; Millennials Building Engagement with Associations, Survey Matters 2018).

This paper summarises the key themes identified during the planning process, their influence on the plan and outlines the goals and strategies for 2020–2022.

## Business focus

In association parlance, AIRAH operates a Hybrid Benefit Model. AIRAH is an organisation that performs the function of both a professional body – for the benefit of individuals, and an industry body – for the benefit of the industry and the public. Our goals and operations therefore are a mix of member-benefit and public-benefit; we seek to produce positive outcomes for individual members, as well as the HVAC&R industry and wider community.

The mix of member and public benefit is quite evident when we consider the scope of our operations. We:

- Provide an industry voice;
- Build the skills of members and the industry;
- Shape policy and regulatory frameworks, standards and guidelines;
- Provide knowledge sharing, education and training;
- Deliver conferences, forums and events.

At times it has been challenging to reconcile the two functions and to achieve a clarity of purpose and strategic priority – where to put our focus and limited resources while ensuring financial stability – member versus non-member, and membership versus industry and public.

This has become clearer however as we progressed initiatives during the 2017–2019 plan. The organisation has cemented its position as the industry leader in HVAC&R education and training with a renewed focus on career pathways for HVAC&R professionals, continuous professional development and post-graduate education, while also working to introduce an accreditation program for professional engineers.

This has helped confirm our primary target audience for membership, although not sole target by any means, as engineers and skilled practitioners working in HVAC&R. AIRAH has researched the broad “fridge” or air conditioning / refrigeration technician segment and determined while it is vitally important to the industry, and a key focus of AIRAH activities, only the more senior skilled

practitioners or “leaders” in this segment are likely to be attracted to AIRAH membership. As a total group, the “fridge” segment is not a primary target segment for AIRAH membership.

AIRAH’s role in progressing the iHub initiative has demonstrated the importance of AIRAH being a leader for evidence-based innovation in HVAC&R design, installation and operation, while also highlighting the need for AIRAH to have greater access to government for influence and commercial benefit. The initiatives of the Refrigeration Special Technical Group has highlighted the need for a coordinated industry and government response to improving the work standards and training of HVAC&R technicians and the necessity for effective compliance and enforcement systems – as an enabler to effectively manage the transition to low-GWP refrigerants and as a contributor to a low-emission (direct and indirect emissions) high-efficiency HVAC&R.

Safety and compliance issues continue to be major issues for the industry and AIRAH will maintain its focus on providing critical technical information and safety standards and compliance training for HVAC&R developed in conjunction with government, regulators and industry.

## Consultation and feedback

Feedback obtained from our members and customers surveyed was encouraging and confirmed that the organisation is on the right path. Of our respondents, 78 per cent said AIRAH had made notable progress in the past three years; only 8 per cent said we had not. The top five areas of importance for AIRAH were:

- Representing HVAC&R industry;
- Providing HVAC&R information and news;
- Leadership through conferences and forums;
- Technical information, manuals and guides; and
- Professional education and industry training.

Areas that could be enhanced or receive further “investment” included:

- Professional education and training;
- Advocacy and engagement with government;
- Technical engineering knowledge within AIRAH;
- Information and advice on refrigerants and the phasedown; and
- Easy access to technical manuals and resources.

All these areas are addressed in the 2020–2022 plan.

## Maintaining our focus

In 2020–2022 we will seek to maintain the momentum created during the current plan period. Our consultation process has confirmed that we are on the right path and we will build on what has been achieved to date. Our goals have been modified only slightly, but our strategies have been recast to reflect the next stage of our journey.

We will maintain the goal to be the peak membership body for HVAC&R, and the goal to be the industry voice for resilience, sustainability, safety and innovation. We have combined two goals into one – the goal to be the leading provider of HVAC&R knowledge resources, news and information

and the goal to be the leading provider of industry accredited education and training – in recognition of their inter-dependency and to better leverage the value of our IP. Building on recent experiences with the iHub initiative and to better position us as the industry’s voice, we have added a new goal to strengthen our access, influence and commercial relationships with government.

We have also reduced our goals from five in the current plan to four in our new plan. This is, in part, a reflection of our clarity of focus. It is also, in considerable part, as improvements in our organisational capability and business processes has given us confidence that we no longer need to include a specific goal to be a savvy, commercial and sustainable business.

## Key themes

### Member and HVAC&R community focus

While AIRAH's scope of activities covers the whole of the HVAC&R industry, developing and maintaining a vibrant membership is crucial to supporting its leadership position and ability to influence. AIRAH has defined its primary (but not exclusive) target for membership as individual HVAC&R professionals with engineering or similar credentials and / or work experience and associated HVAC&R leaders. Ensuring a relevant membership value proposition with reduced membership fees and flexible payment options and career pathway for 25–35-year old graduates, new entrants and career starters will be essential.

The refrigeration technician segment, while vitally important to the industry as reflected in our industry leadership and education and training strategies, is not the primary target for AIRAH membership. They are a vital segment for the effective operation of the industry, and they and associated TAFE sector educators will remain an important audience for development and distribution of technical skills updates and resources, and safety and compliance training.

Through the upgrade of our association management system (iMIS) and website, AIRAH has enhanced its membership offer, online access and digital resources. To support HVAC&R professionals through their career AIRAH will create a HVAC&R professional career path with industry leading HVAC&R specific technical education, supplemented with courses for leadership, business and personal development provided by partner education providers. We will introduce a comprehensive framework for continuous professional development (CPD) and provide an online Diary for recording CPD activity.

The HVAC&R Professionals Salary Survey introduced in 2019 (to over 490 participants) has highlighted the need and opportunity for a spotlight on HVAC&R. Consequently, it will be continued most likely as a biennial review. It is the only survey of its kind focussed specifically on the HVAC&R industry, providing invaluable information about remuneration, employment conditions, job satisfaction, career movement, and a measure of individual and industry confidence.

How we engage effectively with young engineers and HVAC&R participants more broadly, whether for membership or any “product or service” will remain a focus. In addition to over 3,500 members, AIRAH also engages with a further 10,000 participants (non-members) involved in or with the HVAC&R industry through our distribution of publications, eNewsletters and program of industry training and events.

The next step for AIRAH will be to increase the quality, extent and value of engagement with both groups – members and our broader (non-member) HVAC&R community. Not all HVAC&R industry leaders and active participants are AIRAH members, yet their participation in AIRAH activities can make a difference. This will require greater knowledge and understanding of them, segmented and recorded in our database, to enable more valuable relationships and to ensure our communications are welcomed and relevant.

The distinction between member and non-member will retain a strong value orientation (preferential pricing and participation) but we will engage with our (non-member) HVAC&R community cohort more widely and involve them more directly in initiatives that enhance the profession and industry.

We will seek to facilitate, but not direct, greater member-to-member and member-to-HVAC&R community engagement and will be an advocate for greater recognition and promotion of diversity in the HVAC&R industry and our membership.

We will review the operation of our Special Technical Groups (STGs) and consider how we can facilitate members creating more flexible single-purpose groups that have a clear mandate for their existence. The AIRAH 100-year Centenary in 2020 will not only be a major initiative but also a catalyst for member and community engagement.

Development of a comprehensive engagement strategy will be a critical first step in 2020, and to ensure a structured approach and to track progress we will introduce engagement measures in our database for both members and the broader (non-member) HVAC&R community.

## Registration of professional engineers – implement and promote

In early 2018, the Shergold Weir Report titled *Building Confidence – Improving the effectiveness of compliance and enforcement systems for the building and construction industry across Australia* was released. Its first of 24 recommendations is for the registration of building practitioners involved in the design construction and maintenance of buildings.

Queensland has operated with a professional engineers' registration scheme since the introduction of the Professional Engineers Act in 2002. In Victoria, the Engineers Registration Bill 2018 was passed by the Legislative Assembly to introduce a similar scheme. The Australian Capital Territory, New South Wales and Western Australia have also announced that they will follow.

Currently nine industry associations have accredited assessments schemes for the registration process. Professional associations can apply to provide services as an assessment scheme in the area of engineering for which they have the expertise to do so.



