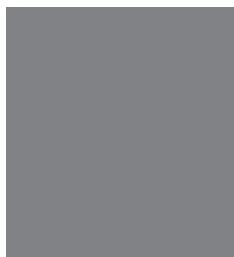


PRIME

For the future



The HVAC&R industry's blueprint for a successful transition to a low-emissions future through Professionalism, Regulation, Information, Measurement, and Emission abatement.

prime *[pruym] adjective, noun, verb*

1. first in importance, excellence or value
2. first or highest in rank, dignity or authority; chief; principal; main.
3. to prepare or make ready for a particular purpose or operation.
4. to supply or equip with information, words, etc., for use.
5. original; fundamental.
6. to lay a train of powder to (*any charge, a mine, etc.*)

The PRIME imperative

PRIME is an initiative developed by a coalition of stakeholders from within the Australian heating, ventilation, air conditioning, and refrigeration (HVAC&R) industry. The industry has been under pressure to help reduce the environmental impact of HVAC&R. Key stakeholders have taken a step back and spent some time evaluating exactly what needs to be done to develop low-emission solutions for the essential HVAC&R services we all depend upon.

PRIME stands for the five pathways to transition: Professionalism, Regulation, Information, Measurement, and Emission abatement. All of the industry-sourced solutions have been allocated into one of these five categories.

Australian HVAC&R is carbon intense

According to the *Cold Hard Facts 2* report in 2012 Australian refrigeration and air conditioning was responsible for 11.7 per cent of total national CO₂e emissions, with more than 45 million individual pieces of equipment consuming more than 59,000GWh of electricity – about 22 per cent of all electricity used nationally. When you consider heating and ventilation usage, even more energy was consumed.

The HVAC&R industry consists of about 20,000 businesses nationally, employing 173,000 people across Australia. In 2012 the industry had overall expenditure of more than \$26 billion, which represented 1.7 per cent of national GDP.

These are big numbers, illustrating how deeply embedded HVAC&R is within every aspect of the Australian economy. As Australia and the developed world acts to control and contain carbon emissions, it is clear that low-emission HVAC&R has an essential role to play. Future HVAC&R must therefore be low-impact and low-carbon.

It's PRIME time

PRIME has evolved from a series of cross-stakeholder industry summits and discussions on low-emission strategies for the sector. The Australian Institute of Refrigeration Air Conditioning and Heating (AIRAH) has facilitated the project's evolution to date, including the development of a discussion paper proposing more than 200 industry-suggested solutions and actions designed to lead the industry to a low-emission future. These ideas and actions have formulated into the PRIME Action Plan.

PRIME pathways to low-emission HVAC&R

Professionalism	Skills and training, licensing, professional registration, tertiary education and an industry council or forum to consider strategy, policy, information sharing, and industry practices.
Regulation	Inform government policy and regulations, industry codes and Australian Standards, including validation, regulatory data, and enforcement.
Information	Educate and inform end users, disseminate low-emission skills and knowledge, technologies, design practices, convert data to information.
Measurement	Measure and benchmark HVAC&R performance using system rating tools, industry metrics, building tuning, system optimisation, validated efficiency claims and technology-comparison tools.
Emission abatement	Product stewardship, new technologies, work practice accreditation, incentivising low-emission interventions, maintenance for energy efficiency, and refrigerant containment.

PRIME directives

PRIME aims to bridge the gaps between stakeholders in the industry in order to change thinking and practices.

Future HVAC&R will be:

- Integrated with buildings and end uses to safely provide health, comfort and productivity.
- Well understood, water and energy-efficient, and operated and maintained optimally.
- Innovative, flexible, lean, measured and controlled for high performance and low impact.
- Intelligent, responsive, and able to self-diagnose so that systems are optimally efficient.
- Supported by a specialist, skilled and respected industry workforce, and by education and research institutions.
- Low cost, low carbon, and low environmental impact.
- An attractive and engaging industry offering rewarding career paths.

The PRIME vision

“To have an Australian HVAC&R industry that is highly skilled and professional, safe, cost-effective and environmentally effective.”

This vision means:

- A professional workforce underpinned by education, training and licensing regimes designed for a low-emission future.
- Low-emission technologies, practices and processes embedded into the industry.
- The right low-emission HVAC&R information, in the right hands, at the right time.
- An HVAC&R industry that takes genuine, practical steps toward reducing carbon emissions in buildings, industry, agriculture, and within the cold chain.

PRIME delivers

- A long-term low-emission strategy and focus for the HVAC&R industry.
- Access to trusted data and information.
- Benchmarks and tools so industry can measure emissions performance.
- Technical and non-technical low-emission guides and information for end-users, technical service providers and related professions.
- Engagement with education providers to ensure industry training needs are met, and that HVAC&R is appropriately addressed in other vocations.
- Engagement with governments to develop a single occupational refrigeration licensing scheme covering all refrigerants and sectors, and with strong links to skills maintenance and continuing training development.

Stepping stones to PRIME

STEP 1

Create a PRIME Steering Council to formalise PRIME's structure, governance and management

STEP 2

Review draft PRIME action plans, agree on the strategies and priorities, coordinate resources and effort, and engage with government and industry.

STEP 3

Develop an "open-source" or informal and flexible structure to deliver individual PRIME projects and priorities.

STEP 4

Continue to develop and roll out PRIME deliverables in accordance with industry needs and capabilities.

PRIME is an ongoing commitment that will be reviewed and validated annually.

PRIME and the community

PRIME relies on cross-industry support, not just from the stakeholders within the HVAC&R industry but from all of the associated interests. We all need to be part of the solution, part of the journey. PRIME needs support from:

- Government – Federal, state and local government, multiple departments.
- HVAC&R service providers – Designers, installers, and maintenance service providers.
- HVAC&R end users – In agriculture, the cold chain, retail, health, industrial, institutional, and commercial and residential buildings.
- Building professionals – Architects, builders, managers, quantity surveyors, and simulators.
- Manufacturers and suppliers – Plant and equipment, building products, innovative materials and controls.
- Building owners and facilities managers – Owners and operators who control HVAC&R.

PRIME For the future

For more information about PRIME, including information about the Prime Action Plan, go to www.airah.org.au/PRIME

The following are official support organisations of PRIME:

