

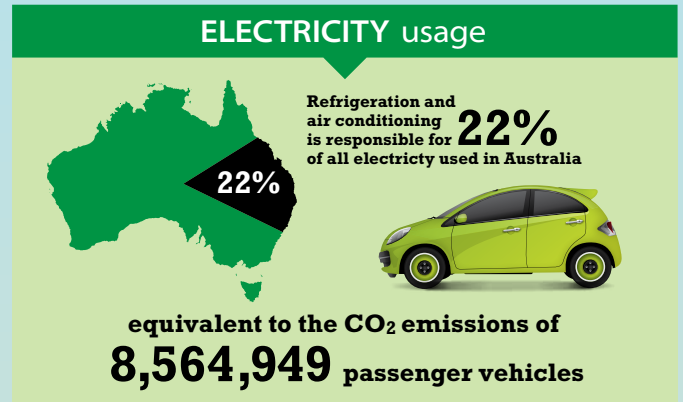
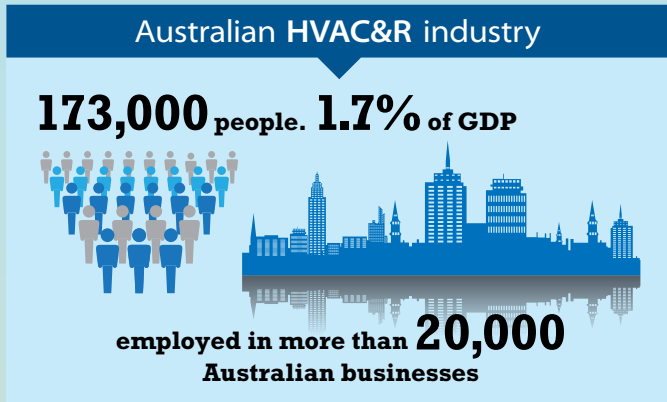


The Innovation Hub for Affordable Heating and Cooling will facilitate the HVAC&R industry's transition to a low-emissions future, stimulate jobs growth, and showcase HVAC innovations in buildings.



The time has come for the **Innovation Hub** for Affordable Heating and Cooling

Essential to our health and comfort, heating, ventilation, air conditioning and refrigeration (HVAC&R) is associated with some big numbers in Australia.



A smart place to innovate

- International trend to regulate for net-zero-energy buildings – driving new technology and renewable energy integration opportunities.
- IoT-enabled equipment driving new energy-as-a-service models and new ways of interacting with building occupants.
- Strong growth in cleantech investment.

Collaborate to innovate

PRIME is proposing to establish the Affordable Heating and Cooling Innovation Hub as a key mechanism for facilitating industry transition, stimulating jobs growth, and showcasing HVAC innovations in buildings.

The Innovation Hub will create a connected research and development community in Australia with a shared IP platform, a streamlined and flexible research environment, living laboratories and design studios. These design studios will assist product development, provide access to international networks and knowledge, and build strong connections to venture capital sources and product commercialisation skills.

“**Collaborate to innovate**” is the key theme, with low-emission heating and cooling solutions for buildings the primary focus.

Our vision is to drive innovation, targeting:

- >200 new jobs from new products and services.
- Retention of successful Australian entrepreneurs through shared IP platform, facilities and incubation community.
- Low-energy designs applied in at least 10 major construction projects.
- Establishment of Australia’s first Building Services degree.

So what is **PRIME** anyway?

PRIME is a WHOLE-OF-INDUSTRY pathway to a low-emissions future, established over five years of industry consultation and visioning work. PRIME stands for Professionalism, Regulation, Information, Measurement and Emissions abatement.

PRIME
A whole-of-industry pathway
to a low-emissions future



So what does an **Innovation Hub** do?

The Innovation Hub will provide virtual and physical spaces where a community of industry innovators, designers, and educators can easily access knowledge and research infrastructure to:

1. incubate ideas and
2. reshape industry practice to the needs of the 21st century.

The Innovation Hub will enable Australian small and medium-sized enterprises (SMEs) to accelerate product development through access to cutting-edge intellectual property, independent technology validation, and interfaces with venture capital investment.



Industry road-mapping

- PRIME provides clarity and strategic foresight.
- A participatory process will be maintained over the life of the Hub.



Research and seed innovation grants

- Funding priority will focus on the development of IP.
- Seed funding will also be available to SMEs.



Living laboratory accelerators

- Exemplar building spaces will be established as research infrastructure for real-world testing of new products and services.



Design co-creation labs

- The building design consulting industry will be supported with funding to enable exploration of innovative solutions, in partnership with educators.



Undergraduate and vocational training centre

- A process will be implemented to recruit a training provider to establish a suite of undergraduate and vocational courses.



Codes, standards and evidence base

- A structured program of engagement will be established with international knowledge brokers (e.g., ASHRAE, IEA, ISO).

Industry contributions, supplemented with government funding will be used to fund the activities.

The Innovation Hub aims to build its membership base and IP returns, to a point where it is self-sustaining.

As evident from the nature of these activities, a significant fraction of the budget would be flexibly allocable to industry contractors and consultants to ensure rapid progress and agility.



Structure and governance

The Innovation Hub will support the broader HVAC industry with knowledge dissemination, skills-development and capacity-building. However, only members will be able to access funding and free testing infrastructure. An annual fee will be charged for membership. The fee will be set to reflect the likely benefit for different industry stakeholders (manufacturers, consultants, universities, developers, etc).

A board will oversee the strategic operation of the Innovation Hub.

Day-to-day administration of the Innovation Hub will be performed jointly by AIRAH and CSIRO, under the governance of the board.

Members of the Innovation Hub will be able to access CSIRO's ON incubator processes and \$200 million Innovation Fund.

Who should become members?

Manufacturers and product entrepreneurs

- Access to seed funding pool for product prototyping and testing.
- Access to scientific laboratory test facilities.
- Product validation in Living Laboratory Accelerator test sites with major property portfolio owners.
- Shared access to, and influence on, publicly funded research results and intellectual property.
- Export market development support.
- A voice on industry standards and codes.

Designers and consultants

- Access to additional resources and support for stretch innovation in the design process.
- Introductions to motivated clients through early-stage co-creation design studios.
- Access to participate in international knowledge-sharing activities.
- Nurture the next generation of building services engineers, and access talent.
- A voice on industry standards and codes.

For more information, go to www.airah.org.au/ihub



AIRAH is the leading specialist membership association for air conditioning, refrigeration, heating and ventilation professionals. It represents more than 10,000 professionals across Australia.

In operation for over 95 years, AIRAH provides the industry with representation, dissemination of technical information, networking, member recognition and education and training.

AIRAH is the secretariat of the broader PRIME HVAC&R industry initiative.



CSIRO is Australia's national research agency and innovation catalyst. It is in the top 10 applied research agencies globally. It is Australia's largest patent holder and has spun out more than 150 companies. CSIRO has an interest in 34 of these companies, with a market capitalisation of \$1bn and \$120M in annual sales.

The Grids and Energy Efficiency Research Program offers world-class lab-testing facilities in HVAC&R. It has eight active technology licences with SMEs, and earns around one-third in royalties from IP.