AIRAH has commenced work on the introduction of the AIRAH Registered Professional Engineer (ARPEng) program for Mechanical Engineers – HVAC&R. It will recognise a mix of formal degree qualifications in mechanical engineering or equivalent, and successful application of engineering knowledge and skills in

the HVAC&R workplace. The program will formally recognise qualified engineering professionals within the AIRAH membership and will further enhance our standing as a professional association and strengthen the value of membership and the grading system.

The AIRAH Registered Professional will be the only peak body benchmark of its kind for HVAC&R industry professionals, and it will provide the basis for AIRAH becoming an assessor for state-based professional engineer registration. It will reinforce AIRAH's position as the institute for HVAC&R engineers and practitioners.

The introduction of the ARPEng program and operation as an assessment scheme for state-based professional engineer registrations schemes will be a major strategic initiative during the plan period. It will entail embedding processes (application management, assessment and review, CPD activity, scheme audits, assessor training) and management and governance structures and performance that meets the expectations of the profession and compliance requirements of government.

## Education and training – build and expand

AIRAH has been pursuing a strategy to position itself as the HVAC&R industry’s leading provider of competency-based career enhancing education and training for HVAC&R professionals and practitioners. This strategy, and the continuous development of new high-quality courses and programs, will remain a priority focus for AIRAH during 2020–2022.

AIRAH is the only organisation providing post-graduate focused training courses for entrants to the HVAC&R industry. The success of the AIRAH Professional Diploma in Building Services – HVAC&R (PDBS) and the positive response from early enrollees in AIRAH Professional Certificate in HVAC&R Fundamentals (Fundamentals) has provided a clear signal that we are on the right path.



The Fundamentals program provides in-depth technical knowledge in short-duration online modules and is a useful precursor to the PDBS or as stand-alone education for new entrants or existing HVAC&R practitioners. New Fundamentals modules will be developed for refrigeration and HVAC, with the development of the HVAC topics leveraging AIRAH’s Design Application (DA) manual resources such as *DA09 Load Estimation*. Both programs will continue to be developed to enhance learning outcomes and user experience.

Our plan also recognises the relationship and benefit of viewing our technical resources (DA manuals, Technical Handbook, Best Practice Guides and ARAC manuals) and education and training products through a single development lens. We will leverage the value of the material in both our technical resources and education and training channels and fast-track the growth of our education properties by establishing a single development plan for new manuals and updates combined with our education and training products.

AIRAH is also successfully developing its online, face to face and in-house training covering HVAC&R operations, safety and compliance. AIRAH currently offers 14 technical training courses and has an additional 30 training courses no longer in use that will be a source of further products.

Courses that will be developed or re-developed include a new course in code compliance for refrigeration systems and heat pumps; re-development of the graduate certificate in air conditioning code compliance into a five unit online professional diploma of code compliance; re-development of the graduate certificate in energy efficiency into a four unit online professional diploma of energy efficiency; and introduction of indoor air quality courses under licence from NADCA in the USA.

The career pathway for HVAC&R engineers and technicians will be defined and AIRAH’s post-graduate and practitioner training courses mapped to it. The requirement for continuous professional development will be actively promoted and members supported with an online CPD Diary for recording activity. This work, along with the introduction of the ARPEng, will reinforce AIRAH’s position as the peak membership body for professional engineers in HVAC&R, and as the leading provider of HVAC&R knowledge, education and training.



## Technical resources – bundle and target

AIRAH possesses a large pool of valuable technical resources including the AIRAH Handbook, DA manuals, Best Practice Guides and the ARAC manuals for TAFE students. Arguably it is our technical resources that has historically set AIRAH apart and been at the heart of our membership value proposition.



While AIRAH’s technical manuals and resources are highly valued by a segment of our membership, the use of the internet as an online knowledge resource and the challenge of cost-effectively adding new and updating existing manuals is making it increasingly difficult to generate direct commercial benefit from them. Ensuring our technical material continues to be valued (content and format) – while generating a commercial return – needs fresh thinking.

AIRAH will establish and pursue an integrated technical resources / education and training development strategy. We will review the way we create content and present / deliver our technical resources. Our strategy will consider the content our HVAC&R community needs; what is best created by AIRAH and what is best utilised from third parties; and how it is best “packaged” and delivered. Our products will comprise a mix of reference material, technical tools, online applications, video products, manuals, webinars, seminars and training courses, all designed to meet the needs of today’s HVAC&R professionals and practitioners.

We will de-aggregate and re-aggregate material, for example our DA manuals and Technical Handbook, and deliver them in smaller bite-sized bits in a combination of digital and hardcopy formats; and we will utilise existing HVAC&R Nation *Skills Workshops* to create online training / knowledge products. We may reverse-engineer existing training courses to create new technical reference material, as we have already started doing with the development of *DA05 Smoke Control and Fire Dampers* which is based on the material contained in the Smoke and Fire training course.

We will become an aggregator and disseminator of technical material, and we will disseminate third party material which complements our own resources where it is practical and where it meets the needs of our members and the HVAC&R community.

## HVAC&R leadership – the industry voice for resilience, sustainability, safety and innovation

AIRAH will continue its goal to be the industry voice for resilience, sustainability, safety and innovation in the HVAC&R industry, and the principles outlined in AIRAH’s Policy and Advocacy Positions 2017–2020 document will continue to guide our approach. That is:

- To continually strive for a safe, sustainable and professional HVAC&R industry;
- To be technology-neutral, and to take a whole-of-supply-chain view of the HVAC&R industry;
- To recognise the global and local pressures influencing the industry;
- To collaborate and develop consensus-based technical standards and regulatory intervention;
- To actively support the licensing, registration, competence and training for maintenance of a professional workforce;
- To actively support research and innovation as cornerstones for developing the industry;
- To actively support the involvement of all industry participants in the creation and implementation of policies and strategies for the future of the industry;

In 2020–2022 we will focus on two areas of vital importance to the HVAC&R industry, both of which will be heavily influenced by our guiding principles. They are:

1. The drive towards net zero energy buildings as a fundamental response to the challenges afforded by global climate change;
2. Improving the work standards and effectiveness of compliance and enforcement systems (licencing) for HVAC&R industry refrigeration technicians, as an essential enabler for the effective transition to low-GWP refrigerants (and implementation of the hydrofluorocarbons [HFCs] phase-down)

## The Innovation Hub for Affordable Heating and Cooling (iHub) and net zero energy buildings

Australia, as a signatory to the 2015 Paris Climate Change Agreement COP 21, has committed to the global transition to net zero emissions, and to reaching net zero emissions nationally around 2050.

Reducing emissions in buildings could help Australia meet over half of our energy productivity target. The property sector can help reduce dependence on fossil fuel-derived energy by increasing the use of on-site and off-site renewable energy sources, and by integrating energy storage solutions into buildings to help smooth out electrical, heating and cooling energy supply and demand curves.

The ultimate objective is to create a net zero energy building (NZEB) – one that produces as much energy as it uses. Buildings will be very different in the net zero energy future; they will be designed differently, and they will be used differently. Renewable energy, heat recovery and energy storage will all be part of the net zero HVAC solution.



The Innovation Hub for Affordable Heating and Cooling (iHub) is an initiative proposed by AIRAH and CSIRO to lead HVAC innovation for a whole of industry approach to achieving net zero energy buildings. By facilitating a collaborative approach to innovation, iHub brings together leading universities, researchers, consultants, building owners and equipment manufacturers to create the first of its kind, connected research and development community for HVAC in Australia. Government funding support from ARENA is a critical element of the project.

The iHUB initiative will progress three interlinked activity streams:

1. **Living Laboratories** will provide real-world validation of technologies that integrate on-site renewable energy and HVAC loads. The iHub Living Laboratories are flexible spaces where product suppliers can bring their technology for validation.
2. **Smart building data clearing house** will establish an open data platform for receiving and making available data relating to HVAC and on-site renewable energy equipment. A key objective is to establish a financially self-sustaining open-data platform for the collation and distribution of data relating to the management of HVAC equipment in support of renewable energy operation.
3. **Integrated Design Studios** will build industry knowledge and competence in design for the maximum utilisation of on-site renewable energy in conjunction with HVAC. The integrated design studios will consist of facilitated design workshops (in a studio format) that include industry practitioners (practicing architects and engineers), academics, and students working with clients on identified project case studies.

## Transition to low-GWP refrigerants and industry licencing and registration

Australia and other parties to the Montreal Protocol have reached an agreement to a global 85 per cent phase-down of hydrofluorocarbons by 2050. Australia has committed to an 85 per cent phase-down by 2036.

One of the biggest challenges facing the industry is the move from high-GWP refrigerant technology to low-GWP refrigerants and associated technologies. Choosing a refrigerant has become more complex. Contemporary low-GWP refrigerants include natural refrigerants, synthetic refrigerants and blends of refrigerants.

Some low-GWP natural refrigerants have been used in the Australian market in specific applications for many decades. Although more environmentally favourable, low-GWP refrigerants are not free of the traditional refrigerant safety concerns which include flammability, toxicity, high pressures or simple asphyxiation.

These characteristics, combined with a lack of industry familiarity and training, present a series of safety challenges for both the industry and community. Most of the refrigerants that licensed technicians have been trained on will soon be replaced, resulting in a significant technical re-training requirement for all practitioners in the field.

AIRAH is committed to providing critical technical information and safety standards and compliance training for the HFC phase-down, and will engage with the ARC, Refrigerants Australia and other industry and government bodies and regulators to do so.

The industry's ability to address the knowledge and training needs of refrigeration technicians involved in installing, operating and maintaining refrigerant reliant systems, and who are critical players in achieving a safe and effective phase-down, is severely compromised, however, by the lack of a sufficiently comprehensive licencing and enforcement scheme. The current ARC licencing regime only provides a licence for refrigerant handling specifically designed for synthetic gases (and is only voluntary for natural refrigerants, CO<sub>2</sub>, ammonia, HFO-1234yf, etc.) and has no skills basis to it.

The HVAC&R refrigerant technician's role is broad, covering areas such as OH&S, problem solving, electrical works, control strategies, hydraulics, plumbing, refrigeration and so on, and the extent of knowledge, skill level and professionalism required can vary dramatically and is often dependent on the business or organisation. Technicians may work on anything from small coke fridges to liquid overfeed NH<sub>3</sub> systems with tons of refrigerant.

AIRAH will work pragmatically with industry / government to seek a whole of industry approach to a comprehensive skills-based licencing and registration scheme utilising existing education pathways and licencing frameworks. The licencing structure should reflect the varied skill requirements associated with levels of scale, risk and skills, and be supported with appropriate CPD and training.

At a practical level, our advocacy activities will be formulated:

- With a clearly defined sense of purpose;
- To obtain trust and credibility with decision makers – especially in government;
- To effectively utilise media;
- With a consistency of message and approach;
- With a mandate from members to prosecute an agreed agenda;
- To ensure the individual actions of members support the objectives of the organisation;
- On the back of well-developed policy.

## Government access, influence and commercial linkages – strengthen and deliver

AIRAH has utilised its membership and government links with great effect over many years to obtain support and to deliver regulatory change, and, in the case of government, to obtain funding to build industry knowledge and develop new tools and training products such as Fairair, My Cooling Tower, Calculating Cool, the Flammable Refrigerant Safety Guide and others. In today's environment, and to implement an ambitious strategic plan (without the benefit of ARBS funding), it is even more important that we have a strong and effective engagement strategy in place with state and federal government and regulators.

As we have experienced with iHub, obtaining government support and funding is not easy. It requires a good understanding of the political environment and players; a clear and well-considered engagement strategy, with benefits to government defined and ideally quantified and evidence-based; plus, focussed resources and tenacity to carry it through.

Strengthening government access and influence, and securing funding for industry-benefiting projects, will be a major goal in the 2020–2022 strategic plan.

A key first step will be the creation of a government engagement strategy designed to deliver our advocacy agenda, and to obtain funding for industry-enhancing products and services.

As mentioned earlier, AIRAH operates a Hybrid Benefit Model which means we operate for the benefit of the industry and the broader community, as well as our membership. Hence, our government engagement strategy will have both an “influence” and “funding” dimension.

## Organisational capability and governance

During the 2017–2019 Strategic Plan, AIRAH embarked on a concerted program of initiatives to create a sound platform of organisational capability from which to thrive and grow. A strong financial focus, sound systems and processes, business practice compliance, and growing our people capability have all become an integral part of the way we do business. Organisational capability will always be an important part of our performance plans and management activities, but it is not a specific goal for 2020–2022.

The planning and consultation process has also reinforced the desirability of having greater diversity of representation in AIRAH's governance structures. To ensure the organisation is relevant to a representative mix of the HVAC&R community, we should encourage recent graduates and career starters to take up governance roles and increase the involvement of industry-employed professional registered engineers and women more broadly.

## Our vision

Safe, sustainable, healthy and effective environments.

## Our mission

To create an Australian HVAC&R industry that is highly skilled and professional, safe, sustainable and environmentally effective.

## Our goals and strategies

We have reduced our organisational goals from five to four for the 2020–2022 strategic plan. We retain four outward facing goals as we have in the current plan, but the fifth – related to organisation capability – is now considered to be part of “business as usual” and is therefore not included as a goal for this plan.

Our membership goal is more specific, reflecting the Institute’s role as the peak body for professional engineers in HVAC&R, and our strategies have evolved as our capability and member offer have progressed. We will shortly be able to provide engineers working in HVAC&R with a dedicated professional engineer accreditation program to rival other engineering associations. Enhancing engagement with our members and HVAC&R community will become a major focus.

We have combined technical resources with education and training to better reflect their interdependence and the focus they will have throughout the plan period. The major initiatives taken during the current plan to enhance our news and information services put us in a strong position going forward, and, as a result, they are not identified for special attention.

Our goal to be the leading voice for resilience, sustainability and innovation in HVAC&R remains, but our efforts will be directed in two key areas. The implementation of iHub, and the entwined issue of the HFC phase-down and enhancements to the licencing and registration regimes for refrigeration technicians will be our priorities.

Advancing our engagement capability with government and stakeholders and establishing more effective commercial relationships (generally funding for projects, products or services) is a new goal in the plan. The challenges facing the industry, and the importance of AIRAH having strong government and stakeholder relationships to advance its agenda has never been more evident.

### AIRAH will pursue four strategic goals. They are to:

1. Be Australia’s peak membership body for HVAC&R professionals and practitioners;
2. Be the leading provider of industry recognised technical knowledge, education and training;
3. Be the industry voice for resilience, sustainability, safety and innovation in HVAC&R;
4. Create strong government and industry influence and commercial linkages.

The strategies and initiatives associated with the goals are outlined in the following pages.

**A**

## ***Australia's peak membership body for HVAC&R professionals and practitioners***

### **1. Introduce an accreditation program and become an assessment scheme for registration of professional engineers**

AIRAH will introduce the AIRAH Registered Professional Engineer (ARPEng) for Mechanical Engineers – HVAC&R. We will become an assessment scheme for the registration of professional engineers in Queensland, and other states as registration schemes are introduced. The ARPEng program will complement our creation of a career pathway model for professional engineers and will clearly position AIRAH as a professional engineering association for the HVAC&R industry. The requirement for continuous professional development will be promoted more widely.

### **2. Develop programs, and recognise diversity to strengthen our membership and HVAC&R visibility and community engagement**

We have defined our primary (but not exclusive) target for membership as individual HVAC&R professionals with engineering or similar credentials and skilled HVAC&R practitioners and leaders. We will continue to develop our membership value proposition to ensure it is relevant. We will reduce membership fees and provide flexible payment options and career pathway education for graduates aged 25–35, new entrants and career starters.

We will increase the quality, extent and value of engagement with members and our broader (non-member) HVAC&R community. We will build our knowledge and understanding of them to help us create more valuable relationships and to ensure our communications are welcomed and relevant. We will be an advocate for greater recognition and promotion of diversity in the HVAC&R industry and our membership.

The distinction between member and non-member will retain a strong value orientation (preferential pricing and participation) but we will engage with our (non-member) HVAC&R community cohort more widely and involve them more directly in initiatives that enhance the profession and industry. We will seek to facilitate, but not direct, greater member-to-member and member-to-HVAC&R community engagement.

In 2020 we will develop a comprehensive engagement strategy to lead our activities and introduce engagement measures for both members and our (non-member) HVAC&R community.

**B**

## ***The leading provider of industry recognised technical knowledge, education and training***

### **1) Create and deliver education programs to support technical and professional careers, safety and compliance**

We will complete the first refresh of module content and assessment tools in the Professional Diploma of Building Services – HVAC&R (PDBS) and transition to a marking structure matching TEQSA standards in 2020. We will pursue a program of activity to update sections of the PDBS with latest technical information while also making changes to the way it is delivered to enhance the learning experience. We will review feedback on the

Professional Certificate in HVAC&R Fundamentals program and amend content and delivery as necessary.

We will re-introduce a course in code compliance for refrigeration and heat pumps; re-develop the graduate certificate in air conditioning code compliance into a five-unit online professional diploma of code compliance; re-develop the graduate certificate in energy efficiency into a four-unit online professional diploma of energy efficiency; and introduce an indoor air quality courses under licence from NADCA in the US.

In addition, we will continue to review and refresh the suite of technical programs that AIRAH’s previous RTO delivered in order to create additional educational offerings.

We will define the career pathway for HVAC&R engineers and technicians and will map our post-graduate and practitioner training courses to it. We will actively promote the need and role of continuous professional development.

## 2) Build our range of technical tools and resources

We will establish and pursue an integrated technical resources / education and training development strategy to create “fit for purpose” tools and resources.

We will review the way we create content and present / deliver our technical resources. We will consider the content our HVAC&R community needs; what is best created by AIRAH and what is best utilised from 3<sup>rd</sup> parties; and how it is best “packaged” and delivered. Our products will comprise a mix of reference material, technical tools, online applications, video products, manuals, webinars, seminars and training courses, all designed to meet the needs of today’s HVAC&R practitioners.

We will de-aggregate and re-aggregate material – for example our DA manuals and Technical Handbook – and deliver them in smaller bite-sized bits, in a combination of digital and hardcopy formats; we will utilise existing HVAC&R Nation *Skills Workshops* to create online training / knowledge products; and we will reverse engineer some existing training courses to create new technical reference material.

### C

## ***The industry voice for resilience, sustainability, safety and innovation in HVAC&R***

### 1) Facilitate innovation to create net-zero buildings

We will pursue the Innovation Hub for Affordable Heating and Cooling (iHub) initiative and its three interlinked activity streams to help develop and drive adoption of renewable energy, and renewable energy enabling technologies, across the built environment sector, and in particularly the HVAC industry.

AIRAH will manage the engagement and knowledge sharing activities with industry across multiple formats including conference events (at least one per year); project specific seminars and workshops; publication of summary results; briefings and media releases, while also maintaining an online “knowledge hub” portal for disseminating project reports and more detailed iHub findings.

## 2) Advocate for licencing and registration change to support regulatory compliance and the transition to low-GWP refrigerants

We will engage with the ARC, Refrigerants Australia and other industry and government bodies and regulators to provide the refrigeration sector with critical information and training for the HFC phase-down.

AIRAH will work pragmatically with industry and government to seek a whole of industry approach to a comprehensive skills-based licencing and registration scheme that utilises existing education pathways and licensing frameworks. The licencing structure should reflect the varied skill requirements associated with levels of scale, risk and skills, and be supported with appropriate CPD and training.

## D

### *Create strong government and industry influence and commercial linkages*

#### 1) Develop constructive and influential relationships with government and industry

We will develop a government and stakeholder engagement strategy to better focus and guide our activities throughout the plan period. We will ensure our engagement activities are designed to support our leadership positions to greatest effect; that they cover all key stakeholders; and implementation and outcomes are recorded and measured.

#### 2) Collaborate with government and industry to develop technical tools and training programs

We will establish a program of activity to build funding streams for technical tools and training products for the industry and practitioners. We will identify funding sources and, with a thorough understanding of the opportunity and requirements, submit high quality proposals. We will ensure our submissions; project management; and acquittal processes are rigorous and high quality.